The Australian Energy Regulator and

Best Practice Regulation

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Thank you for the invitation to address the ACORE Seminar program this afternoon.

Universities and research centers such as ACORE play an important role in developing skills and in undertaking research on regulation. Skill development and research are both important issues for the Australian Energy Regulator (AER) and the ACCC, so I welcome this opportunity to speak with you today.

Outline

My topic is the AER and Best Practice Regulation (BPR).

The AER was established in July 2005. There are some important developments occurring presently which are very relevant in considering best practice regulation and which will have an important bearing on how the AER will go about its business in the future.

The first is the Australian Energy Markets Commission (AEMC) review of Chapter 6 of the National Electricity Rules dealing with Economic regulation of electricity transmission.

The second is the draft report of Expert Panel appointed by the Ministerial Council of Energy to advise on common regulatory arrangements for the gas and electricity transmission and distribution sectors.

But before I discuss these I thought I would start by dipping into some text books (appropriate given the academic environment!) and briefly discuss some key themes arising from the historical development of economic regulation.

I will then discuss the principles for Best Practice Regulation.

Then I will briefly summaries the new regulatory arrangements, in particular the role of the AER and the AEMC - and look at these within the context of the principles of best practice regulation.

Principles of Best Practice Regulation – Historical experience

I would like to briefly recap on some of the history[1] that lies behind what we now consider the principles of Best Practice Regulation.

The problems associated with private financing, regulation and pricing of network infrastructure are not new.

In 1870 in the UK, the Tramways Act allowed municipalities to purchase tram companies at written down cost at the end of a twenty one year franchise. With the advent of electricity, Trams should have been electrified near the end of the franchise period. But private companies were unwilling to incur the considerable cost required given the law and instead electrification was delayed until after acquisition by the municipalities.

This is an early example of investment behavior being affected by concerns by investors about future security of their returns. It reminds us that some of the issues being debated today are not new!

Monopoly businesses which are subject to regulation are typically capital intensive, durable and immovable.

The obligations to provide access and the political need to ensure "fair" or non exploitative prices means that investors must expect that after they have sunk their capital they will be limited in the price they charge and subject to various obligation related to supply, service standards and safety.

If public utilities are to be successfully privately financed then regulation must credibly satisfy the demands of both consumers and investors.

[1] This discussion is drawn from "Privatization, Restructuring and Regulation of Network Utilities" by David Newberry, 1999, MIT.

David Newberry sums it up this way:

> If consumers are unhappy they cannot chose an alternative supplier. But they (can) use their "voice' through the political process to secure their demands.
>
> If investors are to be induced to invest they need reassurance that future prices will be set at a sufficiently remunerative level to justify the investment.

These ideas formed the basis for the establishment of independent regulatory bodies, (starting in the 1930's in the United States) whose job it was to make pricing decisions for monopoly infrastructure that balanced the interests of consumers and investors; and the development of rate of return regulation as the regulatory tool for determining prices. A more recent development has been the unbundling of competitive and monopoly components of utility industries and the development of incentive regulation or CPI – X regulation. CPI - X is most commonly associated with Stephen Littlechild's recommendations to the British government for regulation of British Telecom following its privatization in 1983.

These ideas developed in the late 1970's recognised that regulation should be limited as far as possible to natural monopolies. Given the limitations of regulation, competition was to be preferred to regulation wherever competition as feasible.

Unbundling and incentive based regulation reflected a growing interest in economic efficiency over and above the promotion of a stable climate for investment.

David Newbery sums up these two schools of thought emerging from the US and UK approaches to economic regulation this way:

> Rate of return regulation *evolved* through series of landmark court cases in the United States. These cases provided procedural fairness in the allocation of rents to investor owned utilities but was criticized for its inefficiency through cost plus pricing.
>
> In contrast price regulation in the UK was *designed* by economists to create an efficient system of regulation to enable privatisation of utilities, but it was criticized for its lack of procedural fairness which was said to create risks that undermined regulatory credibility and investment certainty.

