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BACKBONE OF THE NEM

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2 February 2009

Australian Energy Regulator
Attn: Steve Edwell, Chairman
GPO Box 520
MELBOURNE VIC 3001

email: AERInquiry@aer.gov.au

Dear Steve,

Review of WACC

Grid Australia represents owners of the electricity transmission networks (combined asset value in excess of $10 billion) which are the backbone of the national electricity market (NEM).

The level of future investment in transmission networks will be pivotal in whether the NEM becomes a more fragmented regional market with ever-increasing congestion, higher pool prices and higher volatility (much to the detriment of consumers) or whether the NEM becomes a truly national market which delivers electricity reliably and securely at least cost.

The AER's foreshadowed slashing of the regulated rate of return (WACC) to a level well below the actual cost of capital will strangle transmission investment, thereby bestowing upon Australia the former, highly undesirable outcome.

The level of future transmission investment in transmission networks will also be pivotal in whether the government's climate change targets (CPRS, expanded RET) are achieved at least cost, or whether the lack of required higher capability on major flow paths, including interconnectors, means that these targets can only be met at a much higher cost to consumers (or not met at all).

The AER's foreshadowed WACC settings will significantly frustrate the delivery of these high profile national government policies.

Whilst Grid Australia is a contributor to the joint submission from the electricity network associations, the impacts on future investment in the electricity transmission grids, and the resultant consequences, are so severe that Grid Australia are obliged to separately put our very real concerns on the record.

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Grid Australia believes that there are material problems in the AER's methodologies, data analysis and process which need to be addressed in the Final decision. Grid Australia has highlighted some of these in the Attachment.

We acknowledge and appreciate that you and Chris Pattas have been willing to hear our concerns. We trust that you will give thoughtful consideration to our suggestions for achieving an outcome which is sustainable in these very challenging times, and aligned with the policy initiatives of our national leaders.

Grid Australia also recognises that some of the material we are referencing has been published since the AER released its Proposed Statement and held its public forum.

One such example is the report from S^3 Advisory (December 2008) commissioned by the AEMC. S^3 Advisory focussed on the very relevant matter of the expected conditions in financial markets in the coming years, and concluded:

> *" In considering the allocation of , and **cost of capital going forward**, it is clear that the significance of the current credit crisis and the limit it is likely to place on access to, and cost of capital **should not be underestimated**, as it establishes a **new paradigm** in which investment must be considered, and will have a **significant influence** throughout the period **till 2020**" (emphasis added)*

It is also apparent that the economic and financial markets circumstances have since deteriorated further, and that our nation's political leaders continue to adjust their position and actions in response to these changes.

One of the policy initiatives agreed upon by all our national leaders is the need to significantly increase investment in Australia's infrastructure. In our view, the AER should be supporting, not frustrating, that leadership initiative.

We recognise that an outcome on the WACC that will encourage investment in the grid requires the AER to shift significantly from its foreshadowed position. We are also aware that regulators often do not move much from their draft decision.

But these are not conventional times, and there is no place for artificial constraints to making the necessary changes. Australia's political leaders have demonstrated that, in these times, a willingness to make large and decisive moves is regarded as a strength, and not a weakness.

We strongly encourage the AER to leap onto the same page as our national leaders.

Yours sincerely,

Gordon H. Jardine
CHAIRMAN

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Attachment

Some observed problems with the AER's approach, and suggested remedial action

Grid Australia believes that there are problems with key aspects of methodology, due process and data analysis in the context of what electricity transmission businesses should reasonably expect from the AER in an exercise which has such very large impacts.

Grid Australia also believes that if the AER persists with its foreshadowed position of reducing the WACC, there will be significant adverse consequences for transmission investment, the operation of the NEM, risks to trading participants in the NEM, total electricity costs for consumers, and the achievability of government economic initiatives and government climate change policies.

Grid Australia believes that some elements of the AER's approach thus far can be characterised as the AER considering information which is not relevant and / or not considering information which is relevant.

In addition, Grid Australia notes that some of the information referenced herein was published after the AER's Proposed Statement, and therefore can be characterised as new information. Grid Australia believes that this new information is relevant, and therefore ought to be considered by the AER in formulating its final decision.

Grid Australia emphasises that the matters raised herein are not intended to be a comprehensive list of our concerns. Grid Australia is a contributor to the joint submission from the network industry associations.

