BELL POTTER

Uranium Sector Musings

A busy month for Uranium

Title

Stock	Price	Mkt Cap	1M %
Boss Energy Ltd (BOE)	$5.23	$2,448	14%
Paladin Energy Ltd (PDN)	$1.33	$4,253	26%
Deep Yellow Limited (DYL)	$1.51	$1,281	30%
Alligator Energy (AGE)	$0.07	$305	23%
Lotus Resources Ltd (LOT)	$0.34	$623	15%
Bannerman Energy Ltd (BMN)	$3.51	$604	26%
Peninsula Energy Ltd (PEN)	$0.14	$299	50%
Devex Resources Ltd (DEV)	$0.33	$148	18%
92Energy (92E)	$0.53	$60	3%
Basinenergylimited (BSN)	$0.17	$11	27%
Laramide Res Ltd (LAM)	$0.86	$18	16%
Global Uranium (GUE)	$0.13	$31	24%
Elevate Uranium Ltd (EL8)	$0.61	$207	36%
Silex Systems (SLX)	$5.14	$1,352	27%
Cameco Corporation (CCO*)	$0.60	$28,069	6%
Nexgenenergycanada (NXG**)	$11.93	$550	19%
Energy Fuels Inc. (EFR*)	$0.09	$1,613	4%

** USD , ** CAD*

Bell Potter U3O8 coverage

Stock	Rating	Valuation	Last Price	Us/Ds
BOE	Hold (Spec)	$6.41	$5.23	23%
PDN	Buy (Spec)	$1.60	$1.33	21%
DYL	Buy (Spec)	$1.81	$1.51	20%
AGE	Buy (Spec)	$0.10	$0.07	45%

Source: IRESS & BELL POTTER SECURITIES
* valuation for Speculative rated stocks

Speculative rated securities:
- **See risks on Page 12 & 14**
- **Bell Potter acted as joint lead managers to AGE's Spet-23 $25.5m placement and received fees for that service.**
- **Bell Potter acted as joint lead managers to BOE's Dec-23 $205m placement and received fees for that service.**
- **May not be suitable for Retail clients.**

Kazatomprom cuts, what do they mean?

Kazatomprom (KZGM, KZ – not rated) cut production growth over 2024 by 9.2Mlbs ~83% (~14% downgrade in total), which was beyond what we had previously anticipated, and resulted in a positive move in spot uranium on the day up to US$107/lb. The downgrade was significant, we estimate roughly 7% of 2023 production. Our updated 2024 supply/demand balance now shifts to a deficit of 32Mlbs (~23% of 2023 production). The risk we now see is further downgrades to 2025 guidance from KZGM, which was originally going to see the business produce at 100% capacity, a full scrapping of 2025 growth would further exacerbate the supply deficit and place upward pressure on both spot and long-term contract prices for U3O8, and if so the current spot price of US$100/lb is likely to face upside risk.

Cameco quarterly – Pouring water on an electrical fire

Cameco (CCO, TSX not rated) reported its 4Q23 results producing 17.6Mlbs (+69% YoY with the restart of McArthur River) sales of 32Mlbs (+25% YoY) and an average realised price of US$50/lb. The business reiterated its stance on the overall market, being that they continue to see broad price support across the nuclear fuel market (conversion, enrichment and yellowcake). Management downplayed participation in the spot market, playing into CCO's need to buy 2.5Mlbs on market (or beg borrow or steal from somewhere else?) to meet its 2024 obligations. The result saw a sell-off in US uranium stocks over night and a sell down in the spot uranium price, which may assist CCO in the short term, however it is akin to pouring water on an electrical fire, any reprieve in recent price momentum will be brief in our opinion.

Reactor data - January 2024

As of January 2024, 62 reactors were under construction around the globe, with 26 of those in China (+2 since our Nov-23 update). In 2023, 4 reactors were connected to the grid in Slovakia, China, USA and Belarus (total capacity 3,772MWe) and 5 have been shutdown in Taiwan, Belgium and Germany (total capacity 6,048MWe). Two suspended operations in Japan have restarted, totalling 1,560MWe. We continue to see reactor installation growth across the globe, with China and India boasting both a comparatively young fleet and ambitious growth outlooks for nuclear capacity (China propose construction of a further 154 reactors and India a further 28). We estimate current primary U_3O_8 demand at 169Mlbs/yr, expanding to 213Mlbs/yr by the end of the decade.

