

# Nuke spruik worth a look



*The padlock is coming off uranium mining so we're digging into a miner eyeing yellowcake and rare element prospects.*

**W**E'VE TAKEN A PLUNGE into exotica this week with an emerging rare-earths miner that also has prospects in gold, uranium and iron-ore royalties.

Until recently, it has been my cynical view that any new entrants into uranium prospecting in Australia would face almost insurmountable barriers to actually mining and selling the radioactive metal. But rational voices are emerging from the emotional debate, calling for a lifting of Australia's restrictions on the production and export of uranium.

Labor elder statesman Bob Hawke has led the push from the left, with a call to drop the ALP's ban on new mines. At a uranium conference in Perth earlier this month, federal Labor's resources spokesman Martin Ferguson said uranium mining was a fact of life to be accepted, at the same time ensuring safety standards in mining and usage.

Then last week, in a debate at Sydney's Excellence in Exploration and Mining conference, some delegates were startled to hear a former executive director of Greenpeace Global, Paul Gilding, announce that if the world's choice was climate change (due to the burning of fossil fuel) or nuclear power, he would go for nuclear power. More boldly, he reminded the delegates that Australia could make immeasurably more out of storing nuclear waste than mining uranium.

So it appears the window is slowly opening to uranium mining. Australia is credited with having about 40% of the world's known exploitable reserves. Another debater at the Sydney conference, **Deep Yellow** director Leon Pretorius, revealed that there were about 70 companies "doing uranium work" in Australia, whereas a few years ago there were just five.

## HOW THE PORTFOLIO STANDS

	COMPANY		BOUGHT	COST (\$)	NOW (\$)
5000	Meteoric	MEI	17.07.04	av.179	.27
40,000	Eagle Bay Resources	EBR	19.08.04	av.092	.085
20,000	Cooper Energy	COE	21.10.04	.26	.39
20,000	Golden Gate Petroleum	GGP	12.01.05	.34	.20
10,000	Samson Oil and Gas	SSN	17.03.05	.37	.47
5000	Amadeus Energy	AMU	13.05.05	^64	1.06
50,000	Genesis Biomedical	GBL	8.06.05	av.03	.035
4000	Rey Resources	REY		free	unlisted
6000	Tomahawk Energy	THK	31.08.05	.75	.61
20,000	Aztec Resources	AZR	18.08.05	.17	.17
21,500	Andean Resources	AND	8.09.05	.17	.20
20,000	Harrington Group	HGR	29.09.05	.12	.185
20,000	Northwest Resources	NWR	6.10.05	.24	.29
16,000	Arafura Resources	ARU	20.10.05	.25	.25

Total value of portfolio

<b>TOTAL</b>	<b>\$44,628</b>
Portfolio change since Dec 31, 2004	<b>+48.8%</b>
All Ords since Dec 31, 2004 (4053)	+7.2%

The Speculator's portfolio is notional, based on prices and turnovers in the week before publication. It commences each year with \$30,000.

For the adventurous investor keen to take a position, the question is: where do you place your bets? Existing producers, such as **BHP Billiton** with its Olympic Dam mine, offer a certain but extremely diluted exposure to an upsurge in uranium production. Many of the new prospectors, however, are light on funds with barely grassroots prospects. The safest bet is a company with the promise of producing uranium as a profitable by-product, but with no dependence on doing so.

Such a company is **Arafura Resources** (ASX code: ARU), which listed in November 2003 having bought various exploration projects that had been underway since the late 1990s. The vendors were prospector Norm McCleary and Kalgoorlie businessman and former WA Chamber of Mines executive Mick Muir and their associates. Unlike some new hopefuls, all their exploration licences in the Northern Territory have been granted, together with prospecting approvals from traditional owners.

With issued capital of 58 million shares, the company has traded between 39.5¢ and 12¢ in the past year. At 25¢ last week, it carries a market capitalisation of \$14.5m. It has remaining cash of \$2.9m, after a placement through Bell Potter last month at 2¢ a share raised \$1.8m.

Arafura's main project is the Nolan's Bore rare-earths deposit in the eastern Reynolds Range, 135km north-west of Alice Springs.

## THE NOLAN'S BORE DEPOSIT IS AMONG THE RICHEST IN THE WORLD

The deposit is 60km west of the Alice Springs-Darwin railway, 40km from the all-weather Stuart Highway and 5km from a natural gas pipeline. Drilling during the past three years has identified an indicated and inferred resource of 5.81 million tonnes of 3.9% rare earth elements (REEs), 16.5% phosphate, 0.031% uranium oxide and 0.454% thorium oxide.

REEs are a group of a dozen or so rare metals that occur together. Boutique uses have been found for about half of them as additives in special alloys, glass, electronic components, display screens and magnets. The Nolan's Bore deposit is among the richest known in the world and its finding is timely, because the only significant mine in North America, the Mountain Pass, closed in 1999 and exhausted its remaining stocks a couple of years ago. Mountain Pass opened with 100 million tonnes grading 5% REEs. With further drilling, Arafura has hopes of boosting its resource closer to 20 million tonnes. The only other significant operating mine in the world is Baotau in China, with a head grade of 3%-plus.

According to Arafura's managing direc-

### Bought

16,000  
Arafura Resources  
@ 25¢ \$4060

tor, Alistair Stephens, the only other significant deposit known in Australia is the undeveloped Mt Weld in WA, with a grade of less than 2% under about 60m of overburden. Reportedly, Nolan's Bore has a strip ratio of just 0.5:1. Under a conceptual mine plan, it could be mined from surface for the first three years at a mining rate of 500,000 tonnes a year.

That plan envisages an in-ground value for the mineralisation of \$220 a tonne (\$200 for the REEs, \$20 for uranium, nothing for the phosphate). It would have an operating cost of \$100 a tonne and a capital cost of \$100m, and yield a 20-year mine life.

Growth in demand for REEs has historically been 3% a year. In 2004, this growth increased to about 5%, with potential to rise to 7% based on demand associated with the growth of the hybrid car market. Toyota produced 130,000 hybrids in 2004. Stephens claims Toyota will produce 500,000 in 2006 with potential to double year-on-year.

Arafura has several uranium prospects, the principal one at Lagoon Creek near the Queensland border, about 40km south of the Gulf of Carpentaria. This has been farmed out to the Toronto-listed **Laramide Resources** (Market cap. \$C165m/\$186m), which can spend \$5.5m to earn 60%. An aeromagnetic survey has been flown, with an initial 2000m of drilling expected by mid-2006.

Arafura also expects to earn \$2m during the next three years in royalties from its Francis Creek iron ore deposit, plus income from its small Mt Porter gold deposit near Pine Creek.

Potential investors should watch out for November 5, when 12.5 million of the issued shares come out of escrow, along with 16 million options. That will take listed options to 26 million exercisable at 20¢ by 2008.

Meanwhile, shares in **Eagle Bay Resources** dipped after two Bass Strait wells in which it had modest participation proved to be dry. Offsetting that is more than \$2.4m cash due from **Australian Oil Company**, which successfully listed last week. AOC will contribute 25% of drilling and development costs to earn a 12.5% equity in five Eagle wells to be drilled on the Cooper-Eromanga basins. ●