

# Energy Market Reform and its Impact on Electricity Transmission, Market Structures and Energy Financial Markets

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Address to CEDA, Sydney, 23/05/07

Colin, thank you very much for that kind introduction and also thank you to CEDA. I mean there's no doubt that this what CEDA does best. Bringing groups of people like this together around common and particularly public policy issues and I think CEDA is to be really congratulated for doing that. In particular thank you for inviting me here today to discuss with you the need for ongoing reform in the electricity and gas sectors in Australia and also to give you some observations arising out of the recent work of the Energy Reform Implementations Group or ERIG to uses it acronym.

What I want to do today is really two or really I suppose three main things. I do want to give you some broad comments about the importance of the energy market reform for our economy. For many of you of course that will be no surprise but I think it's wise for all of us to just go back and revisit that from time to time. I will then outline for you some of the issues and recommendations and findings from ERIG and then in the end I would very much welcome your questions. When you're preparing a presentation like this as many of you would know it's almost impossible to come to any real understanding of what's on your mind and the only way I can get that is if you're prepared to ask me some questions.

Let me just give you a bit of background to ERIG. ERIG was established by the Council of Australian Governments. The report that ERIG produced was really an important part of the competition, efficiency and allied reforms considered by the Council of Australian Governments at its recent meeting in April. I know I don't have to remind this particular audience but energy market reform has been an important part of the reform process for Governments really since the beginning of the 1990s and even earlier than that. The initial

reform path was largely outlined in the 1991 study by the Industry Commission into the electricity, generation and distribution sector.

Of course Australia has gained enormously as a result of those reforms that have gone on pretty well since the early 1990s. [A Bear] has estimated that reforms to the sector has increased our national income by around \$1.5b per year. Past reforms have also contributed to Australia having some of the lowest electricity prices in the developed world. But the energy sector is also important simply in its own right because it makes up somewhere around about one and a half and almost two per cent of our nations GDP. And of course energy is required to power our information technology, our telecommunication systems and drive the wheels of industry, and it's not an accident therefore that energy and ongoing energy reform is such an important part of the rubric of all developing countries. We of course all understand that reliable and competitively priced energy is vitally important to our economy and very importantly also to Australia's international competitiveness.

Energy reform as I said is really been on the agenda for quite a long time and I think that reflects its importance to Australia. It was interesting to us when we were doing our work. We had some discussions with the International Energy Agency and they were very complimentary about the work that Australia has done and in their view we have one of the most efficient and competitive electricity markets in the world. And yet when ERIG reviewed the energy sector it became clear to us that looking at the past benefits and the past progress of reform it in fact tells us nothing about where Australia's full productive potential lies in this area. ERIG came to the view that improving the performance of our energy sector is just as important today even given the reforms of the past that it has been at any other time in our history.

ERIG also found that the energy sector faces increasing and very different challenges than it has faced in the past. It's now generally accepted along with the rest of the world that we are facing a global warming challenge. Policy action to reduce carbon emissions, one dimension of this challenge is likely to fall heavily on the energy sector and this is just one of the additional elements that the energy sector has to address that hasn't been an issue that we've had to address with quite the same urgency as we now have to address it today. At the same time of course our energy consumption continues to rise. To meet the forecast increase in demand will require the installation of around 1000 megawatts of additional capacity in Australia every year for the foreseeable future. The Energy Supply of Australia has estimated that by 2030 at least \$35b will need to be invested in additional installed generation capacity across our nation.

And even in the short term we face challenges. The drought has constrained our electricity production and this is placing upward pressure on prices. ERIG came to the view that our capacity to adjust to such pressures in a least cost manner in both the short and long term depends on the success of many additional reforms in our energy markets.

And to give you a little bit of background to us that is ERIG, it was made up of 4 people. There was the highly respected economist Geoff Carmody from Access Economics. There was David Swift from the Electric Supply Industry Planning Council of South Australia, I think an acknowledged expert in his field. There was Alan Rattray who had a long and distinguished career in the electricity sector and then there was me. The panel was supported by an ex officio on an ex officio basis by senior officers of the AEMC that the Nemco and the AER. We're also supported by a small secretariat with numbers drawn from the Commonwealth and a range of state Governments.

ERIG was really asked to look at three main issues. We were asked to look at structural issues in the energy sector. We were asked to look at issues around the national character of the transmission network and we were asked to look at measures to enhance the operation of the financial markets in the energy sector. We of course as you would expect in a review like this, went out and sought significant stakeholder input. We had established reference groups. This was supported by public consultations and we released some issue papers. So it was a very open and transparent process and we tried to draw on as much information as we could from the community at large.

