Energy Users Association of Australia
Energy price and market update seminar

'Finding the balance—the rules, prices and network investment'

20 June 2011
Andrew Reeves, Chairman

Good afternoon and thank you to Roman for the invitation to address the Energy Users Association of Australia's energy price and market update seminar today.

For many years Australia enjoyed relatively stable energy prices in real terms. However, this situation has changed markedly, with substantial increases in prices in the past 2 to 3 years.

Charges for use of the transmission and distribution electricity networks together represent about half of a customer's bill and have been a major contributor to increasing prices. There are a number of reasons for this- fundamentally there is a need to spend money on the networks to meet strong growth in demand, to provide services to new connections and to replace ageing equipment to maintain reliability.

Recent decisions also include higher allowances to cover increases in the cost of debt that have occurred since the global financial crisis and increases in labour and materials costs. However, as has been raised by a number of recent reports, the framework under which the regulator must operate is also a factor in the increases.

The role of the AER as the economic regulator for energy networks is to ensure that consumers are not paying more than is necessary for the delivery of safe and reliable services. Indeed, this concept is enshrined in our energy legislation. The national electricity and gas objectives are such important principles that they are set out in the National Electricity Law and the National Gas Law. These laws, together with the National Electricity Rules and the National Gas Rules, direct the work of the Regulator.

In essence, the objective set out in the law is to promote efficient investment in and efficient operation and use of energy services for the long term interests of the consumers of energy. It is important that the National Electricity Rules and National Gas Rules, under which the Regulator makes decisions, deliver outcomes that meet this objective.

The AER considers that changes to these rules are necessary for regulatory outcomes to better meet the objective of the Law.

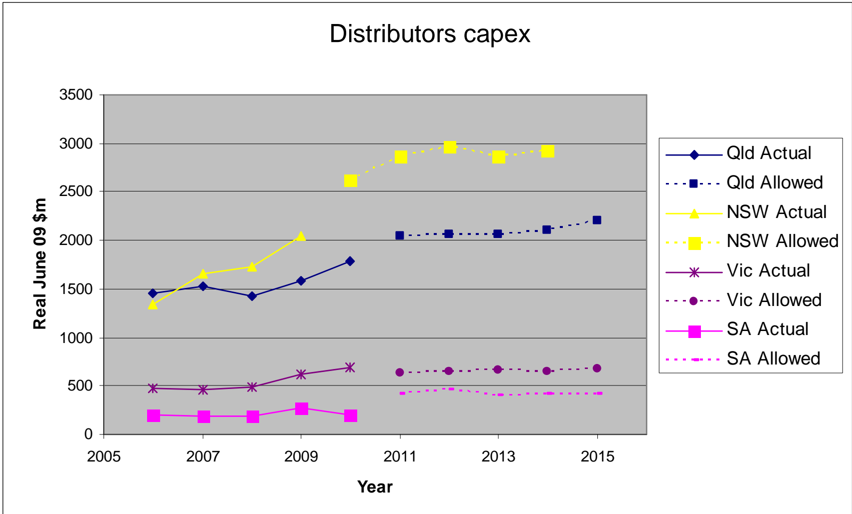
The AER considers that, in order to achieve the objective, it is necessary that the rules allow the regulator to determine an unbiased estimate of efficient costs required to provide these services. That is not the case as the rules now stand.

We recognise that network reliability is critical, so we need to be certain that we make sufficient allowance for investment to meet demand and to replace equipment that has reached the end of its life.

We need to be certain that firms have sufficient allowance to meet the costs to operate and maintain the network and to restore power quickly if blackouts occur. We need to provide a commercial return on efficient expenditure so that the firms can fund this investment. But we also need to be sure that we are only making customers pay the minimum necessary to meet the cost of an efficient service provider for the safe and reliable supply of energy. And that is the challenge – to ensure that the rules allow the regulator to strike that balance.