Ways to play it:

We remain in favour of BOE, PDN, DYL and AGE as these businesses offer an alternate supply source from the global heavyweights in stable jurisdictions. BOE and PDN are approaching the restart of their respective assets over the next six months, and have the ability to capture near-term price spikes. DYL and AGE offer leverage to the growing uranium thematic. DYL has an attractive portfolio of two advanced projects in Namibia and Western Australia, whilst AGE is developing a BOE style project in South Australia.

KZGM volumes down, CCO - who knows?

BP View

Over the past week we have seen Kazatomprom (KZGM) downgrade production for 2024 and Cameco release its quarterly report, guiding to flat YoY growth with long-term expansions/ extensions at McArthur river and Cigar Lake. Our notes from these events have been provided below. Despite the volatile spot price, we remain positive on the outlook for uranium over 2024, with fundamental growth in new reactors, life-time extensions for existing reactors and limited supply availability from current and prospective producers.

Kazatomprom downgrade (1 Feb 24)

- KZAP downgraded their 2024 uranium production guidance by 14% (9.2Mlb), or 83% of the planned 11.9Mlb production growth outlined in Aug-23
- Downgrades in production guidance are due to the ongoing issues in obtaining sulphuric acid and construction delays on new projects.
- KZAP remains committed to contracted volumes, which are to be covered by current inventory stockpiles.
- 2025 production guidance will remain at risk if sulphuric acid availability continues to persist. KZAP were planning on increasing production volumes to 100% of its subsoil use agreement in 2025 effectively adding 26Mlbs of production over 2024 and 2025. However with 2024 effectively guiding to flat production yoy this guidance is under considerable pressure.
- KZAP will hold its CY23 conference call on the 15th of March.

Cameco Corp (CCO, TSX – not rated) quarterly update highlights (8 Feb 24)

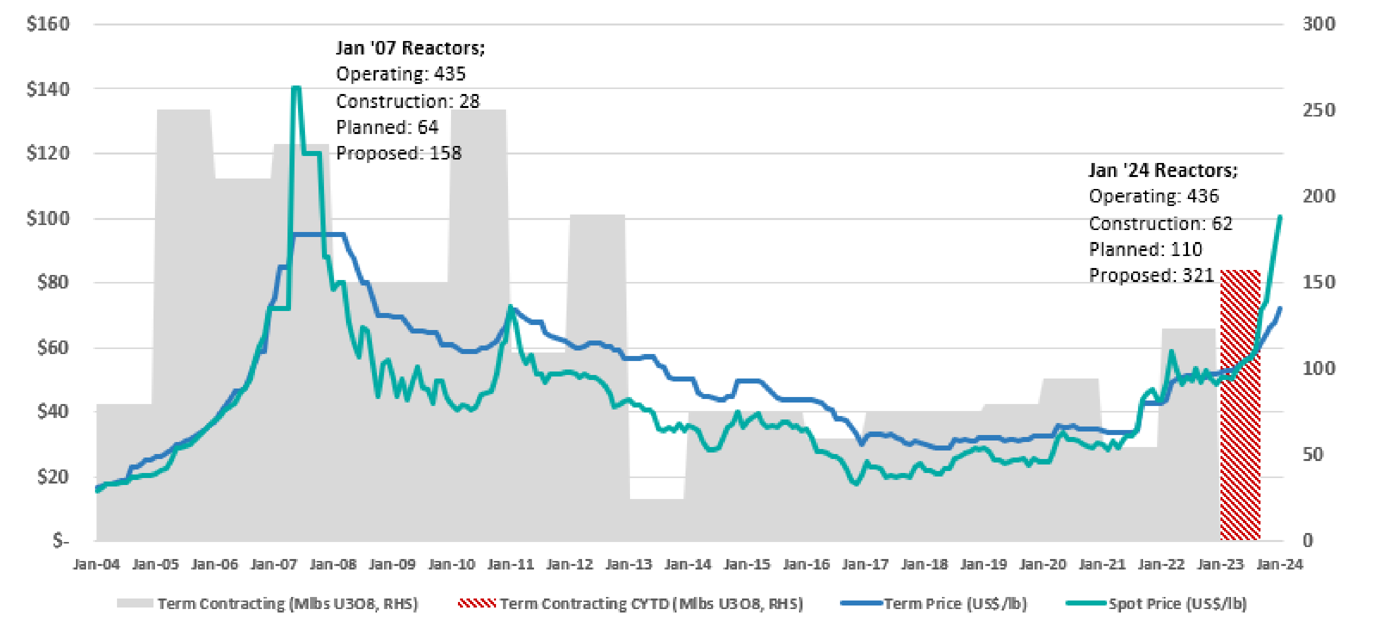
- CCO emphasised that we are continuing to see price discovery across the entire nuclear fuel cycle chain and are far from reaching the top. They maintain discipline with their contracting book, which has lagged the current spot price moves, expressing the focus on quality of offtakers and long-term contracting over thinly traded spot price discretionary sales.
- CCO finished 2023 producing 17.6Mlbs U3O8, up 69% YoY. Sales were 32Mlbs, up 25% YoY at an average realised price of US$49.76, +11% YoY.
- Positive market momentum in 2023 is expected to continue over 2024, mobile inventories well and truly cleared and demand continues to grow.
- Uranium market shifting closer to replacement rate level (~169Mlbs) with roughly 160Mlbs sold under long-term offtake over 2023. Volumes through the spot market in 2023 were lower than 2022.
- They continue to see durable demand, evidenced by sustained pricing support. Historically peaks which lasted for weeks and valleys which lasted for years, characterised by small flash in the pan events which increased short term pressure on supply and demand. Full cycle growth across all time-frames. Climate change, and geopolitical issues remain, there is no net zero without nuclear.