Methodology matter # 1 – Extrapolation approach

The AER's approach involves analysing historical data, and then extrapolating it to apply in the future (effectively for the next 10 years, given the staggered timing of revenue resets for network businesses).

As it happens, the AER is doing this exercise during a "once in a century" financial/credit crisis which represents a major discontinuity between the historical data and the pertinent future period of this decision.

The AER has extrapolated the historical data forward across this major discontinuity, without any adjustment, thereby assuming that the conditions in the financial market of the near future will be the same as the benign conditions which applied before the crisis.

Grid Australia would observe that, given the views of financial markets practitioners and others, the AER has thus far adopted a truly unique position in that regard.

The AER also assumes that the crisis will be over before the first application of the new parameters.

Critically, from a process perspective, the AER has not undertaken any work on the expected conditions in financial/credit markets for the pertinent future period, nor has it provided any arguments to support the pivotal assumption that those conditions will be the same as before.

One would reasonably expect that if the AER is adopting a (unique) view that is materially different to market practitioners, then the AER would have expert advice and documented reasons to support that position, given the importance of the decision.

Further, one would expect that the AER would have seriously considered the alternative plausible proposition that there will be carryover and residual effects from the current crisis which materially affect the cost of capital in the pertinent future period. The implication of this proposition is that data cannot be extrapolated from the past to the future without adjustment for the residual effects.

Grid Australia notes that the AEMC recently commissioned a specialist finance consultant (S^3 Advisory) to report on the expected conditions in financial markets for energy sector investments for the pertinent future period. Grid Australia believes that this constitutes information which is relevant to the AER's decision on WACC.

The S^3 Advisory report was published on the AEMC website after the AER's Proposed Statement was published, and thus represents new information.

The S^3 Advisory report concludes that:

> *" In considering the allocation of , and <u>cost of capital going forward</u>, it is clear that the significance of the current credit crisis and the limit it is likely to place on access to, and cost of capital <u>should not be underestimated</u>, as it establishes a <u>new paradigm</u> in which investment must be considered, and will have a <u>significant influence</u> throughout the period <u>till 2020</u>" (p12, emphasis added)*

> *"In addition to the limited capital pool, there will be a <u>step change</u> to a <u>more conservative</u> approach to the provision of debt and equity as investors seek to manage a more limited supply and <u>address an under-estimation of risk in recent years</u>... financial market practitioners expect that the more conservative approach to lending <u>will last for at least until post 2020</u>" (p6, emphasis added)*

In essence, S^3 Advisory has concluded that:

(a) there will be residual effects from the financial crisis into the pertinent future period, and

(b) these effects will be large, and

(c) these effects will be persistent for the pertinent future period.

The implication of these findings is that it is not appropriate to extrapolate from historical data to the future without adjustment from statistical median values, as the AER has thus far done.

One of the shifts identified by S^3 Advisory relates to risk transfer from debt providers to equity holders:

> *"This has already begun to affect investment as banks take the opportunity to modify loan covenants in order to reduce their risk exposure and transfer it to equity" (p6)*

This observation is important in the context of extrapolating the cost of equity from the past to the future. S^3 Advisory has identified that the set of risks faced by equity holders in the future will be materially different (larger/higher) than the set of risks in the past (which are reflected in the cost of equity in the past).

Thus, it is not appropriate to extrapolate past data on the cost of equity into the future without, inter alia, an (upwards) adjustment for the different (higher) set of risks.

In summary, Grid Australia believes that the AER needs to take cognisance of the expected conditions in financial markets in the pertinent future period.

Methodology matter # 2 – Mechanistic / fragmented vs. Holistic

The AER has adopted a very mechanistic / fragmented approach, in which considerable weight has been placed on analysing each parameter, in isolation, with little or no weight placed on the overall WACC outcome.

A similar fragmented approach has been applied to considering the National Electricity Objective – the AER has observed that a lower WACC would result in lower network charges, but has not looked at the consequential effects on pool prices, volatility and the energy component of the cost of electricity to consumers.

Grid Australia believes that the AER should be taking a holistic approach to both the WACC and to the total cost of electricity to consumers. Such a holistic approach should be standard for a prudent regulator.

Grid Australia further believes that, in this particular exercise, the existence of a "persuasive evidence" test makes the adoption of a holistic approach even more compelling.