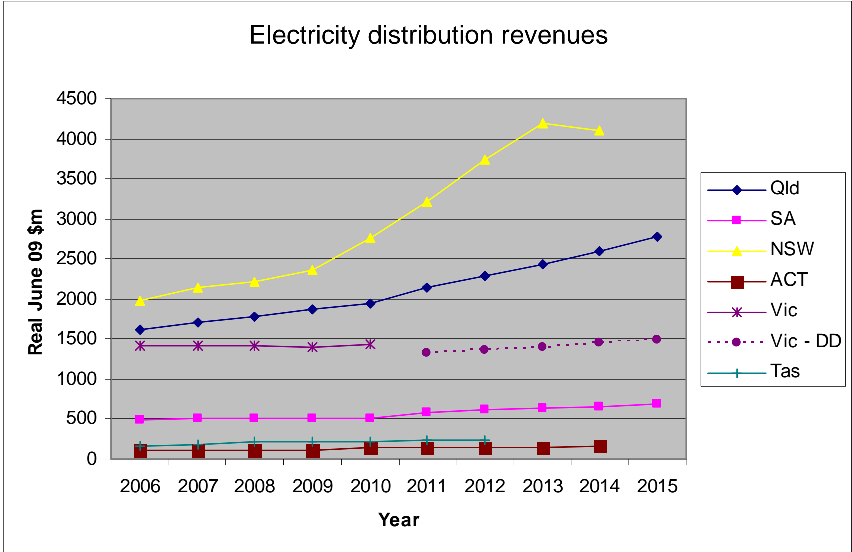
The current framework has allowed a major increase in investment expenditure by distribution and transmission networks. This slide (Figure 1) shows the increase in the capital expenditure of electricity distribution networks which has been approved under the current framework which came into effect in 2006.

Figure 1 Annual capital expenditure, distribution networks (by state)



The next slide (Figure 2) shows the impact of the current framework on distribution network revenues. As you can see, the amended rules framework has supported significant increases in electricity distribution revenues, particularly in NSW and Queensland.

Figure 2 Annual revenue, distribution networks (by state)



But to understand how this has come about, we should consider the circumstances in which the current set of rules were developed. The rules were written in 2006, when Australia was enjoying a long period of growth, network charges were relatively constant and there were concerns in some quarters about whether investment in critical infrastructure was sufficient to support continuing strong growth. It was argued at the time that the previous regime administered by jurisdictional regulators and the ACCC did not give the sector the assurance of returns needed to guarantee that investment would take place. It was thought that it was necessary to hard-wire into the rules, procedures and factors that the regulator ought to observe.

However, the result was a framework for network regulation that went beyond codification of regulatory process. The rules that operate today are not only highly directive in regard to process, but limit the ability of the regulator to exercise a proper discretion in assessing key inputs to its decisions.

While certainty for investment remains a critical consideration it is equally important that the framework only supports investment that is necessary and efficient.

The AER has now almost completed a full round of resets under the current framework and we have undertaken a stock take of our experience. What we have found are a range of issues with the rules which restrict the regulator’s ability to make its own unbiased determination on efficient costs.

In several important respects, we have concerns about whether the current framework strikes an appropriate balance between the interests of network businesses and those of consumers. In broad, these concerns can be boiled down into three separate issues:

- first, we consider that the regulator should be able to make unbiased forecasts of efficient capital and operating expenditure
- second, there needs to be strong incentives for the firms to spend no more than is necessary and efficient, and to be sure that excessive expenditure is not rewarded
- lastly, there needs to be a process for setting the cost of capital that properly reflects the cost of funds, maintaining certainty for service providers that they are able to receive a commercial return on efficient investment, while ensuring that consumers are not paying for excessive returns.

I will now turn to each of these issues.

Forecast capital and operating expenditure

The AER is concerned that there is a systemic bias towards inflated forecasts because of the framework for establishing forecasts of required capital and operating expenditure.

As it stands, the current regime provides network businesses with incentives to submit revenue proposals that are at the top of, or beyond, what could be considered a range that ‘reasonably reflects’ the required expenditure.

The rules state that the AER must accept the estimate proposed by the business if it is satisfied the total ‘reasonably reflects’ efficient, prudent and realistic costs taking into account certain factors set out in the rules. Where we are not so satisfied, we must determine a substitute amount, subject to the requirement that the substitute decision must be made on the basis of the service provider’s proposal.

As with all of the rules, these two items must be read together as a package. In isolation, they could be read as affording the regulator discretion to reject forecasts and to substitute its own view. However, looking at the process in more detail demonstrates the problem.

First, there is a clear incentive for the business to submit proposals that are either at or beyond the upper end of the range of reasonable estimates since the regulator is obliged to accept a reasonable estimate.

As you would expect, the proposals include copious amount of detail, and substantial engineering justification. Since the rules require that the regulator's response be based on the original proposal, the regulator must engage in a careful forensic examination of the myriad of detailed workings to be able to amend the forecast.

Further, the regulator can only amend the proposal to bring it back into a range of what could be considered to 'reasonably reflect' a forecast of efficient costs.

These factors, put together, mean that the regulator can only make adjustments at the margin, i.e. can only amend those details which are excessive to a reasonable estimate of that particular detail.

