## AI EXPOSURE THROUGH NUCLEAR STOCKS

Celebrating 13 years of Under the Radar Report: Small Caps, Big Wins!

We have been early on a lot of investing themes including gold, BuyNowPayLater, and lithium and we were early on nuclear & uranium. We first recommended Paladin Energy (PDN) at 43 cents in early 2021 (Issue 441). The stock has gone as high as \$16 this year but has aggressively sold off in the past six months. It's now bouncing from a 12-month low of \$8.45 and we spot an opportunity.

Nuclear stocks are rebounding on news of a 20-year contract between Microsoft and Constellation Energy, which involves reopening a nuclear plant.

Nuclear power is base load, reliable and carbon-free. Big Tech requires enormous computing power to store, process and transmit vast amounts of data, because hyper scalers require Al-equipped data centres located near power sources to minimise transmission costs.

Nuclear stocks are at the high end of our risk spectrum, even though Paladin has a market capitalisation of \$3.5bn. **Paladin** and **Boss Energy (BOE)** are both producers but have single-mine risk. You would not be putting more than 2% of your portfolio's value into these stocks because they are in the boom-bust category.

Having put that amount in myself, I am very happy to say that they vastly exceed that value now! But the point is that you need to leverage into investments. They have to prove themselves, otherwise they end up eating into your other investments, which will invariably be much lower risk.

The fact is that the world needs energy and there are only so many sources of base load power, which can occur whether or not the sun shines or the wind blows. The energy transition requires base load and innovation. Small Modular Reactors are not yet a reality, but they are on their way to being. The power demanded by AI technology demands it.

Small Caps power economies; they can power your portfolio's growth.

## the issue

#### THE NUCLEAR REPORT PART 1

Nuclear stocks have been hit hard in the past six months, but have been rebounding off 12-month lows in the past two weeks, despite a relatively flat U308 spot price. Our mining analyst Peter Chilton discusses why this indicates that uranium stocks are positioned for growth.

| BOSS ENERGY (BOE)    | SPEC BUY |
|----------------------|----------|
| PALADIN ENERGY (PDN) | SPEC BUY |

#### **RESEARCH TIP UPDATES**

| MEDICAL DEVELOPMENTS    | SPEC BUY |
|-------------------------|----------|
| (MVP)<br>SOMNOMED (SOM) | ▼ HOLD   |
|                         | - HOLD   |

#### BEST STOCKS TO BUY NOW

These stocks are the quality companies that we believe offer great return potential for the risks faced. Check them out online.

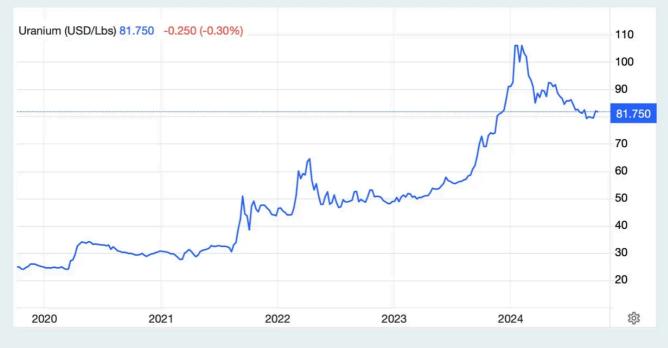
People talk a lot about AI but not many people have made any money out of it. Well, our members have – we've more than doubled our money in less than 3 months on a little stock called AI-Media.

Richard Hemming Head of Investments **Richard Hemming** 

# NUCLEAR & URANIUM ANALYSIS

Nuclear stocks have been hit hard in the past six months, mirroring the uranium (U308) spot price. But the uranium shares have started rebounding off 12 month lows in the past two weeks, despite a relatively flat U308 spot price. Our mining analyst Peter Chilton discusses why this indicates that uranium stocks are positioned for growth. One hint: hyperscalers and their energy requirements.

## **NUCLEAR STOCKS PREPARING TO TAKE OFF**



Uranium oxide (U308) price for the past 5-years

Uranium stocks have taken off on not much news, but sentiment in the sector has improved, which we believe will be followed by fundamentals, which include an improving uranium price following weakness so far this year.

SOURCE: Trading Economics

# **THE CASE FOR URANIUM**

#### THE BIG DRIVER: HYPERSCALE DATA CENTRES

Nuclear power is base load, reliable and carbon-free. Legacy nuclear plants will be used where available with announcements to build new nuclear in the US expected. The Microsoft deal with Constellation is an example of this trend but there are others, such as Amazon's deal with Talen.

Big Tech – Google, Amazon, Microsoft and Facebook – require enormous computing power to store, process and transmit vast amounts of data. Power consumption is typically 20-50 megawatts (MW) per data centre.

