

The following is taken from parliamentary hansard on 31 August 2005

Uranium Mining Ban

Hon Colin Barnett MLA

I thank members for that courtesy. As I said, this is an important issue that should be debated. The debate will no doubt go on for some time. I reiterate that last week I gave notice that I would move a motion that simply says that the house calls on the Labor government to remove its ban on uranium mining in Western Australia. As has been pointed out today, there is nothing in the laws of Western Australia that bans either the exploration for or mining of uranium. If this government were genuine, it would have amended the Mining Act.

Let me say clearly that my position as member for Cottesloe is that I support the advancement of nuclear science, I support the expansion of a global nuclear power industry, and I support the mining of uranium in this country and, in particular, in this state.

I will cover some of the science of the issue; however, I do not pretend to be a scientist. Uranium is widespread. It occurs in most rocks on this planet and it is dissolved in the ocean; it is a very common material. It provides the source of energy for the heating of the core of the planet. It is not a rare substance. Uranium occurs in a number of isotopes. The two main isotopes are uranium-238, which accounts for more than 99 per cent of the natural element, and the lesser one is uranium-235, which accounts for 0.7 per cent of uranium; it is found in a very small concentration. However, it is uranium-235 that is capable of being split through a process of nuclear fission and can generate nuclear power.

The mining of uranium is not much different from a lot of other mining. Because of radioactivity, different standards and measures need to be in place. However, there is nothing unusual about uranium mining. Uranium mining produces a uranium oxide called yellowcake, which is a relatively benign material. Uranium oxide will contain only 0.7 per cent uranium-235. It is less than one per cent of the component that is used. It is in a very low concentration. More dangerous materials than uranium are transported around this state, such as sodium cyanide solution, which is used in the gold industry, and chemicals that are used on farms. Even petrol is more dangerous and volatile than is yellowcake. Let us get some science and realism into this debate. A point of scientific interest is that the 0.7 per cent concentration of uranium-235 must be enriched before it can be used in nuclear power generation. It is enriched up to about 3.5 per cent uranium-235.

The Premier spoke about bombs. Nuclear weapons require uranium to be enriched to more than 90 per cent. The uranium used in the nuclear power industry cannot be used in weapons in any way. They are like chalk and cheese; they are totally different.

Dr G.I. Gallop: How do you make a nuclear weapon?

Mr C.J. BARNETT: The Premier is talking about levels of enrichment and sophistication that do not apply in the nuclear power industry.

I refer to the use of nuclear energy around the world. Thirty-one countries have nuclear power generation. There are 440 nuclear reactors around the world. Sixteen per cent of the world's electricity is produced from nuclear energy. Major developed countries such as the United States, the United Kingdom, Japan and Germany generate 20 to 30 per cent of their power from nuclear energy. France generates 80 per cent of its energy from nuclear energy. Sweden, which is considered to be a "green" country, generates 50 per cent of its electricity from nuclear energy. It is common.

The developing world does not have much nuclear energy generation. In the two most populous countries, China and India, less than three per cent of their electricity is generated by nuclear power. Both countries are embarking on major programs of developing nuclear power, as are other countries such as Pakistan. How arrogant and selfish it would be for the developed world, which has used nuclear power since the 1950s, to say to the developing world that it cannot have this form of energy generation. That would deny developing countries electricity for industry, education, clean water and development.

If we followed the Premier's line, we would be trying to impose a standard of holding back development and living standards, which I think is inhumane. Nuclear power offers the potential to massively raise the living standards of people in some of the poorest and least developed parts of the world. Let us be humane.

Around 30 nuclear plants are being constructed around the world, and another 70 nuclear power plants are at various stages of planning. The simple point I make is that the horse has bolted. Nuclear power has been with us since the 1950s. It is now going through a period of rapid expansion. It has bolted. It is away. Nothing that we do in WA will stop the global expansion of nuclear energy in the developed and undeveloped worlds.

What are some of the factors that are leading to that? The first is economic factors. The price of coal, oil and natural gas means that fossil fuels are becoming increasingly expensive. The Minister for the Environment referred to the environmental factor. I recognise that some

people have a long history of ideological and philosophical opposition to nuclear power, which may go back to the Cold War and the arms race of the 1960s and 1970s. I can understand and respect the view that many people hold.

The point is that a committed environmentalist now faces a conundrum, because fossil fuels are clearly producing massive amounts of greenhouse gas, global warming and all the consequences of that. Based on known technology, the only alternative for large-scale, low-cost power generation at a global level is nuclear power. It is the only alternative and the only technology available to produce base-load reliable energy.