The process was challenging from a number of perspectives. First of all we had to evaluate all of the information that came to us. Secondly we had to do it within 6 months and I was particularly keen to do this because what I knew was that if we didn't get into the COAG agenda in what we thought was going to be February we were likely to miss out in getting onto the COAG agenda into sometime in 2008. I simply didn't want to miss that. So even though we knew that we weren't going to have a perfect product, for us it was important to get onto that COAG agenda as it turned out for April. And we managed to do that.

And we then go on to what were our general findings. I think it's fair to say when doing a report like this, it's always tempting to try to make the case that everything is broken. After all if we can do this it makes it clear that our work is very, very important and it also gives added importance to the findings and recommendations. Now while our work was clearly important and we've made a number of very significant recommendations we did not find that this industry in general was in crisis.

Nor did we find that it was subject to significant policy neglect. It's true to say I think and many in this room have been part of it. That there have been many significant reforms that have been developed over the past two decades but we did find that Australia's generally good performance masked significant regional differences in performance. We also found that in general most decisions in relation to energy were taken and implemented on a regional level, not a national level. I'll come back to that a bit later because we really need to do both and we need to do both well. And importantly while the current arrangements have tended to serve Australia well in the past in ERIG's view they are unlikely to be adequate for the future.

We're also very surprised to find just how important appropriate Government arrangements are and in fact need to be to ensure that Australia continues to have better practice policy and performance in the energy sector and just how much needs to be done in this very important area. Very importantly ERIG came to the view that Australia should consider the establishment of a national energy market operator for both energy and gas to strengthen the national character of the whole of energy market governance. Of course we were therefore delighted when COAG agreed to implement what I think is a very important and likely to become quite a profound recommendation and development.

And we then go to some of the very specific issues that we spoke about with regard to market structure. ERIG found that in regards to market structure continuing Government ownership of electricity assets is the number one issue taking precedence over all other matters. If the issues surrounding Government ownership of energy assets can be satisfactorily resolved much inefficiency in the sector will be automatically addressed. ERIG did not come to this view because of any political or ideological predisposition. ERIG came to this view because the evidence was compelling.

For example ERIG found that when considering productivity trends since the beginning of the national energy market the productivity performance of Government owned assets tends to lag behind that of the private sector. ERIG found this to be the case in relation to indicators such as labour productivity, capital productivity, capital utilisation and prices. We did find some average rates of return that were above the normal average in jurisdictions where energy assets were in public ownership but when we looked at in detail, because this performance was produced at the same time as sustained higher spot prices, ERIG was of the view that this was more likely to be evidence of market power and the existence of barriers of entry in that particular jurisdiction than really a result of inherent good performance. ERIG given the experience of the people making up the panel fully understood that we need to be very careful when we look at any of these indicators

because every one of us has been involved in any various sorts of analysis before and many of us had been working in business where these indicators mean a lot to us. So we knew what they meant. We knew the strengths and weaknesses of every one of these indicators. But when all the indicators, when measured consistently between public and private providers showed that on a trend basis private providers performed better than public providers, we were obliged to take notice.

ERIG also found direct conflict of interest between a Government's role as an asset owner and its policy making, legislative and regulatory roles. This applies at both the regional and at the national level. In addition and in spite of recent efforts to create a level playing field between the public and private sectors in the energy sector, ERIG found that competitive neutrality arrangements have not been completely effective. This combined with the conflict of interest issue discussed earlier has significantly discouraged investment by the private sector in those jurisdictions where Governments own and control significant energy assets.

Now this is not to suggest that private investment does not or cannot occur alongside public sector investment but as one highly respected State Government admitted to ERIG in a moment of what was wonderful candour, to do so requires the States who own and operate assets to what he described as snake charm investors, to invest in these jurisdictions using special incentives and exemptions.

A better and more efficient approach is to allow full market contestability. In that environment private investors can continually seek out investment opportunities that will meet the needs of their shareholders and potential customers and very importantly efficiently invest to take advantage of these commercial business opportunities.

I mentioned earlier that ERIG took careful look at the Governance issues. Good Governance becomes fundamental where conflicts or even perceived conflicts of interest exist. ERIG found significant shortcomings in the Governance arrangements for the AEMC and Nemco including in relation to issues as fundamental as adequacy of funding and the Board appointment processes.