A holistic approach means that the AER needs to look at the overall WACC outcome, and how that aligns with:

(a) financial market expectations in the pertinent future period, and

(b) expected outcomes (including consequential effects) for total electricity costs to consumers and reliability, in the context of the National Electricity Objective, and

(c) government policy directions for national infrastructure development and energy markets (including pertinent climate change initiatives).

In Grid Australia's view, all these matters are relevant to the decision.

In the context of expected financial market conditions, S[3] Advisory notes:

> *"There is a strong view from the Financial Market participants ... that the cost of capital has risen, and will continue to rise for some time and remain at a higher rate than it has in recent years" (p7, emphasis added)*

And, being cognisant of the AER's Proposed Statement, S[3] Advisory has commented specifically on the regulatory WACC:

> *"... the issue of a reducing regulatory WACC is material in the context of the other factors affecting the energy sector which all go to the risk and reward that can be achieved on an investment . As noted above, it is expected that the risk premium required on investments will increase, with those in the regulated energy sector being no exception" (p50, emphasis added)*

These findings have significant implications for the AER's approach.

If knowledgeable financial market participants are expecting the cost of capital in the pertinent future period to be higher, and the AER's fragmented/mechanistic approach results in a lower WACC, then surely a prudent regulator, acting consistently with good regulatory practice, would not simply run with the latter.

Further, in this exercise there is an explicit requirement for the AER to have "persuasive evidence" for changing WACC parameters from those currently published in the Rules. Surely this places a very high hurdle against reducing the WACC when financial market practitioners are expecting a higher, rather than lower, cost of capital in the pertinent future period. This hurdle is one that should be clearly defined and consistently applied, as intended by the Rules.

And surely it now places a significant onus on the AER, should the AER choose to persist with its (truly unique) position of adopting a lower WACC , to provide substantive evidence and reasoning as to why its view of future financial markets is correct and why the views of the community of financial market practitioners is wrong.

A similar situation applies in relation to the consequential effects of a lower WACC on pool prices, volatility etc, in assessing how the decision aligns with the National Electricity Objective, and how it aligns with other germane government policies. These matters are discussed further below.

Data analysis matter # 1 - Credit rating

In its analysis of credit ratings, the AER has not used the relevant, "fit for purpose" credit rating data for government-owned networks. Further, given the importance of this decision, the AER has not made reasonable endeavours to gather such data.

The data which has been used for government-owned networks are ratings which include government support, rather than the "standalone" ratings of the business. The purpose of the AER's analysis is to determine the cost of debt. Government-owned networks source their debt through their respective State treasury corporations, which, under National Competition Policy (competitive neutrality principles), apply a cost of debt which is based on the network's standalone rating.

It is the standalone rating which is relevant and fit for purpose. This rating is materially different to the government supported rating which the AER has used in its analysis. Grid Australia notes that the median standalone rating for the government-owned network businesses (submitted in the JIA submission) is BBB+, some 5 notches below the AA rating adopted by the AER for government-owned businesses.

The effect of using the wrong ratings data creates a significant upwards bias in the assessment of the benchmark credit rating.

It is recognised that many standalone ratings of government-owned businesses are not published. By using only published data, the AER has excluded the ratings of significant players in the electricity network business, and this also acts to create an upward bias in the data used in the assessment of the benchmark rating.

However, given the importance of the decision and the small number of businesses in this category, it is reasonable to expect that the AER will now use the relevant, broader data on standalone credit ratings provided in the JIA submission.

Finally, Grid Australia notes that, in response to the AER's Proposed Statement, ratings agencies have indicated a likelihood of a ratings downgrade on the basis of the AER's decision. Whilst Grid Australia recognises that there is a certain circularity in this, surely it must require the AER , in the "persuasive evidence" test, to lift the barrier to change.

Data analysis matter # 2 – Risk free rate (5 years vs. 10 years)

The AER's data analysis of this factor is manifestly incomplete, because, inter alia, it only considers one of the two roles of the risk free rate.

The risk free rate forms the basis of calculation for the cost of debt, and it is this role which the AER has considered. Grid Australia believes that there are shortcomings in that aspect of the AER's analysis, and these are discussed in the submission from the joint industry associations.

However, and equally importantly, the risk free rate also forms the basis of calculation of the cost of equity – the other part of the WACC calculation.