- On supply side, significant uncertainty remains, geopolitics adding negative pressure on supply of uranium and nuclear fuel services. Market tightness expected to persist into the next decade.
- CCO are working with Kazatomprom to determine impact to JV Inkai, however, nothing has been announced yet.
- Assessing options to increase the McArthur River capacity from 18Mlbs up to licenced capacity of 25Mlbs (100%) – evaluation work recently commenced on bottlenecks at Key Lake Mill. Targeting the expansion at McArthur before looking at Tier-2 assets. Capital for Cigar Lake extension $250-300m range to extend to 2036 at 18Mlb pa.
- Leverage to spot prices – CCO's realised price lagged spot and term price movements with the read through interpretation being that their contract book could be reaching the ceilings of their current book. CCO cautioned on the call the focus on targeting the spot market exclusively, they continue to prefer market related contracts, however entered into under a long-term contract.
- Continue to see the early stage of contracting cycle, maintaining discipline on expanding tier-1 assets and haven't looked at considering the tier-2 assets, continue to see strong demand and price discovery for uranium ahead.
- Expect to continue to need more than current production volumes to feed into sales contracts. CCO might buy up to 2Mlbs at market prices this year, other options include under long-term purchase commitments, loans and customer delivery movements.

Contracting remains robust, edging towards replacement rate

Roughly 160Mlbs of U3O8 was contracted for in 2023, up from 124Mlbs in 2022. We estimate this is slightly below the current annual consumption of 169Mlbs, with considerable catch up still required for future demand. CCO estimate ~510Mlbs have been locked-up in the long-term contract market over the last five years, vs 780mlbs consumed during that period.

Figure 1 – Price follows contracting, and we are entering contracting season…



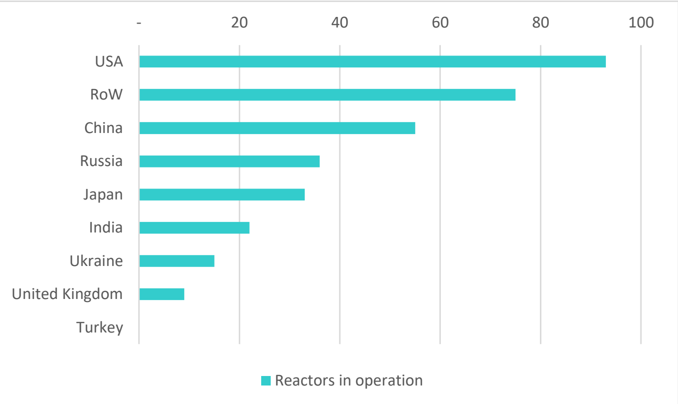
SOURCE: 1 WORLD NUCLEAR ASSOCIATION, CAMECO, PALADIN ENERGY, BELL POTTER SECURITIES ESTIMATES

