

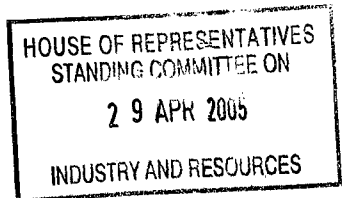
**House of Representatives Standing Committee on Industry and Resources.**

**Case Study into the Strategic Importance of Australia's Uranium Resources.**

Comments and Suggestions by

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**1). Strategic Importance.**

During the 1960's and early 1970's Australia enjoyed a permanent seat on the Board of Governors of the International Atomic Energy Agency (IAEA) in Vienna. Indeed, at one stage we provided the Chairman (Baxter), and the first Director-General of International Safeguards (McKnight).

These important roles came to Australia through general regional agreement that Australia was the "leading nation in Atomic Energy in South-East Asia" at that time.

I do not know the current position in relation to membership of the Board; however, there is no doubt that Australia no longer has the commanding position that she held in nuclear matters then. Most of our neighbours in Asia now have or are acquiring nuclear power stations and associated industries, to help to solve their electrical energy and pollution problems. By contrast, in Australia nuclear power is 'not on the agenda' and most of her former expertise relating to power reactors and the nuclear fuel cycle has been lost as a result of changes in Government policy. (Ref. 1)

Australia's only claim to importance in nuclear matters now arises from possession of major uranium resources, from which she exports concentrates as raw material for others to process into nuclear reactor fuel.

Despite these resources amounting to a large fraction (over one-third) of the world's resources, the current value of their exports in relation to the total nuclear fuel bill to which they contribute is less than 5 percent. Australia's influence on nuclear policy-making – either international, by the IAEA or the UN, or nationally (particularly by our customer neighbours) - is thus that of a "bit player", not a star. Our influence could have been major had we developed industries based on the uranium reserves, as was advocated by Australian industry and the Atomic Energy Commission in the 1970-80's. (Refs 1,2) However, we chose not to do so, by political decisions that I believe were disastrous in terms of lost opportunities for export earnings, jobs, and regional strategic influence.

There is still scope and opportunity for Australia to become a major fuel supplier to the nuclear power plants now operating and being built in many countries, and particularly in our Eastern neighbours e.g. Japan, China, Korea, Taiwan, India, Pakistan, and soon in

Indonesia. We would need imported technology – we have lost what we had in the 1970's – but this has much to commend it, as it is likely that multinational plants for uranium enrichment and fuel manufacture will be favoured internationally because of their perceived advantages in preventing diversion of technology or fissile materials to weapons programmes.

There should be no difficulty in finding overseas partners for such enterprises – access to our uranium resources would provide the incentive, as it did for the international studies on uranium enrichment that we carried out in the 1970-80's. (Refs. 1 & 2)

However, development of these ideas would require major shifts in Government thinking and policy making, to an extent completely foreign to attitudes and decisions of the long term and near past.

Australian industry had its fingers burnt badly in the past when it spent time and money on feasibility studies for uranium industries, and companies likely to be interested would need positive reassurance that the political climate would not change dramatically as it did in the past. (e.g. for the Uranium Enrichment Group of Australia studies in 1983. That soured the attitudes of BHP, CSR, Western Mining, and Peko Wallsend)

The strategic importance of Australia's uranium resources would be very high should she become a major source of nuclear fuel by establishing industries for uranium conversion, enrichment, and fuel fabrication.

## 2) Potential Implications for Global Greenhouse Gas Emission Reductions.

There are no such potential implications whatever outside Australia.

Nearly all developed nations now have (or are in process of acquiring) nuclear power stations, for combinations of 3 reasons – economy, fuel availability, and reduction of greenhouse gas emissions.

Although lack of Australian uranium might lead in the short term to increases in uranium price elsewhere, the fact that fuel price is far less important in the cost of nuclear electricity than it is for fossil fuels would mean little change in development of nuclear power programmes.

Thus Australia's attitude to development of her uranium resources is very unlikely to alter any policies or planning for nuclear power in other countries.