This is borne out by the AER's experience. Businesses routinely submit proposals that contain substantial engineering detail in support of the 'reasonable' estimate. We are then required to undertake a granular assessment of the proposal. This puts a substantial burden on the regulator to produce the evidence necessary to justify an amendment to the proposal, even if only to the extent necessary to enable its approval under the rules. This must be done within a tightly-defined timeframe. The inevitable consequence is an outcome that is not a central estimate of efficient costs, or even one which would conservatively provide 'at least' efficient costs, but one which is biased in favour of the service provider and can lead to excessive payment by users.

To address these shortcomings, the AER is preparing rule changes to amend this two stage assessment process. These would, if accepted by the Australian Energy Market Commission, reduce the limitations on the regulator's ability to challenge the proposal, requiring the regulator to determine the efficient forecast of required overall capital and operating expenditure.

The prescribed ‘factors’ that the AER must now take into account when making its determination are also being considered. The current set of factors include a mix of procedural and substantive matters, but it is not clear whether the list is intended to be exhaustive, or how the regulator should manage conflicting factors.

Importantly, we are keen to ensure that the rules do not place undue restrictions on the use of benchmarking to assist us in determining efficient costs. The AER noted in its final determination for the distribution networks in Queensland and South Australia that we are continuing to develop our analytical tools and techniques. For example, in our recent Victorian decision, we developed a new benchmarking and analysis tool – the repex model – to assess the need for replacement expenditure on ageing assets.

We are giving particular attention to benchmarking as a key tool in identifying efficient costs.

We are acquiring data and developing other benchmarking techniques, including process techniques, programming and parametric approaches, ratio analysis and time-series/trend analysis. We use a number of these depending on the quality and availability of data to hand as part of the assessment of the network businesses’ proposals.

Quality of data is the key to this process. While raw comparisons across networks can expose evidence of differences between the businesses, care must be taken to ensure that the data is showing a fair and reasonable comparison. It must take into account differences in the regulatory environment, accounting treatment, asset classifications, network maturity, customer characteristics, geographical factors between regions and so on.

The AER today can not currently rely exclusively on benchmarking to determine efficient costs. Quite properly, the rules require that we must have regard to the circumstances of the firm being examined and we must be satisfied that the data is a reliable indicator of network needs.

As the nature and consistency of the data improves, we will be able to rely more heavily on benchmarking techniques. Our current review will ensure that the rules do not impose an impediment to the appropriate use of benchmarking.

Turning now to the incentives for efficient expenditure.

Efficiency incentives

The current rules require that all actual capital expenditure be rolled into the asset base at the start of the next period. This occurs even if the expenditure is more than that allowed by the forecast. We have seen that some network businesses have spent substantially more than the regulatory allowances in previous periods. This has led to significant step changes in prices for consumers at the start of the next regulatory period when the higher expenditure is rolled into the asset base.

It has been suggested that this is particularly an issue where the true cost of capital is below the regulated cost of capital and the business may have incentives to overspend. Under the rules, a network business may spend more than the approved allowance during a regulatory period. It has to bear the carrying cost of any expenditure in excess of the allowance, but only until the next reset.

At the next reset, the actual expenditure is rolled into the asset base without further review as to whether it was efficient or necessary. After that, the margin between the regulated return and actual cost of capital compensates for the short term carrying costs. This incentive arises whenever there is an expectation that the actual cost of capital is less than the regulated return, whether for private or Government-owned businesses.

To address this and other incentives for over-expenditure, we are considering a package of measures that would increase the power of the incentive on network businesses to spend efficiently. As a starting point, we consider that the requirement to automatically roll-in expenditure above the forecast should be removed.

While our inclination is not to pursue the ability for a full ex-post review of expenditure, there may be merit in some form of limited ex post review for overspends. We also consider that we should look to measures that strengthen the incentive not to overspend or to reduce the reward from over-expenditure.

However, we recognise that circumstances can change after the forecast has been set. Accordingly, we are also examining whether the current framework of pass-throughs, contingent projects and re-opener provisions are sufficient to manage changes of circumstances throughout a regulatory period.

In sum, we would like a package of measures that enables a robust forecast of efficient costs to be determined, with strong incentives to organise capital expenditure programs to not overspend that allowance, together with a range of measures to deal with changes in circumstances. In our view, such a package would better meet the national electricity objective to promote the long term interests of consumers.

Cost of capital

Leaving behind the setting of allowances for operating and capital expenditure, I will now turn to how the cost of capital and its constituent parameters are set.

At present, the AER must use three different processes to determine the weighted average cost of capital (WACC) to apply to network businesses. In electricity transmission, the AER undertakes a WACC review at fixed five yearly intervals. The parameters determined during the WACC review must then be applied to each subsequent electricity transmission decision, with no ability to depart from the parameters determined during the review.

For electricity distribution decisions, the AER publishes a Statement of Regulatory Intent as part of the WACC review every five years.

