



Out, then back: the big N-plan

John Howard's grand plan for nuclear energy will involve enrichment and waste disposal in the outback if he follows the lead of US President George Bush, writes **Julle Macken**.

Prime Minister John Howard has been briefed on a Washington-backed plan that involves mining and enriching uranium at Olympic Dam in South Australia, exporting it to India and China via the Adelaide-Darwin rail line and reimporting the waste the same way for storage at the former nuclear test site at Maralinga.

Howard was briefed before and during his visit to Washington and Ottawa last month about the role President George Bush expects Australia and Canada to play in his Global Nuclear Energy Partnership.

Bush has said the GNEP will "create a safe, orderly system to field civilian nuclear plants without adding to the danger of weapons proliferation".

The US has told Howard that GNEP allows Australia to be a one-stop nuclear shop that leases enriched uranium to encourage greenhouse-friendly power generations.

The plan reduces not only the weapons risks but also makes Australia a key strategic player in the region and cuts the political dangers of having nuclear power plants near cities.

And while Howard yesterday announced a review of the viability of nuclear generation in Australia, the GNEP deal would begin much sooner without the subsidies nuclear power plants would require.

The GNEP could create immediate profits for any private firm building an enrichment plant at or near Olympic Dam. The mine's owner, BHP Billiton, said yesterday it was "an upstream business. We have no interest in going downstream."

But a plant near Olympic Dam could similarly be used for treating spent plutonium from the US nuclear weapons program and uranium from myriad new Australian mines awaiting approval from Canberra.

The deal would also help the Adelaide-Darwin rail link – owned by Serco Asia Pacific, a leader in the management of the UK's nuclear waste management and transport.

With Australia leasing the enriched uranium rather than just selling the yellowcake, Canberra could retain control and be able to track every ounce of radioactive material produced. Howard has already indicated he has concerns about expanding deals with India.

"This development will elevate Australia's strategic standing in the world to unprecedented levels," says John White, head of Global Renewables, chairman of the federal government's Uranium Industry Framework and one of the four-member Nuclear Fuel Leasing Group (NFLG), which developed the business plan behind Bush's GNEP over the past 10 years.

While significant hurdles remain involving state controls and waste transport and Howard is "yet to be convinced" about nuclear energy for Australia, White is adamant the support is there across the political spectrum from the US, Canada, federal government ministers, and "a number of the members of the opposition".

The Bush administration adopted the GNEP in 2004 and in February the President told the nation in a radio address that: "As America and other nations build more nuclear power plants, we must work together to address two challenges. We must dispose of nuclear waste safely, and we must keep nuclear technology and material out of the hands of terrorist networks and terrorist states. To meet these challenges, my administration has announced a bold new proposal called the Global Nuclear Energy Partnership."

Bush concluded by saying, "We will also ensure that developing nations have a reliable nuclear fuel supply. In exchange, these countries would agree to use nuclear power only for civilian purposes and forgo uranium enrichment and reprocessing activities that can be used to develop nuclear weapons."

Howard hinted at the importance he places on Australia value-adding to uranium mining and geopolitical concerns.

If Australia wanted a seat at the world nuclear table, it had to begin enriching uranium.

"If we're not a nuclear fuel supplier, then that shuts us out of certain gatherings," Howard said.

The Prime Minister reignited the nuclear energy debate before he left for Washington last month but became increasingly supportive of a nuclear industry during the visit while being careful not to commit to power generation.

Once in Washington he said, "The context of the last week or so has given my developing views more prominence."

But he markedly called the GNEP-style plans "very embryonic".

"This is a proposal that's been made in very general terms," he said. "It might happen, it might not happen. And because we have a lot of uranium, we want to be kept informed."

With critics and the states vocal against the prospect of nuclear power, Howard agreed to the inquiry into nuclear power, telling the



ABC's *Insiders* program last week, "It doesn't seem to me to make a lot of sense to favour the export of uranium without looking at enrichment. It doesn't make much sense to look at enrichment without looking at the potential to have nuclear power stations in this country."