Six billion tonnes of carbon is emitted each year in greenhouse gases; 23 billion tonnes of carbon dioxide. I admit that at the time of the Kyoto conference I was a greenhouse sceptic. I am not any more. The evidence is overwhelming. I recognise that it may be an unpalatable choice, but the world has a choice. Are we to continue relentlessly down the fossil fuel path and have it exacerbate the greenhouse gas problem, or will we go to a cleaner form of energy? I put it to members that both the developed and undeveloped world have already made that decision. They are going nuclear. The horse has bolted.

We should encourage renewables. I did as a minister and so is the current government. Currently, the only substantial renewable energy is hydro-electricity. It accounts for about 19 per cent of world generation. The hydro sources around the globe have been well developed and there are not many left. Unreliable rainfall in many parts of the world makes them less reliable. They cannot be used so much as base-load plants; they tend to be more peak plants. That is the reality. Australia's target for renewable energy is 10 per cent by 2020. Based on what we know and what is reasonable in the foreseeable future, most of the research work indicates that the best we can expect from renewable energy is 15 per cent of the total. Even if we have fantastic success in wind power generation, which is probably the most advanced renewable, we will reach about 15 per cent. It is a long way short of the electricity needs of the developed world, let alone those of a growing developed world.

Around the world 64 per cent, two-thirds, of electricity is produced by fossil fuels - principally coal and to a lesser extent natural gas. The reality is that if we do not go nuclear, we will commit this world to increased coal usage and, thus, increased greenhouse emissions.

The Organisation for Economic Cooperation and Development's forecast is that electricity demand will double between now and 2030. I ask members to reflect on this scenario - a little hypothetical: right now nuclear power accounts for 16 per cent of the world's electricity. Given the figures I have put on the table on the expansion and construction of new plants, and

given that the OECD forecast is that world electricity will double in production between now and 2030, if nuclear power were to hold its 16 per cent share, that industry will double in the next 25 years. I put it to members that the nuclear share will probably rise to close to 30 per cent. In other words, the nuclear industry is set to grow fourfold over the next 25 years. It is a likely scenario and those decisions have already been made. The horse has bolted now and it will bolt in the future.

For Australia and Western Australia the situation is different. We are very lucky. Australia is probably the only developed country in which 80 per cent of its electricity is still produced from coal. Australia, instead of simply exporting all the gas, could transport gas by pipeline to the central Australia infrastructure and, as a first world nation, make a conscious decision to dramatically increase its use of natural gas for its own economy. If we did that, we would control the emissions. We can do it. To my knowledge no other country in the developed world has that option. However, we are not doing it. Australia could do so much to prevent greenhouse gas emissions.

I do not envisage Australia using nuclear energy for another 20 years. This state will probably not build nuclear power plants for 50 years, because we have the option of gas.

What matters right now is uranium reserves. Australia has 28 per cent of the world's known uranium, the largest resource of any country in this world. We have nearly 40 per cent of the relatively easily recovered uranium. We are the major player in uranium reserves, and a significant reserve exists in this state. At the moment, Canada is the major producer of uranium and Australia is second, at 22 per cent. It is absolutely inevitable that Australia's production of uranium will rise dramatically. It does not matter what we say or do in this chamber, it will rise and that is happening right now.

This country has a long history of uranium mining. It started in the 1930s at Radium Hill in South Australia. In the 1950s there was the Mary Kathleen and Rum Jungle project, for military purposes, but those days are gone. The Cold War finished a long time ago.

The uranium produced in Australia today at Ranger, Olympic Dam, Beverley and Honeymoon in South Australia and the Northern Territory is used for power generation purposes. Australian uranium is not used for military purposes and will not be used for that purpose. Australia is not only a signatory to the Non-Proliferation Treaty, the bilateral agreements between Australia as an exporting country and those countries that buy our uranium, are rigid. That requires continual policing.

A ban on uranium mining in this state is nonsensical. I do not mean that in a disparaging way. I respect people's views, but it is nonsensical. It is a view that belongs back in the 1960s and 1970s. The world has moved on. This is the twenty-first century. The only chance we have of controlling greenhouse gas emissions is to continue what is already happening; that is, the development of nuclear energy. Why has it not happened earlier?

