Macquarie Research
Equities

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AUSTRALIA

Submission to the AER

30 January 2009

Equity market responses

Event

- This document has been prepared for submission to the Australian Energy Regulator following the release of its proposed statement on the weighted average cost of capital (WACC) values and methods proposed to adopt in future electricity network determinations.
- We canvassed a number of equity market participants in order to gauge the reaction to the decision of the domestic fund managers who are ultimately responsible for allocating capital to this sector.
- In order to do this we sent by email a request for submissions which is enclosed and asked respondents to either answer a number of questions or reply with their own thoughts on the decision.
- We have enclosed these responses and also a research piece that we as Macquarie Securities published at the time of the release of the draft decision. We note that our research has already been sent to the AER in our normal course of our product distribution. As noted in the disclaimer attached to this document, views expressed by analysts are personal views and should not be construed as the view of the Macquarie Group.

Analyst

Gavin Maher
612 8232 4151 gavin.maher@macquarie.com

Submission request sent 8 January 2009

- The email outlined below was sent to our client base on 8 January 2009

Hi XX,

As you will be aware, the Australian Energy Regulator issued a Draft Decision on its review of the weighted average cost of capital (WACC) parameters for electricity transmission and distribution networks on 11 December 2008.

Like most in the market, the decision came as a negative surprise to us and in our view runs inconsistent with recent commentary by the AER. Our views at the time were detailed in the attached report, which as with all of our research was sent to the AER at the time of publishing.

Those of you that attended our briefing on 18 December with the AER in Melbourne (Conference called to Sydney) will recall that Steve Edwell (AER Chairman) stated numerous times that the AER was prepared to receive equity market feedback on its decision, which may be taken into consideration as part of the Final Decision expected towards the end of March 2009.

We have been in discussions with the Australian Energy Regulator (AER) this week about its Draft Decision on the WACC review. Subsequently, we have agreed a format with the AER where we will collect equity market participant feedback and present it as a submission from the Market.

Should you wish to make a submission please respond by email and also indicate whether you are prepared to go on the record or would prefer to remain anonymous. The AER noted that obviously more credence will be paid to those comments that are made on the record, so therefore where possible we would encourage you to respond in this manner. You are more than welcome to make any comments you wish, however, as a guide we have included a list of questions below which may be considered in formulating your contribution.

As noted on the AER website, interested parties are invited to make submissions on the explanatory statement and proposed statements by COB **Wednesday, 28 January 2008**, therefore we would hope to have final responses in by COB **Friday, 23 January 2008.**

Please note that Macquarie Research will not be using these responses in any of its publications but we note that once submitted to the AER we cannot control the final destination of the responses provided.

Should you have any queries or comments, please give me a call on 02 XXX.

Questions for consideration

- Was the Draft decision from the AER worse or better than you expected?
- What were you expecting?
- What impact has the Draft Decision from the AER had on the investment risk profile of regulated assets in Australia?
- What return on equity would you require from investing in a regulated electricity distribution network asset (assume internally managed, clean structure) post the draft decision? What would it have been prior to the draft decision?
- If owners of regulated utilities were required to raise equity, what discount to current share prices would be required? What would it have been prior to the draft decision?
- What impact has this decision made on capital allocation decisions for Australia vs. international infrastructure investments?
- What outcome do you expect from the final decision? Could an increase in the allowed return on equity change the risk profile around this investment class?
- What is your overall opinion of the AER before and following the draft decision?
- Other commentary:

Looking forward to hearing from you.

Regards,
Gavin

Individual responses received

- We note the following individual responses were received as part of our request for submissions by the equity market.

Andrew Preston - Aberdeen Asset Management – 23 January 2009

Decision on WACC Parameters for the Electricity Transmission and Distribution Networks

My concerns on the draft decision centre on the returns of the regulated entity and its ability to continue its investment programme, the cost of funding for that programme and the appetite of investors for taking up new equity.

I am not sure whether the research undertaken by the regulator was completed before global financial markets began to implode last year but the impression given is that the regulator does not accept that these are exceptional times and that everything possible should be done to nurture and ensure that business investment continues at a steady rate, at least until such time as the world returns to "normal". The government now accepts the gravity of the crisis and the need to do whatever is required to prevent the worst consequences playing out in the Australian theatre, as they have done in the US and Europe. It would seem logical that the AER would want to be in step with this thinking and also play its part in encouraging a sustained investment programme (in an area which will bear fruit for many years).

On the cost of funding for the regulated entity. It would seem that the current situation is highly unusual in that nominal interest rates have been depressed to levels approaching those of the 1930s (although spreads around the official rate remain wide). Such levels will likely remain in force through much of this year and possibly longer. But these levels are extreme and cannot be expected to remain in force once economic stimulative measures of our government, and other governments world wide, begin to take effect. At that time prevailing rates will rise and the cost and availability of funding will tighten again. We think this will be late 2009 or 2010. We have the recent example of Japan which collapsed interest rates to stimulate a recovery in its economy post 1990 but in the absence of a broader policy by government to deregulate and encourage growth, the country remained stagnant for close to 20 years and the returns of its financial markets have reflected this state.

From the investment point of view, because of their predictability of earnings and dividends, utility stocks are favoured investments when the broader economy begins to slow and the outlook for profits in the manufacturing sector becomes less clear. Since the utility customer is predominantly the consumer, it is unlikely that a downturn in the economy will be immediately reflected in lower use and demand for energy. A fall in electricity/gas sales to the consumer should therefore not be as severe as a fall in demand precipitated by a downturn in manufacturing generally. This will support the utility price as will the company policy on dividends. If the income stream is put at risk or the potential to pay dividends is constrained, the attraction of the investment will be diminished.

The other side of this argument is that when signs emerge of an economic rebound (in Australia and in the global economy) the out performance of utility share prices which we have witnessed in the last 18 months will be unwound in the expectation that economic sensitive stocks will see improved earnings and hence performance. At this point utility stocks will begin to under perform and the appetite of fund managers to add to positions by taking up rights issues will seriously diminish, necessitating deeper discounts to get the stock away.