The advent of AI has brought power consumption to a new level and hyper scalers require AI-equipped data centres located near power sources to minimise transmission costs.

#### THE MICROSOFT BOOST

But the fact is, that at the start of September 2024, uranium equities were becalmed at close to 2024 lows, with spot uranium prices grounded around the US\$80/lb level, well off the highs of US\$106/lb recorded in January and February at the start of the year.

Quite unexpectedly, uranium equities began to rally despite an almost stationary spot price – it has since moved up to US\$82/lb. What was behind the rally? There were several possible catalysts, but a higher uranium price was not one of them.

The biggest factor was news that **Microsoft (MSFT.NASDAQ)** and **Constellation Energy (CEG.NASDAQ)** had entered into a 20-year fixed price power contract, we understand at US\$110 per MWh, to power data centres using electricity from the shuttered 835MW Unit 1 of the Three Mile Island nuclear plant. Constellation is the top producer of carbon-free electricity in the US (includes wind, solar and hydro) owns the largest nuclear fleet and is investing US\$1.6bn (A\$2.3bn) to restart Unit 1 by 2028. The contract is a vote of confidence for nuclear and confirmation of the impetus that nuclear is experiencing. Tech companies need increased electricity for AI data centres and nuclear power is the prime choice because it is carbon-free and is a baseload 24/7 power source.

The news comes in the wake of other moves by hyper scalers to ensure their huge energy requirements are met at minimum costs. **Talen Energy (TLN.NASDAQ)** part owner and operator of the Susquehanna nuclear plant in Pennsylvania, developed the data centre, Cumulus Data Assets, located on a 1,200-acre campus. Talen is selling the campus to **Amazon Web Services (AWS)** a subsidiary of **Amazon.com Inc (AMZN.NASDAQ)** for US\$650m. Talen will supply fixed-price nuclear power to AWS's new data centre as it is built. AWS has minimum power commitments that ramp up in 120MW increments over several years.

#### NUCLEAR FUNDING

During Climate Week in New York City in late September, 25 nations and 14 financial institutions – including Citigroup and Goldman Sachs – attended and endorsed the objectives of the Financing the Tripling of Nuclear Energy Leadership Event (that really was the title) and the Net Zero Nuclear Forum. The combined objective is to triple nuclear energy capacity by 2050.

Speaking at the Net Zero Nuclear Forum, Dr Sama Bilbao y Leon, the Director General, the World Nuclear Association, made it clear that this will translate to changes in lending policies and greater access for nuclear to sustainable finance mechanisms.

Continued on next page...

## **THE CASE FOR URANIUM**

#### MORE EVIDENCE URANIUM PRICES ARE SET TO CLIMB

Term prices are the uranium prices for sales contracts with power utilities. The term market has risen significantly but off a lower base. Volumes have been at historically low levels because legacy contracts allowed utilities to buy additional material at old, fixed prices. These contracts are now expiring.

Term prices are reported monthly and the most recent figures point to a 17.6% rise in the term price from US\$68/lb to US\$80/lb, which is close to the spot price.

Not all term prices are priced on a fixed basis. Some are priced on a market-related basis with floors and ceilings. Floors are believed to be US\$70-80/lb and ceilings as high as US\$130-135/lb, generally subject to inflators. The ceilings provide an indication of where the uranium price is heading.

#### INVESTMENT CONCLUSION

The positive moves in nuclear share prices are effectively a lead indicator that the fundamentals of nuclear economics is set to improve. The biggest beneficiaries include hyperscalers, but also early investors in existing producers. This is why we include an analysis below on the two ASX-listed producers in the best position, in our view – **Paladin Energy (PDN)** and **Boss Energy (BOE)**. Both have been hit relatively hard and we view as good value at current levels.

## **BOSS ENERGY**

SECTOR METALS\_MINING

INDUSTRY URANIUM NUCLEAR

### **NUCLEAR REPORT**

#### What's New?

Boss Energy shares have rallied over 20% in the second half of September 2024 after the Microsoft hyperscaler deal provided confirmation of a strong future for nuclear power (see sector report in this issue).

At BOE's Honeymoon project in South Australia, the first ion-exchange column is producing uranium and the FY25 production target of 0.85m lbs of uranium oxide (U308) is on track. At the Alta Mesa project (Boss 30%) in South Texas, a full operational capacity of 1.5m lbs a year (Boss share 0.45m lbs) is expected to be reached in FY26.