However, the distribution rules allow the businesses to submit material in order to convince the regulator there is persuasive evidence to depart from the statement of regulatory intent. Our decision on whether or not there is persuasive evidence is subject to merits review by the Australian Competition Tribunal. To date, our experience has been that the existence of the ability for the regulator to exercise discretion in departing from the statement of regulatory intent has led to a parameter by parameter assessment at each reset.

This was clearly not the intent of policy makers when they drafted these provisions. Despite the intent being to allow the regulator to take account of significantly changed market conditions, but otherwise to maintain stability of inputs, our experience shows that, in practice, a case-by-case, parameter by parameter assessment is inevitable.

In gas transmission and distribution, the AER is required to reassess the relevant parameters every time it conducts a reset.

The AER experience has shown that each of these three models is imperfect. For example, while in electricity transmission, the WACC statement is binding on the regulator and

transmission businesses, the other two models require the AER to assess a large amount of material for each reset process, either in determining the parameters themselves or determining whether there is persuasive evidence to depart from the WACC statement.

Further, in all of these cases the rules lock in the form of the benchmark that the AER must use to assess the cost of debt. The rules require the AER to use an Australian benchmark corporate bond rate with a maturity of the same length as used in calculating the risk free rate. Effectively this locks the AER into using a ten year corporate bond.

There are two issues with this. Firstly, it is not possible to determine this benchmark with any degree of certainty due to the limited use of such a long dated corporate bond in Australia. Secondly, this does not reflect the actual debt portfolios of network service providers. While it may have been representative of past practice, that is no longer the case. In essence, the AER is obliged to make its assessment using a methodology that no longer reflects actual debt financing practices. This moves the cost of capital estimate further and further away from an efficient cost estimate.

As I have outlined, there is no one single perfect answer to this problem. Drawing on our experiences, we are currently considering amendments to how the cost of capital parameters are set. We are balancing the intuitive appeal of allowing some limited flexibility to deal with significant changes that might occur within the interval, with the need for stability in those factors which are long term financial market averages.

Further, the justification for the divergence of approaches across electricity distribution, electricity transmission and gas is not clear. It may be that it is appropriate for one regime to apply across all sectors.

Merits review

Finally, I will briefly touch on the interactions with the merits review mechanism that is contained in both the electricity and gas laws.

It is clear that the decisions of the tribunal on hearing reviews of AER determinations has led to further price increases for customers. The evidence is that a low hurdle has been established to enable review matters to come before the tribunal. This has led to reviews of AER decisions becoming an inevitable part of the determination process.

That said, the merits review mechanism itself is not the subject of the AER's current review. The review process that the AER is currently undertaking is focussed towards developing a rule change package to be considered by the Australian Energy Market Commission. Any amendment to the merits review mechanism would require a change to the national energy laws, which neither the AEMC nor the AER has the power to progress.

The energy legislation requires that a review of the merits review mechanism be undertaken by 2015. When it is appropriate, the AER will be willing to share our experiences with the merits review mechanism with policy makers. Just as importantly, the experiences of consumers with the merits review process should also be shared.

Conclusion

So what does the framework that I have outlined look like?

In terms of the information that the businesses are required to submit to the regulator in their proposals, there will be little or no change. The changes do not seek to amend the fundamental building block incentive based model. The key changes are to allow the regulator to robustly consider and challenge the information that comes before us and to determine what the regulator considers to be efficient costs.

If accepted, the changes we will propose will determine an unbiased forecast of efficient costs, while allowing certainty for businesses to respond to changing conditions. We will also propose stronger incentives on businesses to not overspend and to shield customers from inefficient excessive expenditure.

Further, we will propose a process for determining the cost of capital that streamlines the regulatory process and better reflects how businesses actually conduct their financial affairs.

As I said at the outset, our changes will be squarely aimed at restoring the balance of the regime to give better effect to the national energy objective. Nothing in our proposal will be radical or outside of what is already considered best practice economic regulation in other sectors.

For those that have been around the industry for some time, it would be fair to characterise the changes that we will likely be seeking as bringing the regime back into line with other energy

and general economic regulators. For example, the way that the ACCC regulates telecommunications or water, or overseas, how Ofgem regulates energy networks in the UK.

It is our intention to prepare a rule change proposal to be submitted to the AEMC during the third quarter of 2011. This timing is to ensure that it would be possible to have an amended framework in place for the next round of revenue resets starting with the NSW and ACT networks.

I am confident that the changes that we will propose will not only protect the incentives for efficient investment, but will also better promote the long term interest of energy users. Again, I thank you for the opportunity to discuss these important issues with you this afternoon.