Andrew Preston
Aberdeen Asset Management

Justin Edgar – Brook Asset Management – 8 January 2008

While we concede that the prevailing, highly uncertain environment makes benchmark setting for the next 5 (or more) years extremely fraught, the conclusions reached by the AER are virtually impossible to reconcile with the world as we know it today.
In an environment of 1) deleveraging, 2) a shrinking pool of available capital to fund investment, 3) a fundamental re-pricing of risk and 4) credit market dislocations, it beggar's belief that the regulator should conclude that:

1. The cost of equity has declined (market risk premium unchanged and a declining equity beta),
2. An A- credit rating is achievable at benchmark gearing of 60%, and
3. Overall cost of capital has declined

We consider the draft determination wholly unsatisfactory and strongly advocate all parties affected by it adopt capital strikes until a fair and reasonable allowable rate of return is established.

While we generally concur with the AER that the credit worthiness of network operators should improve (credit rating from BBB+ to A-) this should be reflected in a lower level of benchmark gearing (60% to 50%).

AMP capital INVESTORS

23 January 2009

Steve Edwell
Chairman
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

Fax: (03) 9290 1457

Dear Chairman,

AER review of electricity transmission and distribution WACC parameters

AMP Capital Investors manages approximately A$4 billon of capital invested in major infrastructure assets on behalf of its clients, who in turn are responsible for the investment of a significant proportion of Australia's superannuation savings.

Historically, a major attraction of investment in Australian energy utilities has been the presence of an even handed regulatory regime that ensures both the protection of the consumer and the creation of a framework that provides confidence in long term investment in Australia's critical energy utility networks.

In particular, we have been attracted by the Regulator's statutory obligation to ensure the long term viability of the sector.

However, the Draft Statement of Regulatory Intent (DSRI) on WACC parameters for electricity transmission and network service providers released by the Australian Energy Regulator (AER) in December fails to provide the degree of confidence necessary for us to continue recommending the investment of capital in the sector by our clients.

Specifically:

1. The DSRI fails to recognise the reality of risk premiums required by both equity and debt investors as a result of the current conditions in capital markets. Experience from previous episodes of major market and economic dislocation suggests that a full recovery from prevailing market conditions could take upwards of five years. In our opinion, any suggestion that current conditions are a short term aberration, which seems to implicit in the Draft Statement, is wide of the mark. We expect difficult debt and equity capital raising conditions to persist for the foreseeable future.

   Under these conditions, debt and equity premiums can be expected to be significantly higher than those proposed by the AER in its DSRI. Our preliminary modelling suggests that under the proposed regulatory arrangements and with real world debt margins and levels of gearing, equity returns will be totally inadequate to attract investment in such tight market conditions.

2. The proposal contained in the DSRI to assign a credit rating level of A- to the sector is inappropriate given the fact that not a single private sector participant in the sector holds a "stand alone" credit rating at this level. The only two participants (Spark asset companies and SP AusNet) with A- credit ratings both do so solely by virtue of parent company support. The proposal is at odds with the rating of BBB+ which was adopted by the AER in its draft transmission determination for Transgrid, an entity that is publicly owned by a AAA rated entity, less than six weeks prior to the DSRI.

3. Ratings agencies pay particular attention to the asset's debt service cover ratios. The current gearing level of 60% is consistent with the characteristics of a BBB rated entity. The proposed revision of the equity beta to 0.8, coupled with a requirement for an A- credit rating, may impose an obligation on current asset owners to de-leverage their investments. Not a dollar of any required capital injection would go into the development of the sector's future infrastructure requirements.

4. As you will be aware, the DSRI, if implemented, will predominately impact private sector investments over the next few years. The fundamental and adverse shift in a number of the key WACC parameters (assigned credit rating, tenor of risk free rate, equity beta) from recent decisions such as the Transgrid draft decision referred to above, creates an impression of a lack of even handedness between the treatment of public and private sector participants in the sector.

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We would remind the AER that investment in the energy utility sector has a high multiplier effect in the economy as a whole, stimulating significant employment and GDP growth. As such, we would anticipate that the Federal government expects the sector to play a significant role in Australia's economic recovery.

We applaud the very significant level of investment in the sector that has been achieved under the prevailing regulatory arrangements. However, energy supply is an integrated supply chain. Billions of dollars invested in transmission will mean nothing if commensurate investment is not made in the other components of the supply chain, particularly distribution, which is integral to the reliable delivery of energy to end users.

As a steward of other people's money, AMP Capital has an obligation to pursue investment opportunities providing the optimum level of risk-adjusted return to its clients. It has many opportunities to invest in offshore infrastructure that offer better risk/return characteristics than would be the case for the Australian energy transmission and distribution sector under the DSRI WACC parameters proposed by the AER.

The Draft Statement, if confirmed, is likely to lead to a dramatic reduction in private sector investment in the Australian energy utility sector at the very time when securing long term private sector investment in the sector has never been more critical. This would mark the failure of the regulatory regime.

Yours sincerely

Paul Foster
Head of Investments & Portfolio Management, Infrastructure
AMP Capital Investors

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28 January 2009

Australian Energy Regulator
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We manage a number of funds which invest globally in listed infrastructure and utility companies and these funds have had significant investments in listed Australian regulated utility companies. As at the date of this letter, the funds we manage have in excess of $100m invested in the sector, making us one of the largest institutional investors in this market. Other countries in which we currently invest in regulated utilities include Spain, Italy, the United Kingdom, Germany, France, India, Hong Kong, Canada, the United States and Brazil.

We are writing to convey our concern about the Explanatory Statement released by the Australian Energy Regulator (AER) in December 2008 in relation to the AER's proposed positions on each of the Weighted Average Cost of Capital (WACC) parameters for electricity transmission and distribution network service providers. As managers of funds which invest globally in listed utility companies, we continually assess the relative merits and returns on offer in different countries and we believe in the private sector participation in funding the nation's infrastructure development. However, this is subject to the returns adequately reflecting the risks involved.