2023 Recap

Real demand – Nuclear reactor construction/ approval

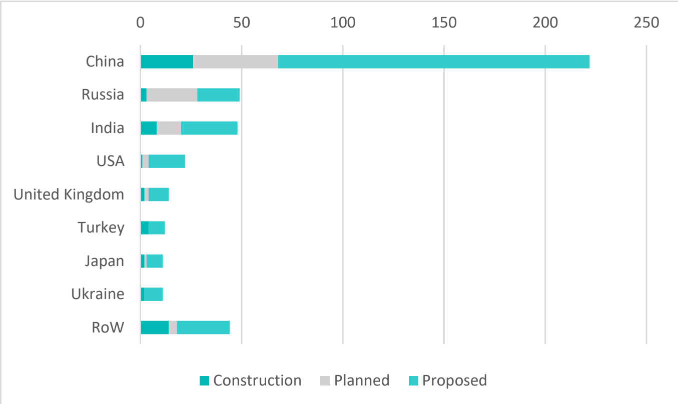
In 2023 5 new reactors were connected to the grid, at a capacity of 5.01GW, whilst there were 5 reactors permanently shutdown totalling 6.05GW. Construction starts continued the declining trend from 10 in 2021, 8 in 2022 and 5 in 2023, as did net capacity (9.13GWe in 2022 to 5.54GWe in 2023). China remains the leader in construction volume with 26 reactors currently under construction, a net change since the March-23 update of 5 reactors, totalling 5.95GWe. Longer-term demand (reactors planned and proposed) remained flat YoY with 114 reactors planned (total capacity 69GWe) and 326 proposed (total capacity 362GWe), up from 103 and 325 respectively. Canada was the outlier, adding 11 planned reactors to the pipeline (from zero in March-23). Construction leaders remain China and India, however notable Western Economies such as Canada and the UK, who recently published their roadmap to quadruple capacity by 2050, could be outliers. The IEA's *"Electricity 2024 Analysis and Forecast to 2026"* report forecast Nuclear capacity to grow by an additional 29GW over the next 2 years, driving nuclear generation 10% higher from 2023 levels. China's five-year plan aims to deliver 70GW of installed capacity (up from ~53GW currently). India is planning to triple nuclear capacity by 2032, equating to an additional 13GW of capacity with currently 6GW under construction.

Figure 2 - Current reactors in operation – US maintains fleet dominance



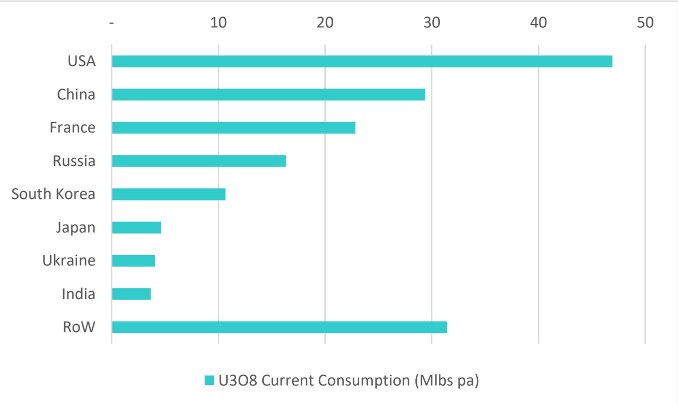
SOURCE: WNA, IAEA, BELL POTTER SECURITIES ESTIMATES

Figure 3 - Reactor growth concentrated in China & India (number of reactors under construction, planned and proposed)



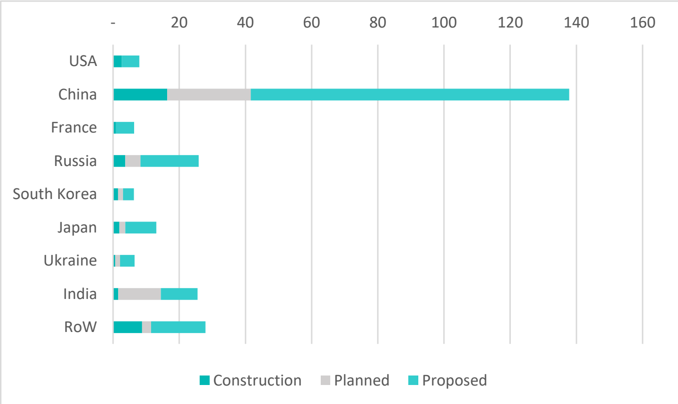
SOURCE: WNA, IAEA, BELL POTTER SECURITIES

Figure 4 – Uranium consumption unsurprisingly dominated by US, China a close second (Mlbs U3O8 annual consumption)