#### **Bull Points**

- · Uranium price exposure, with sales mostly uncontracted
- No debt, \$110m uranium inventory (\$0.27/share)

#### **Bear Points**

- · Honeymoon ramp-up takes 3 years
- Alta Mesa contribution small

**Analysis:** Boss is an Australian producer which is in production now and ramping up to full tilt by 2026; it's got very good exploration potential to increase production down the track. The company bought 30% of a mine in the US, which is relatively small at 1.5m pounds a year, but positions Boss in a growing market.

The third column is on track for production in the coming weeks and columns 4,5 and 6 are being commissioned in 2025 to achieve a nameplate capacity of 2.45m lbs a year U3O8. The tenors (grades) being achieved from the initial wellfields are better than expected.

The Honeymoon project has a 10-year plus life and exploration potential with over 6,000 km2 of prospective tenements. The Alta Mesa project also has significant exploration potential with 52 miles of stacked uranium roll-front identified.

**Portfolio Risk Rating:** High because there is a single mine risk and uranium is a boom/bust commodity. Mitigating this is zero debt, a large cash balance plus a strategic uranium inventory of 1.25m lbs (value \$110m).

RADAR RATING: Multi-mine uranium producer with exploration and production upside in Australia and the US. Well placed for a uranium price resurgence.



#### DATA AS AT INITIAL COVERAGE:

DATE 16 JUNE 2021

PRICE (\$) 1.40

## under the radar report SMALL CAPS

### **ISSUE 620** 03 OCTOBER <u>2024</u>

## PALADIN ENERGY

SECTOR METALS\_MINING

INDUSTRY URANIUM NUCLEAR

### **NUCLEAR REPORT**

#### What's New?

Paladin Energy shares have rallied over 20% in the second half of September 2024 after the Microsoft hyperscaler deal provided confirmation of a strong future for nuclear power (see sector report in this issue).

#### **Bull Points**

- One of the few new uranium producers
- Leverage to higher uranium prices plus growth

#### **Bear Points**

- · In production, but a relatively slow start
- · New projects years away

**Analysis:** Paladin is a large global producer of uranium oxide (U308) and is about twice as big as **Boss Energy (BOE)**. The company has been producing from its Langer Heinrich project in Namibia for the past few months and is ramping up production, although at a slower rate than we had anticipated. Uranium produced thus far has come from stockpiles, from when it was previously in operation. New production is not coming on as quickly as quickly as anticipated, which is positive for the uranium price.

The Langer Heinrich mine (PDN 75%) has been completed, costing US\$119m (A\$173m) and the first shipment from Walvis Bay, Namibia was in July.

We have been surprised, however, at the slow start to the actual project, with stockpiled or being used to meet contracts thus far. FY25 guidance is for sales of 4 million pounds and actual mining is re-starting next year for 6m lbs a year by 30 June 2026.

Paladin is already looking at production optimisation. Strong uranium prices provide the potential to lower the mine cut-off grade, increasing tonnes for mining. It is also looking at plant expansion, with concept studies to commence in FY25.

In addition to Langer Heinrich, PDN has a portfolio of 440m lbs of high-grade mineral resources across several jurisdictions and includes the Michelin project, Labrador, Canada, which should reach levels of Langer Heinrich.

The bid for Fission Uranium (FCU.TSX), with its Patterson Lake South project, Athabasca Basin, Canada has been approved by shareholders and is going through regulatory hurdles. The project is slated to be larger than Langer Heinrich but remains years away.

**Portfolio Risk Rating:** High because there is a single mine risk and uranium is a boom/bust commodity. Mitigating this are offtake agreements with top-tier counterparties in the US, Europe and Asia. Now generating cash flow.

RADAR RATING: Transformation to uranium producer. Better target scale and growth potential than most emerging uranium companies.

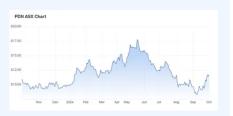
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#### RADAR RATING: SPEC BUY



DIVIDEND YIELD 0%\*

NET DEBT (\$M) -112.2M



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## MEDICAL DEVELOPMENTS

SECTOR HEALTHCARE

INDUSTRY EHEALTH MED TECH

### **Research Tip Update**

#### What's New?

Since we advised MVP shareholders to buy their entitlements in the 1:7.35 rights issue, raising \$10m at 38 cents in August, the stock has stabilised. The FY24 operating earnings (EBIT) loss of \$12m included cash outflows of \$11m, which we identified as unsustainable in March (Issue 591).

Positives include a 5 percentage point improvement in gross margin to 74%, due to lower operating costs on revenue of \$32m, up 40% on FY22 levels.

#### **Bull Points**

- Penthrox in 20 international markets
- · Funded to cash breakeven.