In relation to these market structure matters, ERIG made many recommendations to Governments in relation to the desegregation and privatisation of assets, how to improve competitive neutrality arrangements and how to improve the Governance arrangements for the AEMC and for Nemco.

In relation to privatisation ERIG fully understood that this is a controversial issue in some jurisdictions. Clearly whether to retain energy assets in public hands or not or even whether to encourage or not the private sector to invest in the energy sector is clearly a matter for Governments and their citizens. However ERIG tried to show that Governments and their citizens have much to gain from seriously considering these issues and at the very least making it easier for the private sector to play its part in the future of Australia's energy sector.

We also addressed the many ways Governments might go about doing so. For example if Governments decide that they wish to retain energy assets in public ownership but also want to encourage private investment in the energy sector, then they should ensure that the regulation of publicly owned energy assets are fully covered by the Trade Practices Act and the Corporations Acts as though they were private companies. They should also ensure that the arrangements for the appointments of Boards of publicly energy assets are independent of direct Government involvement and importantly based simply on merit. They should also ensure that all debt is funded through commercial mechanisms without Government guarantees.

ERIG was of no doubt that the private sector is willing and able to invest in Australia's energy industry provided these matters can be successfully resolved. Based on the evidence provided to and collected by ERIG not only can the private sector deliver energy services more efficiently and effectively than the public sector, involving the private sector in the supply of energy can free up significant financial resources for State Governments that can be used to address areas including education, health care and public transport. In relation to Government ownership of energy assets, COAG took the view that this is really a matter for each individual State and Territory to consider.

Let me address an additional matter under the heading of market structure that turned out to be particularly important to both industry and Governments and that is whether we need to be concerned about energy retailers also owning energy assets. Now concern here is understandable. It's now well understood that in all sectors of our economy competition is the very best way to protect the interests of consumers and the energy sector is of course no exception to this general rule.

Consumers and Governments are right to be concerned about any reduction in competition in the energy sector. However ERIG found that allowing retailers to own generating assets is likely to be an appropriate strategic response to reducing risk of lack

of supply for their customers and that this form of vertical integration was unlikely to reduce competition in the sector. However ERIG did take a cautionary approach to this very important matter and while we couldn't envisage that this could be a problem, we suggested that this matter be kept under the review of the AER and the ACCC.

Let me now turn to transmission. ERIG was asked to look at the current arrangements to assess whether they provided the efficient development of a national electricity grid. Now ERIG was impressed with Australia's general performance in this area. Australia does not have electricity grid crisis or anything even resembling an intractable problem. However our analysis did identify some significant deficiencies with the current arrangements. These deficiencies have meant that important investment opportunities have been missed. Although economic cost of this has not been large to date our concern really was to ensure that future arrangements provided for the optimal development of the regional and national grid.

On a personal level I must say that I was very surprised by a number of the prevailing attitudes within the sector with regard to the National Transmission Grid. I was particularly surprised by the number of participants in the industry who seem to be suggesting that Australia would be best served by a completely unconstrained national electricity grid immaterial of the cost. I was surprised by the antipathy towards this suggestion that Australia might gain from some form of transparent national plan that would assist to guide rational, national investment decisions and I was very surprised that some in the industry seem to think that investment decisions regarding transmission could possibly be made without detailed consideration of the most efficient locational decisions of generators.

I think ERIG in its complete panel was also surprised that notwithstanding the impression that Australia had a national electricity grid, most decisions regarding investment in the grid are actually made on a regional, not a national efficiency basis. In all ERIG identified three main significant shortcomings to the existing arrangements in transmission. First we need appropriate commercial incentives on generators to locate new capacity in an efficient manner.

Second we need to ensure that the incentives impends the regime on network companies drives them to efficiently operate the grid and to efficiently invest to meet Australia's future energy demands. In this regard the overall regulatory regime should be structured to achieve an efficient mix of generation and transmission, not one or the other.

And third there is the need to consider investment in the grid on both a national and a regional basis. Now each State and Territory I think generally has effective regimes for considering its own needs, but I think rarely is this done with the National interest actually in mind. Quite appropriately States and Territories are focussed on the adequacy of the transmission network to meet demand forecasts within their own jurisdictions. Each region has its own reliability standards which are open to variable interpretation.