In summary then

- A sustainable system of regulation must credibly satisfy the demands of both consumers and investors

- Regulation must be procedurally fair ('regulatory certainty") but it should also be designed to provide incentives for efficiency.

Finally this history highlights that regulatory systems are capable of being designed but depending on the legal framework they also tend to evolve over time.

Principles of Best Practice Regulation

Looking at the AER and the way in which it will operate in regard to BPR it is useful to recognize a distinction between:

- Powers, obligations and constraints on the AER which are set through the law, the rules, and through appeal processes; and

- Areas where the AER has some discretion and where Best Practice Regulation should be considered

Most of my talk relates to the first point – that is how the legal and regulatory framework being developed impacts on the AER. I will make some comments as to how the AER intends to carry out its functions at the end.

BPR can be thought of as covering principles and methodologies. The principles cover matters such as how regulators should be established and how they should carry out their functions.

The methodologies deal with particular methods or techniques for undertaking various parts of the regulatory task.

First I will discuss the principles of Best Practice Regulation. Later I will discuss some particular methodological issues.

There are a number of different formulations of best practice regulation that have been proposed, including by the OECD. For this presentation I have chosen the principles of "Best Practice Utility Regulation" set out by Australian Utility Regulators Forum[2].

[2] Australian Utility Regulators Forum, Discussion Paper, 1999.

Principles of Best Practice Utility Regulation

Principle	Features
Communication	Information to stakeholders on a timely and accessible basis.
Consultation	Participation of stakeholders in meetings.
Consistency	Across market participants and over time.
Predictability	Reputation that facilitates planning by suppliers and customers.
Independence	Autonomy – free from undue political interference.
Flexibility	Using appropriate instruments in response to changing market conditions and experience. Regulation must be feasible in the light of the stage of development of the market.
Effectiveness and Efficiency	Efficient and timely regulatory decision making Cost effectiveness emphasized in data collection and policies.
Accountability	Clearly defined process and rationales for decisions with the ability for appropriate review This aims to ensure that the regulator adopts objective and fair decision making.
Transparency	Decision making based on accurate information. Openness of the process.

Each principle can be seen to support the overriding goal for a sustainable system of regulation I discussed previously - that is to credibly satisfy the demands of both consumers and investors.

I believe it is fair to say the principles themselves are well established and accepted - there is little debate about them when considered individually.

In my experience many features of Australian Regulatory Practice rate very highly when compared to other regulatory regimes internationally. In particular I would suggest that the level of communication, consultation and transparency undertaken by Australian regulators is undertaken to a high standard.

Areas where debate arises include

- Striking the right balance where there are tensions between the principles. An important issue currently is the tension between principles for flexibility and predictability and flexibility and effectiveness and efficiency ; and

- Whether legislation, and rules, and regulatory decision making appropriately reflect these principles. For example governments are considering whether current review arrangements for regulatory decisions are appropriate.

Flexibility Principle

There is not time to discuss all the BPR principles in detail today and as I mentioned a number of these are not contentious.

However one principle which requires discussion today is *flexibility*.

Graeme Samuel stated recently

> Any reform program must anticipate and encourage improvements in regulatory capabilities and experience over time. There is a trade-off between rigid regulatory rules and procedures and regulatory discretion and flexibility. Going too far toward either extreme is not likely to yield a regulatory framework that performs well over long periods.[3]

The Council of Australian Governments recently noted that regulation:

> "…should not preclude an appropriate degree of flexibility to permit regulators to deal quickly with exceptional or changing circumstances or recognise individual needs."

Finally, Paul Joskow in a recent review[4] of experience with economic regulation in the electricity distribution and transmission set out one key conclusion as follow:

> Incentive regulation in practice is clearly an evolutionary process. One set of mechanisms is tried, their performance assessed, additional data and reporting needs identified, and refined mechanisms developed and applied. This type of evolutionary process seems to me to be inevitable.

Flexibility – some current examples

An example of where regulatory decision making requires flexibility is in relation to Transmission services standards.

The ACCC and now the AER has been undertaking considerable work in attempting to devise a market related service incentive scheme to apply to Transmission companies.

