# How can Australia help prevent nuclear proliferation?

By BRIAN MARTIN\*

SOME proponents of the mining and export of Australian uranium profess to be against breeder reactors; they argue that by withholding uranium. Australia would help "force" some countries with nuclear power (for example, France and the US) to move more quickly to breeder reactors, which do not require nearly as much uranium.

This is indeed a possibility. However, the past history of nuclear power suggests that exporting uranium in the long term would provide an even greater support for breeder

#### Too small

Ever since the idea of "peaceful" nuclear power has been considered, perceptive been considered, perceptive scientists and planners realised that nuclear power would only be viable if the breeder could commercially

The contribution to world energy demand by the burning of the lighter uranium isotope is just too small - a few per cent



of what coal could supply - to research-and-development effort.

By transforming the heavier uranium isotope into plutonium, roughly 60 times as much energy can be obtained from uranium

Yet in spite of decades of intense research and development work, and a massive investment of research money - currently ranging from 10 to 100 times the amount devoted to solar technology, for example - breeder reactors are not yet proven sources of energy, whereas solar technology, at least on a small scale, in many areas is quite feasible as a new energy source.

The only thing that will keep breeder technology alive is further massive inputs to breeder research and development.

And the most likely way that this will occur is through maintenance and expansion of the burner-reactor program: for only with massive capital inputs into this program can further

This is the second of two articles questioning some of the arguments brought forward to support the export of Australian uranium. The first article was published yesterday.

breeder studies be justified or indeed maintained with expanding use of personnel and resources.

So the proponents of the "export uranium to stop the breeder" argument may actually be encouraging the very development they claim to

Basically one must come to grips with the momentum built into any institution - in this case nuclear technology — which often defies those who plan or hope to "turn off" a program when it has served its

#### Too late

This phenomenon can be seen in many areas, from transportation to military preparedness to medicine. Those who argue that uranium exports are justified as an interim measure, or to thwart breeder technology, overlook or undervalue the institutional momentum of the nuclear establishment.

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Solar collector panels on the roof of a house in Germany. "... In spite of decades of intense research and development work, and a massive investment of research money ... breeder reactors are not yet proven sources of energy, whereas solar technology, at least on a small scale, in many areas, is quite feasible as a new energy source".

To stop such a pressure group in 30 years' time, action is needed now; in 30 years' time it will be too late.

Two further (rather extreme) arguments are sometimes advanced to support uranium mining. One is that Australia's stance on mining will not make any difference because plenty of uranium can be obtained from low-grade ores or sea water (presently at a considerably higher price, but not so high as to significantly increase the price of nuclear electricity).

The conclusion implicitly drawn by proponents of mining, presumably, is that Australia should make money from its uranium while it can.

Such a stance completely denies the possibility of moral persuasion. It seems likely that a decision not to mine Australian uranium, accompanied by positive statements and actions

in favour of energy alternatives, quite compatible with a moral would encourage governments to reconsider reconsider their nuclear programs. It would certainly provide a strong boost to citizen groups opposing nuclear power around the world.

### Abdication

A stance based on this argument alone also represents an abdication of moral responsibility. The argument is directly analogous to an argument to export opium or slaves because not exporting them would not make any difference.

A second argument sometimes presented in support of uranium is that if "we" don't export Australian uranium, then "they" (meaning the Japanese) will come and take it.

(This argument of course is based on opposite assumptions to the previous one: if Japan wants uranium so desperately then it would be easier and cheaper to extract it from sea water.)

A strong objection to this argument is that in the present political and economic circumstances there is no likelihood of an attack. Even assuming that an attack were remotely likely, the natural response by any group of people which believed in its position would be to defend themselves (and to obtain international support for this stance).

#### Viable

Proponents of the "export - so - they - won't - come - and - take - it" argument should also be in favour of giving Australian land (ceding its territory) to the seething millions from the north who will otherwise come and occupy it.

More seriously, the export of coal to meet truly urgent energy needs is a viable (and possibly economic) policy alternative,

opposition to the export of uranium.

I have already made some suggestions about how Australia might help poor peoples or prevent nuclear proliferation. Here is another possibility. Australia could state that it

would allow export of its uranium once it had been convinced that:

(1) Importing countries had in-stituted extensive energy conservation measures.

(2) Importing countries had devoted a large proportion of their and-development funds, for a number of years, to alternatives to nuclear power,

(3) Importing countries had committed themselves to sharing a sizable fraction of their expertise and/or GNP with poor countries,

An extensive public debate had been carried out on the desirability of nuclear power vis-a-vis alternative energy strategies, and

The importing country, after all the above, still found a definite need for the uranium.

In the interim, Australia could gear its own research more towards energy conservation and a range of non-nuclear sources, share its expertise and capital with poor countries, and hold an extensive public debate on the desirability of uranium mining (for there are other issues - in particular Aboriginal rights besides the demands of foreign

## Apologetics

Naturally these are personal opinions. My main point is that there are a lot of things Australia could do, and which do not end up being apologetics for the interests of mining companies and manufacturers.

One final justification for uranium mining deserves mention, that it is inevitable, and that therefore we should get the best conditions possible.

It is hard to take this seriously. The only way in which uranium mining and nuclear power can become inevitable is by people acting as if they were inevitable The feeling arises that those who present the inevitability argument are confusing their judgment with their wishes.

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