Whilst we appreciate that the AER's review is limited to the individual WACC parameters rather than a review of the overarching framework in which the WACC is applied, we are concerned, given the significant capital expenditure required in the sector and the dramatic deterioration in global capital markets in the past year, by the AER's proposal of a nominal vanilla WACC which was below what the network operators had proposed. It was also below what the markets had, in our opinion, reasonably expected considering the previous regulatory decisions.

We also note that whilst the proposed nominal vanilla WACC of 8.60% is significantly less than the 9.96% sought by the Joint Industry Associations, it is only slightly above the WACC of 8.48% proposed by the Major Energy Users Inc (MEU) and Energy Round Table. In our opinion, this draft decision fails to adequately take into consideration factors such as the unprecedented turmoil in financial markets. We also note the views of others in the market and industry that the proposed nominal vanilla WACC may not provide sufficient incentive for continued investment in the sector.

Further, we were concerned by the draft decision's proposal to depart from the previously adopted credit rating of BBB+ for a benchmark efficient provider and adopt a credit rating of A-. We believe this decision may put significant financial pressure on some regulated entities, particularly given the current financial environment and the capital expenditure requirements. We also note that Standard & Poors has since stated in response to the draft WACC decision that it leaves companies vulnerable to a lowering in credit ratings by one notch, which would mean that not one of the listed regulated asset owners would in fact have an A- rating. Further, the only listed entities that currently have an A- rating have achieved this rating not as standalone entities, but based on implicit support from their higher rated substantial shareholders.

Like many in the market, we welcomed the move from state-based regulation to the AER as it provided the opportunity to improve regulatory stability and certainty in the Australian utility sector. However, the draft WACC decision has reduced our confidence in investing in the regulated Australian utility sector. At present we are aware of many regulated utility companies around the world, including those in Australia, which will require capital to fund new investments and maintain existing assets.

We would hope that the AER is able to incorporate the feedback provided by the industry and market and arrive at a final decision on the WACC parameters which provide sufficient incentive for continued investment in the sector.

Yours sincerely,

JON FITCH
Chief Investment Officer
Infrastructure Securities Team
Macquarie Funds Group

Questionnaire responses

- Responses received from the following:

Ed Prendergast - Pengana Capital – 14 January 2009 (EP)

Shane Hurst - Hastings Funds Management – 21 January 2009 (SH)

Andrew Gatenby – Solaris Investment Management – 22 January 2009 (AG)

Ed Rayner - Alliance Growth Equities - 23 January 2009 (ER)

We outline below the responses received from the questionnaire.

Was the Draft decision from the AER worse or better than you expected?

- **EP** - Worse
- **SH** - Worse than expected
- **AG** - In my view the decision by the AER was far worse than expected.
- **ER** - Significantly worse.

What were you expecting?

- **EP** -We had expected the regulator to take into account the current state of equity and debt markets when setting the parameters. Clearly conditions have changed dramatically, rendering the experience in the period from 2003-2007 a poor sample for assessment.
- **SH** - Beta of 0.9 and no change to the risk free rate (ie base on BBB+ not A-)
- **AG** - The most material impact is the harder line view on debt, ie from BBB+ to A-, this was a major surprise, especially in light of current market conditions. It seems a strange decision given how tight debt markets are, the depressed equity values of the publicly listed groups and the higher levels of gearing historically in these vehicles. The debt market has changed, the era of cheap debt is gone.

  Changing the Bond from 10yr to 5yr appears ill timed given market conditions. It would seem to be more appropriate to retain the 10yr bond rate as the benchmark. The 5 yr bond has a lower yield than the 10yr bond (Deloitte comments – AER report pg 117/127) and according to Deloitte (AER report pg 113) less liquidity. The regulator has always used the 10yr rate and it would seem to better align with the duration of asset life. In addition by using a 5 year bond for Risk Free Rate, there is inconsistency with the Market Risk Premium. This was derived from historical date based on a 10yr Commonwealth Bond. In the draft AER report (page 28) there is reference to the economic life of some assets at 40 years. Using a longer duration and more liquid bond as the benchmark would seem more appropriate.

  There has been some indications that the view on Beta may change slightly (eg ESC decision in early 2008), however in light of current market situation and high levels of uncertainty, I had hoped the Beta may have been kept at 1.0 for this period (where it has been historically), however the expectation was for a Beta of 0.90.

  Market Risk Premium – Given current conditions there is an argument that this should in fact be higher.

  Changing the parameters regularly increases the risks for the investor, we have a choice where to allocate capital, utilities/infrastructure is just one opportunity across the market. If the risks are too high relative to the potential return, we can and will invest elsewhere. A direct result of this decision should it remain unchanged will be that there is less capital/funding available for these companies to use to invest in the infrastructure/assets and hence their ability to meet the market growth will be impaired.

  As an aside but equally important issue, the more quickly that there is a consistent process and common set of inputs across all jurisdictions/states for these types of decisions the better from an investors perspective

- **ER -** No change to the risk free rate parameters (i.e keep the 10 year bond, same credit rating) and, at worse a 0.9 beta - even this would be bad news given the trouble all companies are having raising capital. I would have expected 1.0x beta as there is a significant essential capex required and these companies have to attract capital in a world where capital is very scarce and investors are very wary. Pretty much every company I can think of has a higher cost of equity and debt now, so it's amazing that the AER thinks companies like Spark and SPAusnet have lower WACCs. The credit markets are virtually shut and the current 10 year bond is artificially low due to the flight to safety and the extreme actions of the the government to lessen the impact of what is turning out to be one of the worst global recessions in modern history. Equity risk premiums have blown out too.

What impact has the Draft Decision from the AER had on the investment risk profile of regulated assets in Australia?

- **EP** - We believe the decision has raised the perceived risk in this sector (as shown by the share price reactions and increased volatility). This is a major negative as the sector is seen as a safe haven in a very tough market. This has now been reversed. Future capital raisings to fund expansion and increased maintenance costs are going to be affected, hence the returns on such initiatives will diminish. Indeed if investors require too large a risk premium to accommodate higher perceived regulatory risk, the listed companies may to be unable to fund expansion and maintenance initiatives.
- **SH** -As a global infrastructure manager, we believe a stable regulatory environment is the most important factor for a regulated company. As such, materially changing the factors in the WACC (BBB+ to A-) especially in the current turbulant market environment has certainly led us to reconsider our Australian investments.
- **AG** - This has increased the risks around this sector and would now require a higher return for us to invest
- **ER** - There are a lot of companies that will provide good investment returns and will earn a strong spread over their WACCs - why bother investing in something that is being given low and reduced returns, as well as increased regulatory risk, following this surprising draft ruling?