But some Howard ministers were briefed on the GNEP and Australia's potential for involvement before the Prime Minister even announced the inquiry into nuclear economics.

About that time Energy Minister Ian Macfarlane became less strident about restricting his support to mining only, but yesterday his office insisted that a GNEP-style plan was not government policy and illegal in Australia.

A spokesman for South Australian Premier Mike Rann said yesterday that the government had already defeated one proposal to put a nuclear dump in the state and would not tolerate any further dumps. The Premier had not been approached about a GNEP-style plan.

Foreign Minister Alexander Downer, who at about the time of the Howard visit to Washington said that enrichment should be discussed, told the Energy Supply Association of Australia last week that the nuclear option should include the potential for complementary processes such as desalination, saying, "This could make nuclear very attractive in areas facing both power and water shortages. A nuclear power plant in South Australia could supply 1000 megawatts an hour of electricity and 75 gigalitres a year of water, at a cost of \$2.5 billion to \$3 billion." Downer noted that that amount is almost half Adelaide's current needs.

White confirmed to the *AFR* that the

proposal Howard was considering would involve "a massive desalination plant established at the mine that would be powered by nuclear fuel".

"This would then provide clean water for Adelaide, Port Augusta and Pirie and restore more environmental flows to the Murray," said White.

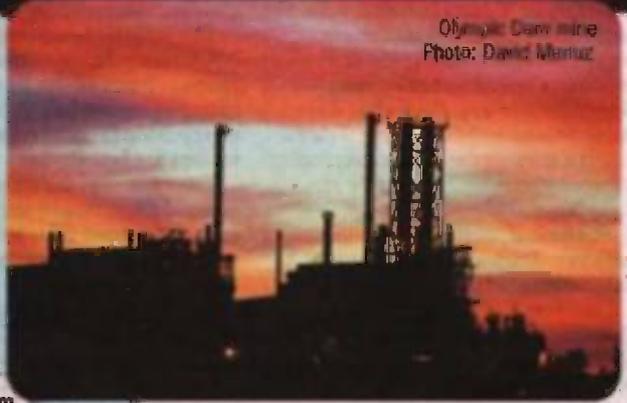
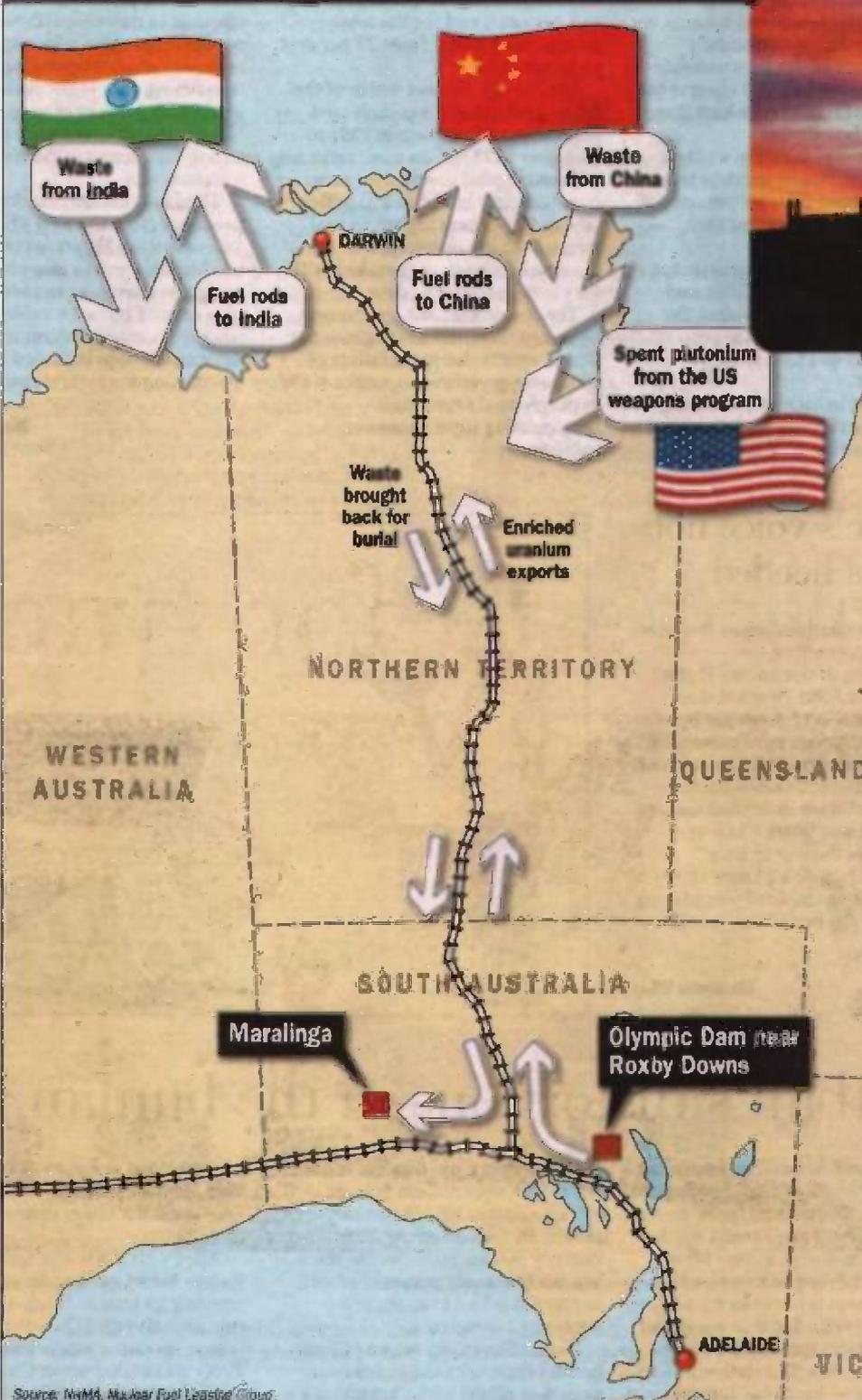
Aside from White, the Nuclear Fuel Leasing Group is made up of three other veterans of the nuclear industry: David Pentz, chairman of Pangea Resources — a company created specifically to explore the world for a nuclear dump and a spin-off of the international geotechnical company Golder Associates, based in Toronto; Daniel Poneman, principal of the Scowcroft Group, which provides strategic advice to clients in the energy, aerospace, security and other industries; and UK-based Mike Simpson, head of business development projects for British Nuclear Fuels (BNFL).

