

INQUIRY INTO THE ECONOMICS OF ENERGY GENERATION

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Theme:

Summary

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Mr J.R.O'Dea MP
Chairman, Public Accounts Committee
Legislative Assembly
NSW Parliament
Parliament House, Sydney, NSW 2000.

Dear Jonathan:

I have read the submissions to the Committee inquiry in to the economics of energy generation with interest. I am sure that they will assist the Committee to make a useful contribution to a debate on policy that is of the utmost importance to the NSW economy and consumers.

There are a number of points that should be drawn to the attention of the Committee as it pursues its investigation:

- 1. Any review of this nature has to have a valid timeline. One of my concerns about the Federal Government's "clean energy future" policy is its attempt to use 2050 as a time horizon – several bridges too far in terms of current opportunities and patently being used for political purposes rather than to aid investor planning and consumer understanding. The Federal Government's energy white paper, now in draft form, has still to come to terms with a timeline, but the Federal Bureau of Resources & Energy Economics has made a useful contribution in recent weeks by modelling power supply out to 2034-35. I commend the BREE paper to the Committee's attention and point out that the agency has modelled NSW electricity generation moving from 75,000 gigawatt hours in 2008-09 to 96,000 GWh in 2019-20 and 110,000 GWh in 2034-35, indicating an annual average growth of 1.5 per cent. Given that this robust modelling is available (and it includes a detailed look at the fuel mix), I would like to suggest that your Committee would be sensible to address the same timelines.
- 2. As is obvious from the BREE report, fossil fuels will continue to dominate electricity generation over the next 25 years and, it seems from the assumptions being used by the agency and consultants to the

Federal Government, without recourse before 2030 to carbon capture and storage technology. In terms of the pursuit of carbon abatement, which, even with Australia accessing international emissions trading credits, will require 2030 domestic reductions in excess of 150 million tonnes a year (assuming the Federal Government's view that domestic abatement in 2020 will be of the order of 60 Mt/pa), the agency's CCS outlook raises significant issues for NSW which remain at this time very poorly articulated by analysts or policymakers. If one assumes that policy decisions about carbon will have a major impact on generation investment decisions in the next two decades, this is an issue, I suggest, that should have the Committee's close attention.

- 3. Another report that has emerged in recent weeks and deserves the Committee's attention is the commissioned contribution by Ernst & Young to the Australian Energy Market Commission's "Power of Choice" inquiry, currently under way, in which the consultants look at likely peak power capacity requirements on the east coast. Ernst & Young say that, if present trends are maintained, NSW peak demand will increase from 14,595 megawatts in 2010-11 to 20,380 MW in 2029-30. If this forecast is realised, there are significant long-term cost issues for all consumers.
- 4. A very important issue for consideration by the Committee is the outlook for reliability of existing coal-fired plant in NSW if we do not see investment in baseload capacity this decade. (In a media interview in the past week the Origin Energy managing director has suggested that construction of new baseload is unlikely on the east coast before 2020 in the current environment.) By, say, 2025 the Liddell plant will be 54 years old, Wallerawang 50 years and each of Bayswater and Eraring 43 years old. The availability of funds for major maintenance and upgrading activity when carbon pricing is impacting on generators' income needs careful exploration.
- 5. No less important is the direction of gas pricing this decade and beyond. Here again, the BREE report is worth the Committee's attention. The agency's modelling indicates that, if gas prices rise even more substantially than is generally expected, the forecast large-scale take-up of gas as a generation fuel will be dampened and, in the case of black coal use, will see an increase in generation to a level some 8,000 GWh a year *above* its current role.
- 6. For decades, a core assumption has been that most generation required in NSW will be sourced in the State. I have seen

commentaries by environmental lobbyists insisting that policymakers should be focussing on ensuring new renewable generation is built within the State borders. In fact, as some submissions to the Committee indicate, about 10 per cent of the NSW requirement is today sourced from Victoria (brown coal), Queensland (black coal and gas) and, of course, the Snowy Mountains Scheme and enlarging this needs to be given close attention. However, the extent to which even the current volume of imported electricity will remain available later in the decade is an issue I suggest the Committee also needs to explore. Beyond this, an important point is what level of electricity to be used in NSW *could* be produced over its borders, eg from black coal and coal seam gas in Queensland, from geothermal energy in the Cooper Basin, from wind power as far away as South Australia's Eyre Peninsula or Tasmania or even from nuclear reactors, which may seem unlikely now but could be a prospect under certain circumstances. My point is that the opportunities for extended and upgraded high voltage interconnection between NSW and its neighbours is not a peripheral issue for the Committee's inquiry, but should be central to its consideration of future generation. Inherent in this issue is the need for State governments to devote some serious effort to consulting each other at policymaking levels on generation and transmission issues and to seeking to rationalise future planning for the east coast rather than each going its own merry way. While the use of various agencies, such as the AEMC, to dissect what may be required is useful, at the day's end the responsibility for ensuring a new dynamic in electricity supply planning falls to governments themselves. The current "national" competitive market did not come in to being because bureaucrats and advocates made it so but because Prime Minister Keating and Premiers Greiner and Goss drove the process at a strategic level and with a view to the collective benefit of east coast consumers