What return on equity would you require from investing in a regulated electricity distribution network asset (assume internally managed, clean structure) post the draft decision? What would it have been prior to the draft decision?

- **EP** - Above the WACC of the given utility. This WACC is affected by a range of issues, including the beta which is directly affected by the market's perception of regulatory risk as discussed above.
- **SH** -10% - 15% (post)
- **AG** - Higher risk, need a higher return.. simple.
- **ER** - As mentioned above, other companies have the ability to earn a return well in excess of their WACCs. Regulated utilities can only earn the regulated WACC (especially if the regulator removes any possibility of earning anything above this or even reduces the WACC) Of course you need to risk adjust this ability to create economic value, but implied returns on equity for the market are quite high now and the draft ruling has added uncertainty by changing the parameters. Regulated utilities now look much less attractive investments than they did before the draft ruling so investor are much less likely to allocate capital too them.

If owners of regulated utilities were required to raise equity, what discount to current share prices would be required? What would it have been prior to the draft decision?

- **EP** - The discount on recent capital raisings has been over 20% and up to 40%, however this has been in highly cyclical stocks such as Bluescope and Incitec. Our guess is that the discount in utilities will be lower (say 10%), however this depends greatly on whether the AER draft decision is upheld. Prior to the draft decision the discount may have been say 5%, but that was from a much higher share price especially in relation to Spark Infrastructure and SP Ausnet. So maintaining the decision will in effect be a discount of 20%+ on the share prices prior to the decision.
- **SH** - 5%-7%
- **AG** - Given the higher level of risk then a large discount would be required:, *eg* 12% - 15%+,

  Prior to the decision we would have been happy with 5% - 10%, depending on the company.

- **ER** - The share price reaction on the day of the draft ruling showed what extra discount is required. It would be hard for the likes of Spark and SP Ausnet to raise equity at these levels.

What impact has this decision made on capital allocation decisions for Australia vs. international infrastructure investments?

- **EP** - Referring to our earlier comments this decision, and the impact on the market's perception of the risks involved in the sector are likely to dramatically diminish the incentive to invest in domestic infrastructure assets.
- **SH** - See comment above (point 3)
- **AG** - We don't invest offshore
- **ER** - Obviously, Australian utilities are going to find it harder to attract investment relative to other countries with lower and falling WACCs and more regulatory uncertainty.

What outcome do you expect from the final decision? Could an increase in the allowed return on equity change the risk profile around this investment class?

- **EP** - We would welcome a final decision that adequately reflects the current condition of the debt and equity markets, and one which does not assume any change in ratings. This should include a higher return on investment for future expenditure to encourage investment on the physical assets.
- **SH** - Of the factors changed...a 0.9 beta and BBB+ debt rating, restoring some confidence to the sector.

  Absolutely, as commented above the higher the ROE and the less hostile and volatile draft decisions are relative to final decision, the higher a utility and its region should be rated.
- **AG** - We would expect a much improved and more market aware/pragmatic decision. This would include a Beta of 0.90, retention of the 10 year bond and a Debt Rating of BBB+ along with a commitment to adopting a consistent approach. In addition it would be a positive step if the regulator moved to a position where the differences between the draft and final decisions were not as great as we have seen historically.
- **ER** -Yes. There is massive competition for scarce capital at the moment and the AER needs to take this into account.

What is your overall opinion of the AER before and following the draft decision?

- **AG** - There is considerable reference in the Draft AER Report to various consultants and precedents to support the draft recommendations, however it is backward looking. The bottom line is that the market has changed dramatically in the last 6 months, risk has increased, debt/credit is not as freely available, confidence is at all times low and the outlook appears very ordinary. In light of this it would seem more appropriate to encourage investment through increased returns to equity holders.

  It would be far better if the regulator(s) adopted a more consistent approach to regulation and adopted a more incentivised approach to reward good performance.

Other commentary:

- **SH** - If confidence is to be restored into the sector and premiums reapplied to this australian assets, a stable regulatory enviornment, with solid returns to equity holders need to reappear. In the current turbulent markets, why cant Australian Utilities lead the world in sensible regulation and solid incentives to asset owners for effecient performance and responsible capex spend. Stop playing games...the less combative the environement for the utilities, the better they will perform and the less time will be needed submitting reset documentation and more time spend improve distribution and transmission assets around Australia!!
- **AG** - Expecting investors to allocate capital to this sector given current market conditions (volatility, cost and availability of debt) with a lower return on equity does not make sense. I would expect that if this decision was to remain unchanged then this will result in a considerable reduction in capital allocation/availability to the sector.

If we look at this decision in isolation then the ramifications impact the listed stocks (*eg* DUE, SPN, SKI etc) as well as unlisted/Government corporations. However there would appear to be a large demand/requirement for substantial investment in Infrastructure (Water, Gas, Electricity, Port and Rail) across the country (and noted by Infrastructure Australia which received over 90 submissions requesting funding). Much of this is to catch up on a lack of investment by various state and federal governments over the last 10 – 15 years as well as the need to remove current bottlenecks and provide the necessary networks to provide for growth. There is competition for capital.

In order to attract funding the returns need to be sufficient to attract the necessary investments into the sector versus other opportunities for capital. For example the Federal Government has stated publicly that it wants re-newables to supply around 20% of the country's power requirements by 2020 (approx target of 45,000 GWhr per year). In itself this renewable investment on its own will require a massive investment (some estimates at +A$25b if you assume just wind as the source – AGL Energy June 2008) just for renewable electricity before anything else. Not all wind farms will be near suitable transmission and distribution locations, new investment will be required to build this infrastructure. **Who will fund this and how?** Governments have been reluctant to invest in this type of infrastructure over the last 10 -15 years and in the current circumstance have limited ability to fund much, if any of their submitted project wish-list as it is (estimated by infrastructure Australia at over $100b). Thus one would assume it will need to be funded by a mix of private debt and equity. Low return on equity will not attract sufficient capital from the equity market. Banks are under pressure to provide additional funding for current operations as foreign banks depart, gaining additional funding/exposure is likely to be expensive and more complex.

