



SENATOR SEAN EDWARDS

The Nuclear Opportunity

The Electric Energy Society of Australia, 11 May 2015

Ladies and gentlemen, it's my pleasure tonight to be able to address such an expert group in the energy space, a field I've had cause to learn a lot about in the past couple of years.

You may be aware that I am lobbying for the development of a nuclear industry in South Australia; specifically for the importation and recycling of Spent Nuclear Fuel.

Before I speak more on that I want to address a few broader issues in relation to the Government's energy policy.

We are a global energy superpower.

Energy exports have provided tremendous benefits to Australia in the last decade especially.

Within the next five years Australia's export earnings from energy commodities is expected to reach \$114 billion annually.

That means more jobs, higher incomes and a higher standard of living generally.

Ladies and gentlemen, energy is at the centre of society and efficient, and cheap, reliable energy is central to our economy.

The vital importance of electricity is only going to grow, regardless of the fuel source. To that end the Government has a technology-neutral approach to fuel sources and we will continue to support research and development of emerging energy technologies.

The Government's energy agenda has three areas of particular focus: Competition, Productivity and Investment.

We are increasing *competition* to keep prices down.

We are increasing energy *productivity* to promote growth.

And we are *investing* in Australia's energy future.

In the politics of energy, price is at the fore. Household electricity bills have increased by 50% since 2010 and the retail price of gas has increased by 8% every year for the past ten years.

Prices are now moderating in most jurisdictions and the Australian Energy Market Commission expects residential electricity prices to have fallen in 2014–15 in most jurisdictions following the removal of the carbon tax.

Over 2015–16 and 2016–17, prices are expected to show modest declines or remain stable across most states and territories because of subdued wholesale energy costs and lower network prices.

A focus on productivity is necessary to maintain cost competitiveness and in order to secure the private sector investment we need.

Ultimately, the energy market reforms outlined in the White Paper aim to increase consumer choice and this is a good thing.

I will draw a line here and move on from speaking about Government policy to speak about something that I would like to see become policy.

My nuclear proposal for South Australia happens to co-exist nicely within the Government's energy policy framework.

My submission to the South Australian Royal Commission into the nuclear fuel cycle will propose that SA stakes its claim in the global nuclear fuel recycling industry. World-wide there is more than 250,000 tonnes of spent uranium looking for a home and many countries willing to pay handsomely to the state that provides it.

If we move to take custody of and recycle this spent nuclear fuel, we could generate significant revenues and extremely cheap electricity for the benefit of South Australian citizens and businesses.

The modelling I've seen shows a range of possibilities; including the generation of enough electricity to meet the needs of the state of South Australia and revenues sufficient to supplant the state's \$4 billion in taxes.

I'm sure most of you are aware that following the PANGAEA report Australia is considered the best location on Earth to host nuclear facilities, given our geological and political stability, our financial standing and our strong track record in nuclear non-proliferation.

You may not know that South Australians offer a very high degree of public support for a nuclear industry, with more than two thirds of those polled revealing active endorsement or a neutral sentiment at least.

I propose that introducing plentiful, cheap power into this equation will increase that social license considerably.

It will also provide a compelling reason for businesses to base themselves in South Australia while relieving cost of living pressures for our citizens.

Opponents of nuclear technology will refer us to cost as an alleged reason to dismiss this entirely.

At the recent G20 meeting in Brisbane that didn't seem to be a problem, given just two countries in attendance were not either using nuclear power or preparing to use it – Australia and Italy.

Yet Australia provides uranium to most of them.

Furthermore, in the case of my submission, the economic dimension is actually the most compelling part, because the global market – and not the Australian tax payer – will fund the capital. So the cost counter-argument doesn't stand up at all.

I suspect this audience will agree, when I put to you that this isn't a debate about science, either.

Science and economics are not the challenge here. The single remaining hurdle Australia must defeat in order to realise its nuclear future is a political one.

The South Australian Royal Commission, however, presents us with a never before seen opportunity in that regard. There is for the first time a bipartisan sentiment attached to the nuclear debate.

Needless to say not everyone is supportive.

If there's one party in Australian politics morally and philosophically compelled to support advanced nuclear energy, it's the Greens. They insist they want the best for our environment but in their opposition of nuclear power, it's the Greens who would stand in its way.

That they so energetically oppose nuclear power is an act of supreme hypocrisy.

Nuclear reactors produce no emissions that contribute to global warming, acid rain or smog. In fact, the life-cycle emissions of nuclear energy rank alongside those of renewables but unlike renewables, nuclear energy can actually provide base load power today. The lifetime emissions from an Integral Fast Reactor, with all the fuel already mined, will make this easily the lowest-emission energy source available to humanity.

That doesn't mean nuclear needs to replace renewables. In my view it must certainly precede them, unless we would prefer to keep burning coal while we wait for renewable technology to reach the necessary level of maturity that it can provide base load power. Informed estimates say that's 40 years away and so even the most strident advocates must acknowledge the need for an interim measure, if you call forty years 'interim'. Our most rigorous scientists tell us the scaling challenges of renewables may remain insurmountable.

Federal Labor has remained fairly quiet on this subject since the announcement of the Royal Commission but some draft language has emerged which is being prepared for the Labor Party National Conference which would have them reassert their opposition.

No doubt there is energetic internal debate occurring right now between State Labor and their dissenting Federal colleagues; on one side there's a State government that desperately needs this industry and the benefits it brings, and on the other, there's a Federal parliamentary Labor Party, many of whose

members are still constrained by historical ideological baggage on matters nuclear.

Notwithstanding Labor's internal difficulties with the issue, the bottom line is the Royal Commission is endorsed by Labor Government in South Australia and by the Coalition Government federally. This bipartisanship in the nuclear debate is unheard of in Australian political history.

While I advocate for an Australian nuclear industry principally for economic reasons, I hope to win over my remaining political opponents with environmental ones.

The successful introduction of a nuclear industry in South Australia would have inevitable implications beyond our borders, not just because we share a National Energy Market, but because its economic and environmental merits become even more obvious once demonstrated.

But, ladies and gentlemen, a campaign like this isn't won by a politician. I require the active support of citizens, of likeminded public figures, of business leaders and especially, of energy experts like you.