SOURCE: WNA, IAEA, BELL POTTER SECURITIES ESTIMATES

Figure 5 – Anticipated additional annual demand for U3O8 (Mlbs) dominated by China



SOURCE: WNA, IAEA, BELL POTTER SECURITIES

Digging into cost profiles – Nuclear remains attractive

One of the more common questions currently in uranium and nuclear is around the sensitivity of reactor cost to fuel inputs, essentially, what's the price ceiling for uranium? We've taken data from the International Energy Agency (IEA) published in 2020 on the levelized cost of electricity, which takes into account the capital, operating and fuel costs of various sources (fossil fuel, low carbon and renewable), and adjusted the fuel inputs for nuclear energy to represent current spot prices for U3O8, conversion an enrichment. We estimate a current fuel cost of US$11.31/MWh, up from the IEAs 2020 estimate in its levelized cost assessment of US$9.33/MWh for brownfield assets and US$9.45 for Greenfields, an increase of ~20% since 2020 in fuel costs. Holding the remaining inputs for LCOE steady, the incremental fuel costs result in a 3% increase. Adjusting the U3O8 spot price to $200/lb results in a 10% increase in the LCOE. Nuclear's benefit over coal and gas is its low fuel cost as a portion of total costs, 14% for Greenfields and 29% for brownfields lifetime extension nuclear plants vs 46% on average for coal and gas. The flipside to that is the high capital costs which are sensitive to prevailing interest costs and construction overruns (in both time and $).

Table 1 - Table

IEA - 2020 Assessment				
	Brownfields		**Greenfields**	
Capital	$8.53	26%	$42.81	63%
Operating	$14.36	45%	$15.23	23%
Fuel	$9.33	29%	$9.45	14%
LCOE	$32.22		$67.48	
US c/kWh	$3.22		$6.75	
Updated for increased fuel costs				
		Required units	**cost per unit**	
Uranium		8.90	$105	$2,060
Conversion		7.50	$46	$345
Enrichment		7.30	$159	$1,161
Fuel Fabrication		1.00	$300	$300
Other		1.00	$204	$204
Total				**$4,070**
			USc/kWh	**US$/MWh**
Burn up	kWh/kg	360,000	$1.13	$11.31
Updated LCOE				
	Brownfields		**Greenfields**	
Capital	$8.53	25%	$42.81	62%
Operating	$14.36	42%	$15.23	22%
Fuel	$11.31	33%	$11.31	16%
LCOE	$34.20		$69.34	
US c/kWh	$3.42		$6.93	

SOURCE: IEA, WNA, UXC, BELL POTTER SECURITIES ESTIMATES

Boss Energy Ltd (BOE)

Boss Energy Ltd company overview

Boss Energy Ltd (BOE) is an ASX-listed uranium development and exploration company. Its primary asset is the Honeymoon project which has been on care and maintenance since it was acquired by BOE in 2015. BOE are currently on track to bring Honeymoon back into production in Feb-24. The mine is an in-situ recovery (ISR) project, consisting of a 71.6Mlb U3O8 JORC resource at an average grade of 620ppm U3O8. In addition to Honeymoon, BOE also holds a 30% interest in the Alta Mesa ISR restart project in South Texas. The remaining 70% is owned and operated by enCore Energy (EU TSXV, not rated). Alta Mesa is targeting first production in 1HCY24.

Investment Thesis – Speculative Hold, Valuation $6.41/sh

We maintain our valuation to $6.41/sh and Speculative Hold recommendation. Uranium fundamentals continue to support our thesis being 1) advancement in Nuclear energy across the globe (62 reactors currently under construction) filtering through to a growing demand for U3O8 and 2) a lack of near-term supply as producers exited the market post Fukushima. The recent acquisition of a 30% interest in the Alta Mesa joint venture, diversifies BOE's operations and revenue streams, making BOE one of only two geographically diversified uranium producers in CY24. We apply a 10% premium to our NAV in arriving at our valuation for BOE.