The introduction of an ETS adds further complexity to the debate and the uncertainty on how this will play out in the market adds further risks for investors. Higher returns will be required to attract investment to offset the increased risk.

There has been considerable debate around infrastructure and the many problems that seem to be confronting the country on this topic. This debate covers port and rail bottlenecks, urban road congestion, poor pricing signals for water and energy (*eg* State Government retail caps distort the market), and often poor planning. I acknowledge that much of this is outside the direct influence of the AER, however I think it is important that the regulator when preparing the framework for its decision does not do this in isolation to the other components of the economy. There are limited resources (*eg* financial & people) to invest in infrastructure, the regulator should ensure that there is sufficient returns to attract the necessary investment.

If Governments and thus by implication the community (consumers and industry) want the infrastructure upgraded, the regulator should ensure its decisions provide sufficient incentive for investors to come in and undertake the required capital expenditure to meet the current and future needs of the economy as it grows. In fact it would be nice to see some forward planning and investment occur so that the essential infrastructure this country requires is built ahead of time, not being re-active as seems to be the case in so many instances. Regulator over to you !.

Some of the links that provide access to some of the data used in preparing the above.

AEMC

http://www.aemc.gov.au/pdfs/reviews/Review%20of%20Energy%20Market%20Frameworks%20in%20light%20of%20Climate%20Change%20Policies/MMA%20-%20Wholesale%20and%20Retail%20Market%20Impacts%20-%20Final%20Draft.pdf

AGL Energy

http://www.agl.com.au/Downloads/UBS%20Conf%20MD%20pres%2011%2006%2008.pdf

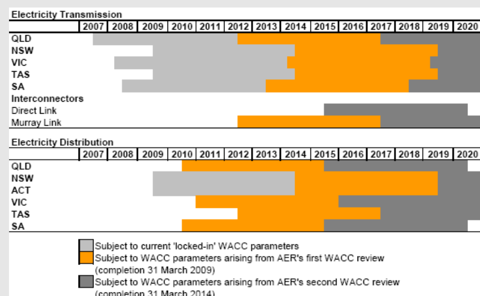
AER

http://www.aer.gov.au/content/item.phtml?itemId=724617&nodeId=fb2c5e92712b75c4a5daf6d65f5ae441&fn=Proposed%20statements%20(11%20December%202008).pdf

- **ER** - Investment in Australian infrastructure has relied upon foreign capital (both debt and equity) and so returns need to be attractive to encourage this investment. Investors are very nervous and are pulling back from overseas markets, so they are not encouraged by lowered WACCs and low returns. Domestic investors also need decent returns and regulatory certainty, otherwise the capital will go elsewhere.

Friday 12 December 2008

When will the new WACC parameter be applied?



Source: AER, Macquarie Research, August 2008

WACC parameters

Parameter	Previous	Industry Proposal	AER Proposed
Gearing	60%	60%	60%
Nominal risk free rate	10 Year CGS	10 Year CGS	CGS
Market risk premium	6.00%	7.00%	6.00%
Equity beta	1.0	1.0	0.8
Credit rating	BBB+	BBB+	A-
Gamma	0.5	0.2	0.65
Nominal Vanilla WACC	9.56%	9.96%	8.60%

Source: AER, December 2009

Analysts

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Regulated utilities

WACCed

Event

- The Australian Energy Regulator (AER) has released its draft decision on its review of the weighted average cost of capital (WACC) parameters for electricity transmission and distribution networks.

Impact

- **Draft:** Before we highlight the negatives, and there are a few, we note that this is the draft and not the final decision which is expected in March 2009. Therefore this release from the AER, while disappointing across the board, can at least be viewed as the worst case scenario, with only upside risk at the final.
- **Aggressive:** The AER is proposing to reduce the return on capital (WACC) it allows a regulated electricity transmission/distribution asset from 9.32–9.56% (previously adopted) to 8.60% (proposed) – a reduction of 8–10%. At a high level, this should reduce asset values by around 8–10%. If we assume gearing of 60%, then the 8–10% reduction in asset value should reduce equity values by around 20–25% if it were to undergo a regulatory reset today. The longer the asset has to wait for its next regulatory reset, the better outcome for value.
- **What are the key details?** The AER is proposing to apply an equity beta of 0.8 (from 1.0 previously), a benchmark credit rating of A- in formulating the pass-through credit spread (from BBB+ previously) and using a Commonwealth Government Security with term matching the regulatory reset period – typically five years (from 10-year Commonwealth Government Bond previously) to calculate the risk-free rate.
- **Hard ball:** Is this the AER or its Victorian state-based predecessor, the Essential Services Commission (ESC), who was in the nasty habit of handing out a tough draft followed by a lighter final decision? We hope for the former, but expect for the near-term equity markets will price in the latter.

Analysis

- This is a negative surprise to us and the market and in our view runs inconsistent with recent commentary by the AER. We anticipate asset owners will challenge the decision and capital markets will reduce valuations. While the equity beta has been the bone of contention in the regulated market for some time, a reduction to 0.8 will be viewed as aggressive. From left field, we have also seen the pass-through of debt costs get squeezed, with the regulator passing through lower credit spreads on top of a lower risk free rate (assuming a positive shaped yield curve).
- There is no doubt the market will be disappointed in this decision. At a time when investors are nervous enough about the levels of debt in these businesses, this is the last thing that the market needed. While it is a disappointing draft decision, we need to remember that it is exactly that, a draft and not the final. Historically the best time to buy regulated utilities is post the time of a draft decision as it can only get better from here.
- From a stock perspective SKI is in the worst position, followed by SPN, while DUE is the least exposed due to asset diversification.

WACC review – what does it mean?