In the 1970s and 1980s the price of uranium ore was low - about \$US10 a pound. Why? Because military demand had stopped - the Cold War was over - there were large stockpiles and we had the process of decommissioning and diluting weapons-grade uranium. That process has pretty well come to an end. As it stands now, the world production of uranium is only about half of the world consumption. That is the reason the price has gone from \$10 a pound in the late 1990s to about \$30 a pound now, and it will stay high. That is why Australia is currently negotiating with China for the supply of uranium, as it will with India and, no doubt, other countries. We are in the industry and, whether members like it or not, Australia is the major world reserve of uranium.

The benefits for Western Australia will be jobs, investment, regional development and royalties. South Australia derives about \$30 million a year from its uranium. We should be deriving a similar amount. They are the crass economic benefits. I am not promoting this argument simply on the royalty stream. I cannot see any logical reason that Western Australia as, arguably, the world's leading mining economy, is not mining uranium and doing it to world's best practice, world's highest safeguards and world's best standards.

Why are we not in the uranium industry? We could stick a drum of yellowcake in the middle of this Parliament and it would not hurt us. We are in more danger of radiation when the member for Perth wears his fluorescent blue jacket than we are from yellowcake. I feel more threatened when he wears that jacket than I would by a drum of uranium ore on the floor of this Parliament. The waste product of a nuclear power plant is an issue, but yellowcake is not dangerous. I do not object to it being exported through the port of Fremantle. I do not think any regional port in this state would seriously object to handling yellowcake.

The public need to be reassured, not scared by the Premier as happened last week. He sought to scare the population about yellowcake. It was unscientific, unfounded and irresponsible. The world has a responsibility to implement safeguards for mining uranium, transporting it and its power generation.

The world has to improve in that regard because some downsides are involved. Nuclear power is not perfect. Nevertheless, there are fewer

downsides with nuclear energy than with fossil fuels. Accidents have occurred. I refer to Three Mile Island in the United States.

Mr F.M. Logan: Chernobyl.

Mr C.J. BARNETT: Yes. Three Mile Island was an example of how the safety measures worked. Yes, Chernobyl was a disaster, but Chernobyl was an old Russian plant that would never have been built in the West and would not be built in a developing nation now. It was a disaster. It was old technology and bad management. One cannot say that because Chernobyl was a disaster, one can never have nuclear energy. Thousands of people have died coal mining - 30 people died at Chernobyl. I do not excuse Chernobyl, but nuclear science has advanced way past that technology. Chernobyl was an old 1950s plant.

Waste disposal is an issue. What is happening around the world today is unacceptable; that is, it is dangerous and improper to have waste stored at plant sites unaccounted for. Australia as a producer of uranium needs to be part of that process. The world is coming to grips with the issue. People talk about half-lives in a dramatic way. The waste is dangerous, but it is not life threatening. The waste needs to be stored and separated from populations and to be accounted for. Over about 1 000 years - an extensive period of time - most of the dangerous radioactivity will reduce, and waste from a nuclear plant in that time will reduce to the level of radiation of naturally occurring uranium ore. It is not an insurmountable problem. I have confidence in science to deal with that aspect. The handling of the waste from the plant, not the product in the mine, is the big negative. However, that downside is more easily managed than some of the problems with fossil fuels.

I conclude with some observations about the debate as it is developing in Australia. For a start, the Northern Territory Chief Minister in the last Northern Territory election did what the Premier of Western Australia is doing. She stated, "We'll have a ban on uranium mining in the Northern Territory." However, that ban went with a click of a finger after the election, and the accusation was made that the federal government took over the matter.

Dr G.I. Gallop: It is a territory.

Mr C.J. BARNETT: Clare Martin admitted that the Northern Territory effectively handed over the matter to the commonwealth. It is a territory, and that happened.

The Anglican Church has said that uranium investments are now considered ethical by the church. The Anglican Church, like other groups, had a ban on investing in uranium, as it was seen as unethical. If

members want to make a moral judgment on the matter, speak to the churches, which see uranium mining as an ethical activity.

The federal government is undertaking a three-year inquiry on uranium mining in Australia. My fear is that as a result of that inquiry, an international agreement will be made and the commonwealth will come in and try to take over uranium decision-making in this state and elsewhere. I would hate to see that happen, and it could well happen under the contrivance of an international agreement.

I turn now to the ALP federally. Martin Ferguson has called for increased uranium exports to China. At least he is in the twenty-first century. This is an important issue that should be debated publicly. I appreciate this opportunity to at least put the case for uranium. I say to members on both sides of the house that they should take time to look at the issue and think it through. We cannot consciously and realistically continue in the twenty-first century with our head in the sand and not be part of what is a great industry for this century.