White's group argues the real money and strategic power is to be had, not in developing nuclear power for Australia but, "in being able to provide up to 20 per cent of world's energy demands within 20 years — all through this closed-loop system of mining, enriching, leasing and then storing nuclear fuel for the world".

Australia would mine the uranium, enrich it (or even better Australia would be used by the US and UK to reprocess their highly enriched but redundant nuclear weapons), create the nuclear fuel rods, lease them to India, China and other "developing nations" and then take them back and store them until a way is found to neutralise their energy. Australia wins on the mining, enriching and leasing, but makes a long-term fortune on the storage.



ONE-STOP NUCLEAR SHOP



MINING AND ENRICHMENT

- Uranium mined at Olympic Dam
 - Processing on site keeps uranium away from rogue states
- Hex conversion at enrichment plant, Olympic Dam
- Fabrication into fuel rods
- Fuel rods via Adelaide-Darwin rail and ship or purpose-built aircraft to India, China or other nations that agree to US and Australia's terms
- Reactor burn-up of fuel rods at overseas nuclear power plants
- At reactor cooling for 1 to 2 years

RETURN OF WASTE

- Keeps process of proliferation concern under Australian control
- Spent fuel transported back to Australia, then rail to Maralinga (3-6 months)
 - Spent fuel cooling at Maralinga (25-30 years)
 - Transfer to waste package (up to 4 months)
 - Transfer to long-term storage in Synroc (up to 1 month)
 - Buried at Maralinga