Grid Australia notes that the AER's analysis has not considered the relevant matter of the role of the risk free rate in the cost of equity.

Grid Australia believes that if the role in relation to cost of equity is considered, it would indicate an appropriate period for the risk free rate of longer than 10 years, and in the absence of a suitable instrument of that duration, it would indicate the use of a 10 year bond as a proxy.

When the "persuasive evidence" test is then applied over a complete analysis, there would be no basis for the AER to change the present setting.

Consequences of the AER's decision

The regulated rate of return (WACC) has a significant impact on the ability and willingness of network owners to invest capital in developing the transmission grids.

In particular, a reduction in the WACC at a time when actual costs of capital are increasing, and expected to remain high, will strangle transmission investment. The most affected category will be the so-called "market benefits" investments, including upgrades to interconnectors and major flow paths.

This is happening at a time when national and State leaders are seeking to increase investment in infrastructure as a key response to the economic situation. An AER decision to lower the WACC will take the electricity grid in exactly the opposite direction to this key national policy position.

Just after the AER released its Proposed Statement, the Commonwealth's high-powered advisory body on infrastructure, Infrastructure Australia, provided a report to COAG which identified the lack of grid interconnectedness as a significant national infrastructure issue:

> *"The Australian energy market is a series of regional markets with limited interconnectedness... The adequacy of interstate interconnection will be a* <u>*key infrastructure issue*</u> *for the National Electricity Market in the near future... the lack of a national energy market has implications for* <u>*national productivity and economic growth*</u>*" (p17, emphasis added)*

Again, the AER's position on WACC will take the national transmission grid and the NEM in the totally opposite direction to that advocated by Infrastructure Australia.

Grid Australia believes that it is incumbent upon the AER to explain why it chooses to act counter to the overall policy direction of governments on the prioritisation of investment in national infrastructure, and counter to the specific recommendations of Infrastructure Australia.

The first casualties of choking transmission investment will be "market benefits" upgrades – discretionary, efficient investments in upgrading interconnectors and major flow paths. The flow-on consequences include:

(a) an ever-increasing incidence of network congestion, which delivers

(b) more market power opportunities to generators, leading to

(c) higher pool prices and higher volatility,

(d) both of which lead to higher energy costs for retailers, which in turn lead to

(e) higher energy costs for electricity consumers , and

(f) higher risks of retailer financial failure arising from the higher pool prices and volatility

When the AER is assessing its decision against the National Electricity Objective, it must factor in all these elements, not just network charges.

Transmission investment is also pivotal to the achievement of the government's CPRS and expanded RET policies, as identified in a recent report by market modelling specialists ROAM Consulting for the AEMC. The expanded RET in particular will require significant upgrades to the major flow paths (including interconnectors) from, and within, the renewables-rich regions to the large load regions.

Absent those upgrades, the 20% RET will either not be achieved , or will have to be achieved at a much higher than necessary cost , arising from higher cost renewables generation in lieu of lower cost sources (e.g. wind in SA) for which there is inadequate transmission capability.

In its recent report to COAG, Infrastructure Australia went on to observe that:

> *"Inadequate interstate connectivity poses a problem not just for ensuring <u>energy security</u> under current arrangements, but is also likely to <u>frustrate</u> the development of <u>renewable energy</u> generation" (p18, emphasis added)*

Again, the AER Proposed Statement chooses a path of action which will frustrate the government's climate change policies. Grid Australia believes that it is incumbent upon the AER to explain why it is intent on so doing, should it decide to remain on that course.

In summary, a decision to lower the WACC will have predictable, deleterious impacts on retailers, electricity consumers, and several key government policies. Grid Australia believes that the AER should be considering these impacts in its decision-making process.

This requires a more strategic and holistic approach to decision-making than the very narrow approach used thus far.

Conclusion

Grid Australia believes that there are several methodology, process and data analysis deficiencies in the AER's work thus far on this decision. Some of these have been highlighted herein.

Grid Australia is also aware that there is relevant new information now available to the AER, including, inter alia, the S^3 Advisory report to the AEMC, the Infrastructure Australia report to COAG, and the submission to the AER from the Financial Investors Group.

Grid Australia believes all this information to be relevant to the AER's final decision.

Grid Australia encourages the AER to adopt a holistic and strategic approach to this very important decision.