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[3] Graeme Samuel, Enforcement of Regulation by an Independent Regulator, 3rd December 2004Asia Pacific Infrastructure Forum, Melbourne

[4] Incentive Regulation in Theory and Practice: Electricity Distribution and Transmission Networks, Paul L Joskow, MIT, January 21, 2006.

It may also be desirable over time to increase the power of the service standard which is currently limited to +/-1% of Revenues. Any changes in the transmission service standard needs to be understood in the total context of the effect of other incentives.

Joskow makes the point that

> As incentive regulation has evolved in the UK and other countries, the portfolio of incentive mechanisms that is being utilized has grown. While the initial focus was on reducing operating costs it has now shifted to investment and various dimensions of service quality. Ideally these mechanisms should be fully integrated and differences in the power of the individual incentive schemes carefully considered.

The detailed development and refinement of service standards with an integrated total suite of incentives will almost certainly require a flexible and iterative approach. Given the issues are not straightforward the process inevitably requires iteration of information and proposals between the regulator and the regulated company.

Secondly, the details of how the entire suite of incentives should apply needs to take account of the particular features of the business, for example its size and complexity.

For example, it would not be surprising to find in future that the right set of incentives for a relatively small straightforward Transmission company such as Murraylink will be different from large complex companies such as Transgrid, Powerlink, or SPI Ausnet.

Establishment of the AER

I'd now like to turn to the establishment of the AER and the AEMC and discuss these against principles for BPR.

Following COAG endorsement of the energy market reform process in 2003, amendments were made to the Australian Energy Market agreement to establish the AER's new role and set timelines on its new responsibilities.

The key principle behind the establishment of the AER is that a national energy market needs regulation to be undertaken on a national basis. Different approaches to regulating utilities across jurisdictions creates unnecessary costs and work against certainty and clarity.

The AER has been established as a separate legal entity under Part IIIA of the Trade Practices Act, and is a constituent part of the ACCC. The AER is funded by the Commonwealth government.

There are three members of the AER appointed for fixed terms. Steve Edwell is the chair, Ed Willett and myself are the other members of the ACCC. I have been appointed as the State / territory member.

The ACCC 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 board of the AER is a statutory independent decision maker, but the AER's staff and resourcing are drawn from the ACCC.

In practice this means the AER has a dedicated group of people with a focus on the energy sector supporting the AER and ACCC processes, together with access to specialist economic and legal expertise spanning other regulated sectors.

Assessment

These arrangements are a significant improvement and measure up well against the BPR:

- They will make a major contribution to promoting regulatory efficiency and effectiveness through establishing a "one stop shop" to replace the existing state and territory regulators.

- They promote consistency both across all regulated energy businesses as well as between the energy sector and other regulated sectors.

Also, the AER is committed to the principle of *independence* in carrying out its regulatory decision making functions.

AER Responsibilities

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.

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.

Jurisdictions have agreed to pass responsibility for regulation of energy distribution to the AER on January 2007.

This means that by early 2007 the AER will have assumed responsibility for economic regulation of energy networks on a national basis.

The AER will subsequently be given responsibility for certain aspects of non-price retail regulation.

The AER and the AEMC

The AER's role is to carry out its regulatory role in accordance with applicable laws and rules (such as the National Electricity Rules) while the AEMC's role is to act as rule maker and provider of policy advice to the MCE.

Notwithstanding these different roles, an effective and cooperative relationship is essential and this has been recognised by the AER Members and the AEMC Commissioners respectively.

The new arrangements have been designed to provide a clear demarcation between policy and rule making on the one hand; and the administration of regulation.

This clearly strengthens *accountability* since the AER is not responsible for setting the rules under which it undertakes its economic regulation functions.

But it is appropriate to debate whether they will produce an appropriate balance in achieving principles for *predictability*, *flexibility* and *effectiveness and efficiency*. I will outline some examples of this debate later on.

Statutory Objectives

An important recent development has been the inclusion in the National Electricity Law (NEL) of an objects clause and a rule making test for the AEMC which requires it to make decision on rules so as to promote the achievement of the objects clause.