If we don't sell them the fuel, they will get it elsewhere. (The Canadians will continue to "laugh all the way to the bank")

However, there are major potential implications for greenhouse gas emission reductions in Australia if we choose to burn uranium rather than coal for base load electricity generation.

We are already under criticism internationally for our 'coal only' policies for base load generation, and this can only get worse as time passes.

I believe that present Government (and Opposition) attitudes and policies, both State and Federal, relating to nuclear power and the nuclear fuel cycle are completely wrong from the viewpoint of national benefit.

It appears that these policies have been adopted mainly through perception that the Australian public is strongly opposed to the use of uranium as a fuel, and to the possibility that nuclear power might be used in Australia.

The Australian public has been subject to campaigns of gross misinformation on nuclear matters over the past three decades, by individuals, and by organisations such as Greenpeace, the ACF, Friends of the Earth, Movement against Uranium Mining, various Trade Unions, and much of the media (including womens' magazines). Any little incident overseas gets sensational headlines, but benefits get no mention.

By contrast, there are very few voices presenting the opposite view – in fact there is only one formal organisation, the Uranium Information Centre in Melbourne, but it suffers in credibility because it is run by the mining industry. The promotional role adopted by the old Atomic Energy Commission vanished when it was abolished.

Despite this, there is a growing swell of interest and questioning in the population at large. Because of my professional background I receive many questions and comments. As well as the usual questions on reactor safety or "what about the waste", people are asking ----

"Why isn't nuclear power even considered for use in Australia?"

"Are all those other countries, particular all our Eastern neighbours, wrong?"

"Are we the only ones in the region who are right?"

"Why has the NSW Government legislated for reductions in greenhouse gas emissions but announced more coal-fired power generation? Surely these are contradictory?"

"Why isn't nuclear power ever mentioned in Government statements on energy matters (except to say it is 'not on the agenda')?"

Well, the only answer one can give is Fear! But not fear of nuclear materials, devices, or radiation. No, it is fear of lost votes.

I am afraid that most politicians of all parties are scared stiff of the word 'nuclear', and even of being seen to discuss the possible use of nuclear power in Australia.

Much is made in the media of developments in 'renewables' such as wind and solar power – all very good for Australia – with inadequate attention to the practicalities. These

sources can never make up more than a minor fraction of our needs – optimistically, say, 20% - even from the point of view of stability of the power grid. What is never discussed is “where do we get the other 80%?”

Inevitably, the answer is from coal or from nuclear.

Everyone in the power industries knows this. So do more and more people in the population at large. (But not, regrettably, many journalists)

Recent surveys of opinions in both the USA and the UK, both of which have had halted nuclear programmes in the last two decades, have shown majority public support for renewal of reactor construction. In Canada, which has had hiccups too, support is very strong and growing.

The present signs of public questioning and potential support will lead eventually to public realisation that we are being deprived of benefit through Government apathy or opposition. Eventually this will force Governments to acknowledge the benefits of nuclear versus coal; meantime Australia will continue to trail the rest of the world. It would be to Australia's benefit if the National Government were to be seen to be positive in approach to the topic by at least an acknowledgement that it should be studied for possible use here. At present whatever policies, or plans, or forecasts are made make no mention of nuclear power except to say it is ‘not on the agenda’.

Even the initial announcement of the study to which this is addressed made the statement that the committee wouldn't be considering nuclear power for Australia. Par for the course!

As this sentence was deleted from later announcements I assume that the Committee could possibly (at last) admit that there could be merit in considering nuclear power for Australia. That would be an enormous step forward. While it would draw some vociferous ‘flak’ from minority groups I believe that it would be welcomed by many, and certainly by all those I meet who are concerned that Australia is now doomed to be the last developed nation to apply this technology.

Even if we change attitude now, it will be a decade or more before a policy change could lead to reductions in emissions.

#### References

- 1) “Australia's Uranium Opportunities”, K.F.Alder, 1996 (Copy enclosed).
- 2) AAEC Annual Reports 1970-80.