- 7. As the Committee will be well aware, the development of new wind farms is highly controversial, as is the State Government's intentions to impose planning restrictions. The extent to which generation required under the federal Renewable Energy Target will impact on market opportunities for investors in new fossil-fuelled plants needs investigation, more so I suggest than, as appears to be the intent of the Committee's reference for this inquiry, investigation of esoteric alternative technologies. The current public debate in Australia is rather overwhelmed by contentions about which technologies still struggling on the fringe of commerciality should be hastened in to the market – a task the Federal Government appears to

wish to undertake with its contentious Clean Energy Finance Corporation and \$10 billion in taxpayers funds. I draw the Committee's attention to the useful work done on clean energy options by the Grattan Institute in recent weeks and suggest that little will be added by Members of Parliament attempting to sift through the various contenders. As is made obvious by the BREE report, and indeed the modelling undertaken for Federal Treasury last year, Australia (and this State) can expect to source power supplies over the next 20-25 years from conventional technologies – coal, gas, hydro-electricity and wind power, with the prospects for accessing geothermal energy outside NSW's borders worth some attention and the issues relating to carbon capture and storage needing close and more urgent focus. Having said this, the prospects for nuclear power clearly also need more attention and I note that the Committee for the Economic Development of Australia, of which I am a trustee, will be undertaking a new review of the issue this year.

- 8. Finally, I feel that too little effort is being made in NSW and elsewhere in Australia to understand the impact of much higher retail power prices. Most of the political focus seems to me to be aimed at dodging the bullets of consumer unhappiness and finding “guilty parties” to blame and shame. This is a wholly vain exercise because it is perfectly obvious that, as Federal Resources & Energy Minister Martin Ferguson has pointed out numerous times, the era of cheap electricity is over. I commend to the Committee the work undertaken by Mr Edwin O’Young of Port Jackson Partners, demonstrating why east coast, and specifically NSW, prices can be expected to double between 2011 and 2017 – and it is hard to see how substantial increases beyond that point will not occur when one considers carbon pricing, the Renewable Energy Target and other measures to promote green energy, still greater investment in network capital works (which are unavoidable despite claims of “goldplating” because of population growth and the need to replace aged assets) and the likely rises in wholesale costs as coal and gas prices track those in international markets. Far more important than political ducking and weaving is the need for policymakers to come to terms with the implications of continuing price rises – which include a substantial increase in those suffering “fuel poverty,” requiring social welfare activity by governments, the need to introduce technologies and measures to enable greater end-use efficiency but also to charge (much) more for peak demand and the overall impact on power consumption. I suggest no useful report on the State’s generation prospects can be produced without grappling with this issue.

I am sure that the Committee does not need me to tell it that, in taking up this task, it has gripped a tiger by the tail. The situation is made the more difficult because the State Government – correctly – is embarking on selling Macquarie Generation, one of the most important power supply businesses in the country, and what is left of other State holdings after the “gen-trader” deals. The issue of the future ownership of Snowy Hydro is also not going to go away. For the first time in NSW this situation will throw generation investment wholly to the private sector.

We are entering an era where decisions about future generation serving the State’s needs will be made by investors from Australia and overseas, driven by their expectations of shareholder benefit. I firmly believe that this is the most efficient way to further develop the east coast electricity supply sector, but going down this path places a heavy responsibility on governments to avoid “sovereign risk.” The current level of uncertainty in the electricity market and the manner in which policies have been chopped and changed over almost a decade for political reasons is the worst way to pursue efficient outcomes.

I wish you and the Committee well in pursuing this task and hope that these comments will be at least of some help in spotlighting major aspects needing to be addressed.

Regards



Keith Orchison
Director, Coolibah Pty Ltd

4 March 2012