In summary the objects clause in the NEL is "to achieve efficient investment in and use of electricity assets in the long term interests of consumers."

A similar object is likely to be reflected in the Gas Law.

This will contribute to achieving the BPR principles of *consistency*, *predictability*, and *accountability*.

Economic Regulation of Electricity Transmission

- Background

Currently the rules for economic regulation of electricity transmission are set out in Chapter 6 of the NER.

A more detailed regulatory methodology is specified in supporting AER guidelines, the most important of which is the AER's Statement of Regulatory Principles (SRP). This was released by the ACCC in December 2004.

The fundamental cornerstone to the SRP's approach to regulation is an incentive based regime. The aim is to provide transmission companies with the incentives to operate more efficiently and undertake needed investment. If they are able to outperform benchmark costs they can keep the excess revenue and vice versa. If the company gains additional profit by beating the benchmark costs it will carry over that profit into the next regulatory period.

The SRP is supported by guidelines on

- Service standards
- Information requirements
- Transmission ring-fencing guidelines
- Negotiation of discounted transmission charges
- The regulatory test for network augmentations

In terms of the incentives on the TNSPs the service standard guidelines are important and are a significant area for development in the future.

- Context for review of Chapter 6 Transmission Rules

Chapter 6 was developed by a committee of the National Grid Management Council in the mid 1990's. At this time there was little practical experience of economic regulation. The drafting of Chapter 6 reflects the compromises common in committee driven processes being managed against fixed deadlines.

The ACCC released draft statement of principles (DRP) in May 1999. Since then it has completed at least one determination for each TNSP and two determinations in the case of Transgrid and Energy Australia. The SRP was developed following an extensive process of consultation. The SRP therefore reflects at least eight years practical experience with regulation of Transmission companies.

Given the context and history of the drafting of Chapter 6 it is not surprisingly there are a number of problems with Chapter 6. It lacks focus and clear direction to the regulator. There are over 50 objectives and principles which have led to repetitive and overlapping objectives. Chapter 6 clearly needed redrafting to address these.

But notwithstanding these problems what assessment can we make of how the entire regime has worked in practice?

Firstly the SRP has a high level of support from the regulated transmission companies and users. While undoubtedly TNSP would like different decisions on some parameters and details it is fair to say that that the regulated business consider the overall framework as being reasonably predictable.

What does this tell us? To recap, the SRP has a high level of support from regulated business, and seems to provide a reasonable level of certainty (albeit this can be improved) – but this is despite the Chapter 6 rules that govern the SRP lacking focus and clarity; and it has been subject to an extensive process of consultation and practical experience in its application.

An important lesson from this is that *predictability* is not simply a function of the laws and rules that govern the regulatory decision making – it is also a function of regulatory experience developing over time.

One of the important ways in which *predictability* arises is through frequent interaction, as regulated businesses develop a greater understanding of the approach that is likely to be taken by the regulator in future decisions.

Going back to the beginning of my talk, it can be noted that the US system of rate of return regulation was not *designed* to produce predictability – rather its predictability emerged through a constant process of interaction between regulated businesses, the regulatory authorities and the courts over many years.

A second lesson is that the level of investment allowed under recent revenue cap decision has been high. While there are a number of factors that need to be considering the success of the regime, (including service standards and cost efficiency) the level of investment in infrastructure assets is an important measure, and certainly a hot topic of recent debate.

Over the past three years for example aggregate capital expenditure by all the transmission companies now regulated by the AER has been $1.6 Billion although this is less than was forecast in setting the regulated revenue caps[5]. It is also interesting to note that the aggregate value of the TNSPs regulated assets has increased by almost 12 percent over the past three years and stands at almost $10. 3 billion.

[5] TNSPs Electricity Regulatory Report for 2004 – 2005, Australian Energy Regulator http://www.aer.gov.au/content/index.phtml/itemId/692872/fromItemId/661380

- AEMC proposed draft amendments to Chapter 6

The AEMC recently published proposals for amending Chapter 6.

The AEMC's draft Rules have codified aspects of the SRP, but have also introduced a number of changes.