ERIG came to the conclusion that in the future both a regional and a national approach are needed. Although there are some arrangements to facilitate planning across regions we don't believe that they are working as well as they could. Information disclosure mechanisms need further development if national and regional investment decisions are to be soundly based. Resolving the challenges here relating to the efficient location of generation and incentive raisings to a transmission companies are of course within the scope of the work currently underway by the AER and the Australian Energy Market Commission.

The main headline recommendation made by ERIG in the transmission area was to call for the establishment of a national transmission planner whose function would be to prepare a national transmission development plan and to encourage informed transmission investment decisions. The proposal to do this was of course as many of you would know agreed to by ERIG.

Let me then move on to the financial market issues. In relation to financial market issues here again ERIG did not find a strong case for radical change. In Ergs view the energy financial markets are actually still maturing. It was therefore to take a relatively conservative view about recommending significant change to financial markets to avoid the potential for inadvertently creating some form of sovereign risk. Financial markets fall into two categories. Capital markets and contract markets. ERIG operated from the premise that there is a limited role for Government in both of these areas. However it did recognise that it is important for Governments to act to remove impediments to the efficient operation of the financial markets in energy.

Industry raised three main concerns regarding Government policy and its impact on capital markets, financial markets and investment. These were Government ownership which I've spoken about a bit already, climate change and its affect on pricing and investment decisions and retail price controls. But I think it is worth stating here again, particularly to this audience that ERIG found that if the Government ownership matter can be satisfactorily resolved and that's not code for privatisation, it's a code for saying lets

resolve the issues in a sophisticated way, then the financial markets in energy will operate more effectively than they do now.

Along with Government ownership climate change issues were cited by industry as a priority. ERIG found that Australia of course had many emission target schemes. They are fragmented and given the nature of the issue to be addressed, clearly inefficient. There is considerable uncertainty within the investment community about how Australia intends to meet this climate change challenge and the nature and timing of decisions such as a possible introduction of a carbon pricing signal. ERIG was advised by potential investors and serious potential investors that this was truly impeding investment decisions in the industry sector in general and the electricity sector in particular. Now ERIG did not make any specific recommendations in relation to climate change while drawing attention to these comments made to us by potential investors, we acknowledge that this was really a matter receiving attention in other forums and were in fact outside our terms of reference.

ERIG noted that financial markets which underpin trade and risk management in the electricity market have generally operated and been developed quite efficiently and that liquidity continues to improve. It is our expectation the financial markets will continue to involve in keeping with changes to the arrangements which we see developing all around us.

ERIG identified imperfections in the way in which risk is managed between and within regions in the national electricity market and we made a number of recommendations in that regard. And most of these recommendations I'm pleased to say were picked up by COAG.

ERIG also found that the prudential arrangements for the settlement of the electricity spot market imposed significant cost on retailers and may in fact act as a barrier to entry and to competition and we recommended a number of ways that this issue can be addressed and again we were pleased that COAG endorsed many of those recommendations.

A final issue that I wanted to address with regard to the financial market is the problem of retail price caps. Now as you know retailers must manage power purchasers in a market where the wholesale price is actually floating while making retail sales at a price which is for all intent and purposes fixed by regulators. So in a trading must be factored into the prices charged by retailers. ERIG found that the existence of price caps is in fact a serious

barrier to competition especially where it squeezes retail margins. This lack of competition means that prices remain higher than they might otherwise be in a competitive market.

So let me finally say that I believe the work of ERIG was in fact worth doing. We examined each issue thoroughly. We consulted extensively. We were fully transparent in our actions and our deliberations. We did not avoid any of the difficult issues. We made recommendations which we believe if implemented will enable Australia to continue to have one of the world's most competitive and efficient energy sectors. We were delighted to the extent at which COAG has accepted ERIG's analysis and agreed to implement many of its recommendations. We were also very pleased that COAG has requested the Ministerial Council on Energy to report to the newly formed COAG Reform Council on the progress of these reforms to ensure that agreed timelines for the implementation of these reforms are in fact met.

The ERIG work however is really nothing more than another step in the process of Australia's commitment to ensure that it has the very best energy market and operation. Continued improvement in the performance of the Australian energy industry will always be necessary. These continued improvements must focus on creating a competitive and open market for energy, ensuring that we have the most efficient Governance arrangements completely free of conflicts of interest, providing contemporary and reliable information to the energy market so that consumers and investors make the most efficient decisions possible. Australia's economic performance and prosperity depend on it.

Thank you very much.

## **End of transcript**

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