#### **Bear Points**

- Still burning cash
- Patchy sales growth

**Analysis:** The company's flagship analgesic product is Penthrox, known as the green whistle. Unit growth in Australian emergency departments was 30% last year, on top of record market volumes in Europe should indicate better times lie ahead.

Australia was more than half of Penthrox FY24 sales and was driven by a price increase. Europe benefited from demand in the Nordics, with some growth in the UK.

Growth requires working capital investment since every individual caregiver needs to have a number of units on hand for immediate use for patients.

The respiratory spacer business delivers a third of revenue and US revenues were up 37% to \$6m, based on market share gains, but revenue in other regions was lower.

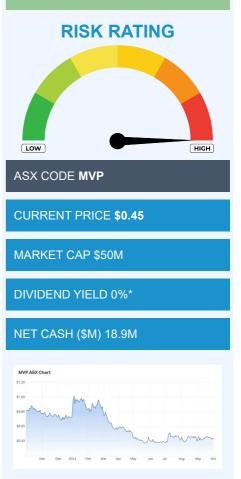
We anticipate positive operating cash flow by the end of FY25 and a maximum of \$10m cash outflow between now and then. Costs are a focus, as are higher Penthrox prices. Distribution in the UK & Ireland has been extended on improved terms, where it is already permission for use in over 70% of hospital trusts in the UK and 100% in Ireland.

**Portfolio Risk Rating:** MVP went from \$1.14 where we first recommended it to above \$11, but we turned positive again much too soon on the way down. Should be funded to cash breakeven by the end of FY25. High risk, but significant potential for longer-term growth.

RADAR RATING: Faced distribution challenges developing key European markets, which has disrupted sales progress. Having secured fresh funds to reach cashflow breakeven in FY25, some of the financing risk has been removed, at the cost of significant dilution.

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RADAR RATING: **SPEC BUY** 



#### DATA AS AT INITIAL COVERAGE:

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#### PORTFOLIO

The Under the Radar Report portfolio has 11360 shares, around 3% of the portfolio; we will add 3460 at Friday's close to make a total of 15000.

## SOMNOMED

SECTOR HEALTHCARE

INDUSTRY EHEALTH MED TECH

### **Research Tip Update**

#### Downgrade from Spec Buy

#### What's New?

Has more than doubled since our last Spec Buy in May (Issue 599) at 20 cents, but it has been a hard road for the sleep apnoea specialist, which now has co-CEOs Karen Borg & Amrita Blickstead.

Income generated for FY24 was \$91.7m, up 10% and grew 20% in the first eight weeks of FY25. FY24 operating earnings (EBITDA) were -\$2.5m and a loss after tax of \$12.2m. Revenue's. When you adjust for lease payments and restructure costs (over \$3m), the company generated positive EBITDA and there is more confidence around management's ability to generate profits from a robust and growing sales line. Plus, the balance sheet has been resuscitated after the \$22m+ capital raising last year, with over \$16m in cash.

#### **Bull Points**

- Demand for product
- Balance sheet repaired

#### **Bear Points**

- · Regulatory hurdles remain
- Confidence low

**Analysis:** New management is talking robust story; top line and break even at operating earnings. We have more confidence in SOM and this is reflected in the share price re-rating.

RestAssure remains the sleeper and is in the process of being reviewed by the US regulator, the FDA and we hope for an assessment next year. This is a gamechanging development, allowing sleep patterns to be monitored. This brings oral devices into the game with the Cpap devices produced by **ResMed (RMD.ASX)**.

The outlook was positive with FY25 guidance at revenue of around \$100m and operating earnings at \$5m; while capital expenditure of \$3m to \$4m.

The big factor in its favour is that its dental or oral-based SomnoDent product for treating sleep apnoea is the best product of its type in the market. Even in a tough year, the company has grown its top line, as proven once again in FY24 and with the current guidance.

Earnings margins remain a big concern. The guidance indicates 5%, but the company has claimed gross profit margins of 60% in the past, so we are hoping that this is a very conservative forecast.

**Portfolio Risk Rating:** High! Has caused investors many problems. The fact that it's alive should give pause, but looks good value and cash.

RADAR RATING: The stock is cheap and has the backing of big investors. What it's also got is big potential in sleep apnoea treatment, but we are exercising caution after its re-rating.

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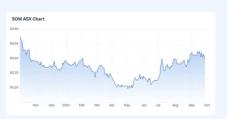
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#### RADAR RATING: HOLD



**DIVIDEND YIELD 0%\*** 

NET CASH (\$M) 15.2M



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DATE 02 OCTOBER 2014

PRICE (\$) 2.04

of Investments Richard Hemming, Publisher Caroline Mark ABN: 65147404662. AFSL: 409518. Website www.undertheradarreport.com.au

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