The AER supports the idea that the Rules should be better aligned with the way in which economic regulation is actually undertaken as set out in the SRP as well as to address some deficiencies in the rules. The AER welcomes that the AEMC have chosen to codify aspects of the SRP.

However the AER has a number of concerns which are set out in detail in a submission to the AEMC. Key concerns are

- Changes introduced in the balance of incentives that are proposed by the AEMC
- Proposals to introduce a form of the "propose-respond" model and the concept of "reasonable estimate"
- The extent of codification proposed by the AEMC in the rules

The AER has also made proposals to improve *transparency* by removing current restrictions on the ability for the AER to publish information.

- Changes in balance of incentives

The AEMC has proposed four changes to the incentive framework established by the SRP.

- Replace the contingent project regime by a new reopening provision for capex. The contingent project regime is intended to provide flexibility for approving revenues when a TNSP does not have certainty over the details of significant projects (costs, configuration etc) at the time the revenue resets is being undertaken.
- Reintroduce an ex post prudence assessment for capex
- Lock in service standards at +/ - 1% of revenues;
- Reduce the power of incentives by removing incentives on the depreciation component of the forecasts

These are quite technical issues which cannot be covered in detail here.

The key point is that the proposals appear to the AER to dilute the incentives contained in the SRP.

1. The proposed reopener provision would require the AER to provide additional revenues to the TNSP if they are likely to significantly overspend their targets. It is acknowledged that AEMC proposed a number of conditions on the ability of the TNSP to make a claim. AER's concern however is that the mechanism does not take into account the efficiency of the business or its spending. This seems to create perverse incentives whereby a relatively inefficient TNSPs could potentially receive additional funding, whereas an efficient TNSP (that is meeting its required service standards but is under spending against its allowed revenue) would not.

2. The proposal to remove the incentives on the depreciation component of the capex forecasts, appears to the AER to reduce the power of the incentives by around 30% and results in very low powered incentives towards the end of the regulatory period.

- "Propose-respond" model and "reasonable estimate"

The AEMC has proposed a "propose-respond" model and a "reasonable estimate" test for assessing capex and opex proposals.

The AEMC has also developed a list of factors which the AER must have regard to in assessing the reasonableness of the TNSPs' proposals. The AER supports the AEMC's proposal to include this list of factors.

I mentioned an Expert Panel has been appointed to advise on common regulatory arrangements for the gas and electricity transmission and distribution sectors. The Expert Panel have suggested that "reasonable estimate" is a new concept which creates uncertainty. It is likely to lead to litigation to clarify the limitations it places on the AER's decision.

The Expert Panel's views on the propose-respond model is:

> "There is little doubt that a propose-respond model … would lead to a systematic increase in the returns to regulated entities relative to the consider-decide model."

In the AER's view, the AEMC was not particularly clear as to the problem it was trying to address. One reason for introducing a propose-respond model may be to address issues related to perceptions of regulatory risk. However, as noted by the majority of the Expert Panel, the measures proposed may not be the best means of addressing regulatory risks.

The majority of the Panel formed the view that it was not clear that an upward bias in all regulatory rate of return outcomes "… is necessarily the best means of dealing with

concerns over regulatory error."

Instead the Expert Panel suggests perceptions of regulatory risk could be addressed by ensuring that the objective for the regulator is appropriate, the guidance is clear and that the review mechanisms are appropriate.

The AER considers that introducing the term "reasonable estimate" is not necessary and that it there are concerns with regulatory error that this should be taken up through considering other elements of the regulatory framework, as suggested by the Expert Panel.

- Codification

The AEMC's objective in codifying the rules is to increase regulatory certainty.

As I said the AER supports the concept of codifying the rules to reflect the SRP. The AER's concern is the extent to which the AEMC has gone in codification.

The draft Rules are significantly more extensive and detailed than the current Rules. The draft rules prescribe

- Weighted Average Cost of Capital (WACC) parameters,
- opening Regulatory Asset Bases (RABs),
- details of tax and X-factor modeling
- depreciation parameters
- the incentive mechanism for capex and pass-through events in the draft Rules

The draft Rules are around 100 pages in length compared to the 10 pages devoted in the current rules to transmission revenue setting.