- The National Electricity Rules (NER) provide that the Australian Energy Regulator (AER) must review the weighted average cost of capital (WACC) parameters to be adopted in determinations for electricity transmission and distribution network service providers. Reviews will be conducted every five years for transmission and at least every five years for distribution.
- This current review is the first one and is expected to be completed by 31 March 2009, at which time the AER will release a final decision for both transmission and distribution assets.
- In the case of electricity transmission, however, the AER's statement on the WACC parameter values or methodologies that will apply to transmission determinations is 'locked-in' for all transmission regulatory proposals submitted after 31 March 2009 and before completion of the next review.

What are the WACC parameters?

- The AER's review is limited to the individual WACC parameters rather than relating to the overarching framework in which WACC is used. For example, the use of the nominal post-tax framework or the use of the CAPM for calculating the cost of equity are two issues not subject to review by the AER.
- The AER may review the values of and methods used to calculate:
  - ⇒ the nominal risk free rate
  - ⇒ the equity beta
  - ⇒ the expected market risk premium (MRP)
  - ⇒ the market value of debt as a proportion of the market value of debt and equity (ie the gearing ratio).

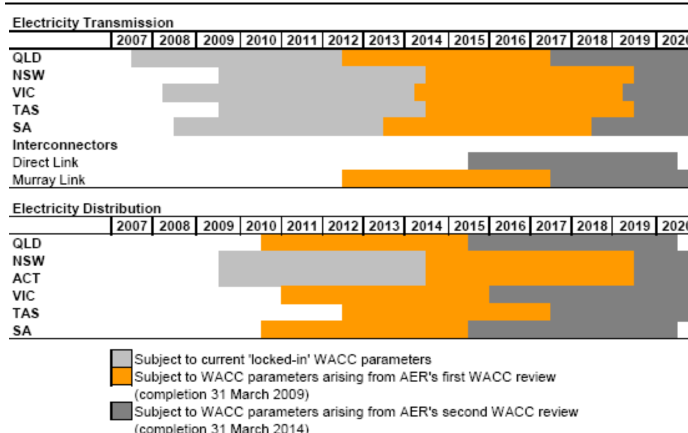
WACC parameters

Parameter	Previous	Industry Proposal	AER Proposed
Gearing	60%	60%	60%
Nominal risk free rate	10 Year CGS	10 Year CGS	CGS
Market risk premium	6.00%	7.00%	6.00%
Equity beta	1.0	1.0	0.8
Credit rating	BBB+	BBB+	A-
Gamma	0.5	0.2	0.65
Nominal Vanilla WACC	9.56%	9.96%	8.60%

Source: AER, December 2009

- The AER is proposing to reduce the return on capital (WACC) it allows a regulated electricity transmission/distribution asset from 9.32% (previously adopted) to 8.60% (proposed) – a reduction of 8%.
- The AER considers that this rate of return is reflective of a forward-looking rate of return for a benchmark efficient service provider that is commensurate with prevailing conditions in the market for funds and the risk involved in providing regulated electricity network services. The AER also considers the revised parameters will result in an allowance for the cost of debt that is reflective of the cost of borrowing, at the time of the determination, for comparable debt.

When will the new WACC parameter be applied?



Source: AER, Macquarie Research, August 2008

What is being hit the most?

- In our view the biggest potential impact to investors should this draft decision become final is driven by three separate parameters which we discuss below:
- **Nominal risk free rate:** The AER has proposed that the methodology for estimating the risk free rate is based on the yield of a Commonwealth Government Security with a maturity matching the length of the regulatory period.
- **Equity beta:** The move from an equity beta of 1.0 has probably been anticipated by the equity market since the ESC decision early in the year on the gas networks in Victoria. However, a move to 0.8 will not have been expected by most investors. As shown in the table below while the final decisions have ranged from the low side of 0.7 (recent Victorian gas decision) to 1.10, the actual average of all previous decisions comes in at 9.125. Room to move perhaps at the final?

Past regulatory practice – equity beta

Regulator (year)	Sector	Asset beta[439]	Debt beta	Gearing	Equity beta (range)	Equity beta (final)
ESC (2008)	Gas	N/A	N/A	60.0%	0.50-0.80	0.70[440]
OTTER (2007)	Electricity	N/A	N/A	60.0%	N/A	0.90
ESCOSA (2006)	Gas	N/A	N/A	60.0%	0.80-1.00	0.90
QCA (2006)	Gas	0.55	0.12	60.0%	N/A	1.10
ESC (2006)	Electricity	N/A	0.00	60.0%	N/A	1.00
QCA (2005)	Electricity	0.45	0.10	60.0%	N/A	0.90
ESCOSA (2005)	Electricity	N/A	0.00	60.0%	N/A	0.90
IPART (2005)	Gas	0.30-0.40	0.00	60.0%	0.80-1.00	N/A
ICRC (2004)	Gas	0.40	0.06	60.0%	0.90-1.09	N/A
IPART (2004)	Electricity	0.35-0.45	0.00-0.06	60.0%	0.78-1.11	N/A
ICRC (2004)	Electricity	0.40	0.06	60.0%	N/A	0.90
Estimate (low-high)	**Energy**	**0.30-0.55**	**0.00-0.12**	**60.0%**	**0.50-1.11**	**0.70-1.10**

Source: ESC[441], OTTER[442], ESCOSA[443], QCA[444], IPART[445], ICRC[446].

Source: AER WACC Draft Decision, December 2008

- **Credit rating:** The decision to move away from a BBB+ metric in the current debt environment is confusing. We struggle to understand why the AER has chosen to move this parameter in possibly one of the most skittish debt markets in history. Does it impact the level of debt these businesses can carry? At this stage we don't believe so although we will carry out further work in the coming weeks to determine if this decision will change the capital structure of these businesses going forward.

So who will this impact?

- We need to remember that this is a draft and not a final decision and we also need to remember that this is a line in sand drawn by the Regulator and effectively this is as bad as it can get.
- In the following section we examine the stocks that are likely to be impacted by this decision, namely SKI, SPN, and to a lesser degree DUE.

Impact to value?

- The AER is proposing to reduce the return on capital (WACC) it allows a regulated electricity transmission/distribution asset from 9.32–9.56% (previously adopted) to 8.60% (proposed) – a reduction of 8–10% as shown in the below table.

Draft decision: Reduction in WACC

WACC	Victorian Distribution	South Australian Distribution
Previous	9.56%	9.32%
Draft Decision	8.60%	8.60%
% change in WACC	**-10%**	**-8%**

Source: Macquarie Research, December 2008

- At a high level, this should reduce asset values by around 8–10%. If we assume gearing of 60%, then the 8–10% reduction in asset value should reduce equity values by around 20–25% if it were to undergo a regulatory reset today.
- We attempt to transfer this analysis to specific stocks. In the analysis below, we reduce EBITDA for the respective assets that are impacted by the draft decision by 10% (Victorian Distribution/Transmission) and 8% (South Australian Distribution) in-line with their next regulatory resets.

Equity cashflows: Current forecast and draft decision

DUE	FY09	FY10	FY11	FY12	FY13	FY14
EBITDA	**660**	**683**	**688**	**697**	**717**	**733**
Interest Expense	-278	-297	-306	-315	-324	-332
Tax Paid	-28	-29	-29	-24	-25	-29
Total Capex	-452	-376	-254	-273	-250	-221
Debt Drawn down	325	246	136	147	133	115
Distributable cashflow	**226**	**227**	**235**	**232**	**250**	**266**
Shares	633	633	633	633	633	633
Equity Cash Flow per share	35.8	35.9	37.2	36.6	39.5	41.9
Yield	**20%**	**20%**	**21%**	**21%**	**22%**	**24%**
EBITDA Coverage	2.4x	2.3x	2.2x	2.2x	2.2x	
FFO Coverage	1.8x	1.8x	1.8x	1.7x	1.8x	

DUE – WORST CASE	FY09	FY10	FY11	FY12	FY13	FY14
EBITDA	**660**	**683**	**680**	**679**	**693**	**702**
Interest Expense	-278	-297	-306	-315	-324	-332
Tax Paid	-28	-29	-29	-24	-25	-29
Total Capex	-452	-376	-254	-273	-250	-221
Debt Drawn down	325	246	136	147	133	115
Distributable cashflow	**226**	**227**	**227**	**214**	**226**	**234**
Shares	633	633	633	633	633	633
Equity Cash Flow per share	35.8	35.9	35.8	33.8	35.7	37.0
Yield	**20%**	**20%**	**20%**	**19%**	**20%**	**21%**
EBITDA Coverage	2.4x	2.3x	2.2x	2.2x	2.1x	2.1x
FFO Coverage	1.8x	1.8x	1.7x	1.7x	1.7x	1.7x

SPN	FY09	FY10	FY11	FY12	FY13	FY14
EBITDA	**728**	**760**	**800**	**828**	**853**	**849**
Interest Expense	-294	-314	-339	-364	-388	-410
Tax Paid	-19	-20	-20	-20	-20	-20
Total Capex	-449	-499	-506	-523	-457	-457
Debt Drawn down	292	324	329	340	297	297
Distributable cashflow	**258**	**251**	**264**	**261**	**285**	**259**
Shares	2093	2093	2093	2093	2093	2093
Equity Cash Flow per share	12.3	12.0	12.6	12.5	13.6	12.4
Yield	**13%**	**13%**	**13%**	**13%**	**14%**	**13%**
EBITDA Coverage	2.5x	2.4x	2.4x	2.3x	2.2x	2.1x
FFO Coverage	1.9x	1.8x	1.8x	1.7x	1.7x	1.6x

SPN – WORST CASE	FY09	FY10	FY11	FY12	FY13	FY14
EBITDA	728	760	797	803	823	796
Interest Expense	-294	-314	-339	-364	-388	-410
Tax Paid	-19	-20	-20	-20	-20	-20
Total Capex	-449	-499	-506	-523	-457	-457
Debt Drawn down	292	324	329	340	297	297
Distributable cashflow	**258**	**251**	**261**	**236**	**255**	**206**
Shares	2093	2093	2093	2093	2093	2093
Equity Cash Flow per share	12.3	12.0	12.5	11.3	12.2	9.9
Yield	**13%**	**13%**	**13%**	**12%**	**13%**	**10%**
EBITDA Coverage	2.5x	2.4x	2.4x	2.2x	2.1x	1.9x
FFO Coverage	1.9x	1.8x	1.8x	1.6x	1.7x	1.5x

SKI	FY09	FY10	FY11	FY12	FY13	FY14
EBITDA	**526**	**550**	**518**	**563**	**597**	**632**
Interest Expense	-191	-201	-221	-252	-283	-311
Tax Paid	0	0	0	0	0	1
Total Capex	-316	-395	-519	-569	-471	-501
Debt Drawn down	206	256	337	370	306	325
Distributable cashflow	**225**	**211**	**115**	**111**	**149**	**147**
Shares	1009	1009	1009	1009	1009	1009
Equity Cash Flow per share	22.3	20.9	11.4	11.0	14.8	14.6
Yield	**18%**	**16%**	**9%**	**9%**	**12%**	**12%**
EBITDA Coverage	2.8x	2.7x	2.3x	2.2x	2.1x	2.0x
FFO Coverage	2.2x	2.0x	1.5x	1.4x	1.5x	1.5x

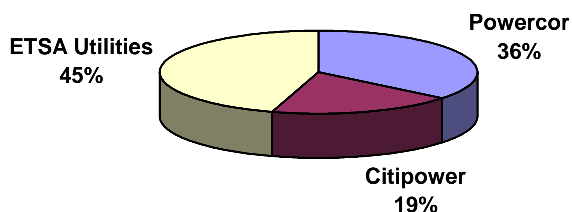
SKI – Pro Forma	FY09	FY10	FY11	FY12	FY13	FY14
EBITDA	**526**	**542**	**482**	**524**	**556**	**583**
Interest Expense	-191	-201	-221	-252	-283	-311
Tax Paid	0	0	0	0	0	1
Total Capex	-316	-395	-519	-569	-471	-501
Debt Drawn down	206	256	337	370	306	325
Distributable cashflow	**225**	**203**	**79**	**73**	**108**	**98**
Shares	1009	1009	1009	1009	1009	1009
Equity Cash Flow per share	22.3	20.1	7.8	7.2	10.7	9.7
Yield	**18%**	**16%**	**6%**	**6%**	**8%**	**8%**
EBITDA Coverage	2.8x	2.7x	2.2x	2.1x	2.0x	1.9x
FFO Coverage	2.2x	2.0x	1.4x	1.3x	1.4x	1.3x

Source: Macquarie Research, December 2008

SKI – likely to be most impacted

- Spark Infrastructure earns the majority of its earnings through its minority interest (49%) in each of three electricity distribution assets, located in Victoria and South Australia. In the chart below we note the split of regulated revenues generated by each of these assets.