I have discussed the AER's concerns previously but to sum up

- Highly prescriptive Rules can result in insufficient flexibility for the regulator to accommodate individual business environment differences and changing market circumstances.

- Overly prescriptive rules may restrict the ability of the regulator to improve the regulatory approach as regulatory thinking develops.

- Considerable additional costs are potentially created for market participants by placing significant detail into the Rules.

- Where Rules are highly prescriptive, even minor changes to regulatory practice will require amendment to the Rules. Significant resources will necessarily be devoted to a rule change process. As a result AER or other parties may decide not to pursue otherwise desirable changes, with the result being the rules becoming static and ossified.

So what is the right approach to codifying the Rules?

The AER believes the right approach is as proposed by the Expert Panel:

> "the constraints imposed on or guidance given to the regulator should be the minimum necessary to achieve the objectives of the regime with some certainty."

As discussed previously more weight should be given to the idea that predictability comes about over time through repeated interaction of regulated businesses with the regulator.

The AER could also be required by the Rules to publish binding guidelines against specified principles.

Best Practice Regulation and the Task Ahead

Following the transition of all the various new regulatory functions to the AER:

- There will be around forty businesses across gas and electricity transmission and distribution, to regulate. This amounts to, on average, 8 regulatory resets each year.

- will have an enforcement and compliance role for non price retail matters across the retail electricity market – a significant and complex market in its own right.

In exercising its discretions, the AER is very aware of the principles of best practice regulation.

We need to strive for high quality decision within time frames set down in the rules and consistent decision making.

At the same time we need to be able to respond to the changing regulatory environment (flexibility).

To do this we need to build the capacity of our organization. We will need to develop internal work practices and corporate governance arrangements that enable effective regulation of 40 energy transportation businesses and, monitoring, compliance an enforcement of all NEM participants with the NEL; as well as any new obligations provided for in the future National Gas Law.

Effective stakeholder engagement is also very important. The AER will be approachable and seeks to have strong engagement with key stakeholders.

Consultation is expected to go beyond the mandatory processes set out in legislation. This will involve strong engagement with industry to be aware of the commercial pressures while at the same time understanding the needs of consumers.

Conclusions

The key points I want to leave you with today are

- The Principles of Best Practice Regulation seem well established and accepted when considered individually.

- The new national regulatory arrangements make a major contribution to promoting regulatory *efficiency* and *effectiveness* through establishing a "one stop shop" to replace the existing state and territory regulatory bodies.

- They also promote *consistency* both across all regulated energy businesses as well as between the energy sector and other regulated sectors.

- Establishing the AEMC and AER creates a clear demarcation of roles between policy and rule making and administration of regulation – this increases the *accountability* of the AER.

- An effective and cooperative relationship between the AER and the AEMC is essential and this has been recognised by the AER Members and the AEMC Commissioners respectively.

- The level of *communication, consultation* and *transparency* undertaken by Australian regulators has generally been undertaken to a high standard. The AER intends this will continue in the future.

- The AER is committed to the principle of *independence* in carrying out its regulatory decision making functions.

- An important issue currently in making decisions on economic regulation rules for transmission and developing a common arrangement for gas and electricity is striking the right balance between principles for *flexibility* and *predictability*; and *flexibility* and *effectiveness* and *efficiency*.

- Some of the AEMC's Chapter 6 proposals appear to dilute the incentives contained in the SRP.

- The AEMC have proposed a very high level of codification in the proposed Chapter 6 rules for economic regulation of Transmission. The right approach in the AER's view was as recommended by the Expert Panel - "the constraints imposed on or guidance given to the regulator should be the minimum necessary to achieve the objectives of the regime with some certainty."

- Some of the aspects of the proposed Chapter 6 Rules seem to go beyond the minimum that is necessary to ensure regulatory certainty.

- More weight needs to be given to the idea that *predictability* comes about over time through repeated interaction of regulated businesses with the regulator.