Regulated revenue breakdown



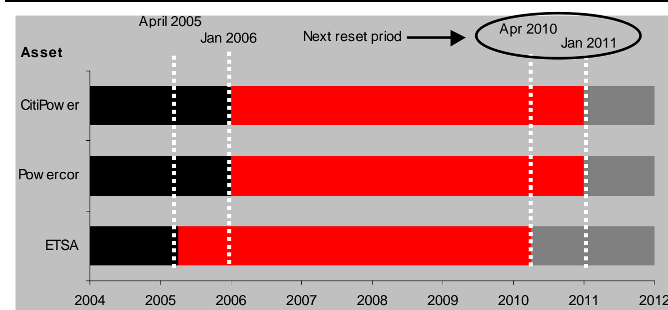
Source: Macquarie Research, July 2008

- Each of the electricity distribution networks carries electricity from the high voltage transmission grid to end users. Spark Infrastructure's Victorian assets cover central and western areas of the state, the areas of western Melbourne (Powercor) as well as the CBD and inner suburbs of Melbourne (CitiPower).
- Spark Infrastructure's minority-owned ETSA provides distribution services to all major South Australian population centres, including Adelaide.

Closest to regulatory review

- Of the three regulated utility owners discussed, SKI's assets are the closest to their next regulatory reset period and therefore the first to feel the pain of any negative final decision in this WACC review.

SKI regulatory reset timetable



Source: SKI, Macquarie Research, February 2008

- In the analysis below, we have outlined the impact to SKI's cashflow available for distribution should the draft decision remain through the final outcome.

Impact of draft decision on distributable cashflows

Free cash flow per share	FY09	FY10	FY11	FY12	FY13	FY14
SKI						
Current	22.3	20.9	11.4	11.0	14.8	14.6
Draft Decision	22.3	20.1	7.8	7.2	10.7	9.7
Variance	0.0	-0.8	-3.6	-3.8	-4.1	-4.8
% Variance	**0%**	**-4%**	**-32%**	**-35%**	**-27%**	**-33%**

Source: Macquarie Research, December 2008

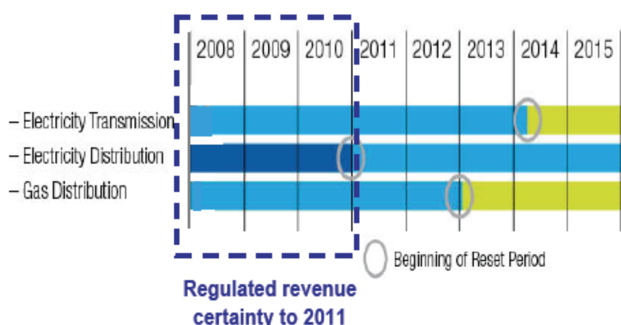
SPN – transmission protected in the short term

- SPN is a utility infrastructure asset vehicle whose assets comprise 100% ownership of Victoria's primary electricity transmission network, an electricity distribution network located in eastern Victoria and a gas distribution network located in western Victoria.

SPN regulatory review – still a long way off

- As SPN has recently completed its Electricity Transmission and Gas Distribution regulatory reviews, the next regulatory decision for SPN is not until its Victorian Electricity Distribution network becomes due for reset in 2011.

SPN Regulation timetable



Source: SPN, September 2008

- In the analysis below, we have outlined the impact to SPN's cashflow available for distribution should the draft decision remain through the final outcome.

Impact of draft decision on distributable cashflows

Free cash flow per share	FY09	FY10	FY11	FY12	FY13	FY14
SPN						
Current	12.3	12.0	12.6	12.5	13.6	12.4
Draft Decision	12.3	12.0	12.5	11.3	12.2	9.9
Variance	0.0	0.0	-0.2	-1.2	-1.4	-2.5
% Variance	**0%**	**0%**	**-1%**	**-10%**	**-10%**	**-20%**

Source: Macquarie Research, December 2008

DUE: Best placed

- We estimate that by FY11 when the Stage 5B expansion of the Dampier to Bunbury Pipeline is complete, its contribution to distributable cashflow will equate to around 40% of DUE total. Duquesne will account for ~25% and Multinet will make up around 10%. Therefore the United Energy Distribution network, which is the only DUE asset affected by the AER's release in the near term, will contribute only 25% of DUE's available cash for distribution.
- Outlined in the table below, we note the impact to DUE's distributable cashflows should the draft decision remain through the final outcome.

Impact of draft decision on distributable cashflows

Free cash flow per share	FY09	FY10	FY11	FY12	FY13	FY14
DUET						
Current	35.8	35.9	37.2	36.6	39.5	41.9
Draft Decision	35.8	35.9	35.8	33.8	35.7	37.0
Variance	0.0	0.0	-1.3	-2.9	-3.8	-4.9
% Variance	**0%**	**0%**	**-4%**	**-8%**	**-10%**	**-12%**

Source: Macquarie Research, December 2008

Will this encourage new equity into the sector?

- In its review, the AER acknowledges that new investment in network assets is required in many areas of the NEM, to address network expansion due to growing energy demand (particularly peak demand), and network replacement due to ageing assets.
- So while the requirement for investment in the sector remains we question whether future equity participants will be encouraged by what they have seen from the AER in this draft decision. Let's hope the final decision brings about better news!

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