Valuation

Table 2 – BOE Sum of the parts valuation

Ordinary Shares (basic)	**m**	**407**
Options outstanding	m	2
Diluted	**m**	**409**
Sum-of-the-parts	**A$m**	**A$/sh**
Honeymoon (NPV 10% , 95% risked)	891	2.17
Alta Mesa - 30% interest (NPV 10%)	188	0.46
Additional HRA resource	540	1.31
Other exploration	388	0.94
Corporate overheads	(41)	(0.10)
Subtotal	**1,965**	**4.78**
Equity Investments/ Uranium	206	0.50
Net cash (debt)	233	0.57
Total undiluted	**2,404**	**5.85**
Cash from options	1	0.00
Total diluted	**2,405**	**5.82**

SOURCE: BELL POTTER SECURITIES ESTIMATES

Paladin Energy Ltd (PDN)

Paladin Energy Ltd company overview:

Paladin Energy Ltd (PDN) is an Australian listed uranium project developer. The company's strategic focus is the development of its 75% owned Langer Heinrich Mine (LHM) located in Namibia. LHM was placed into care and maintenance in 2018 following a prolonged period of depressed uranium prices, prior to this LHM produced 43Mlb U_3O_8 at a C1 cash cost of US$26/lb. More recently, the business has progressed through a recapitalisation, paying down debt and strengthening the balance sheet under the leadership of CEO Ian Purdy. PDN is now looking to capitalise on a positive uranium outlook with the pending re-start of operations at LHM.

Investment thesis: Speculative Buy, Valuation A$1.60/sh

We maintain a Speculative Buy recommendation and a valuation of $1.60/sh for PDN. We reiterate our investment thesis on PDN being 1) LHM is a proven asset in a known uranium mining jurisdiction with a comparatively low restart risk, 2) At full capacity LHM will be a top ten producer supplying 6Mlbs pa by FY26 (BPe), and 3) uranium market fundamentals remain robust, with 118Mlbs in long-term offtake contracted CYTD (124Mlbs CY22), PDN is fully contracted for the first year of operations and substantially contracted for the second year. Our valuation for PDN includes a 10% premium to NAV.

Valuation

Table 3 - PDN Sum of the parts valuation

Ordinary Shares (basic)	**m**	**2,983**
Options in the money	m	17
Diluted	**m**	**3,000**
Sum-of-the-parts	**A$m**	**A$/sh**
Langer Heinrich (NPV 8%)	2,188	0.73
Additional LH resource	1,140	0.38
Other exploration	1,068	0.36
Corporate overheads	(108)	(0.04)
Subtotal	**4,288**	**1.44**
Equity Investments	0	0.00
Net cash (debt)	100	0.03
Total undiluted	**4,388**	**1.47**
Cash from options	0	0.00
Total diluted	**4,389**	**1.46**

SOURCE: BELL POTTER SECURITIES ESTIMATES

Deep Yellow Ltd (DYL)

Deep Yellow Ltd company overview

Deep Yellow Ltd (DYL) is a uranium development and exploration company with two advanced projects, in Namibia and Western Australia. In addition to this, the business is also developing several early-stage uranium exploration assets including Omahola and Alligator Rivers.

Investment thesis: Speculative Buy, Valuation A$1.81/sh

We maintain a Speculative Buy rating on DYL and our valuation of $1.81/sh. Uranium prices continue to lift, as limited near-term supply spurs the spot market whilst the global path to decarbonisation shapes the role of nuclear over the longer-term. Following the merger with VMY (Vimy – de-listed), DYL has a Mineral Resource Estimate (MRE) of 392mlbs U_3O_8, and an Ore Reserve of 110mlbs.

Valuation

Table 4 - DYL Sum of the parts valuation

Ordinary Shares (basic)	**m**	**758**
Options in the money	m	1
Diluted	**m**	**759**
Sum-of-the-parts	**A$m**	**A$/sh**
Tumas (NPV 10%)	674	0.89
Mulga Rock (NPV 10%)	507	0.67
Other exploration	289	0.38
Corporate overheads	(124)	(0.16)
Subtotal	**1,346**	**1.77**
Equity Investments	0	0.00
Net cash (debt)	28	0.04
Total undiluted	**1,374**	**1.81**
Cash from options	0	0.00
Total diluted	**1,374**	**1.81**

SOURCE: BELL POTTER SECURITIES ESTIMATES

Alligator Energy Ltd (AGE)

Alligator Energy Ltd company overview

Alligator Energy Ltd (AGE) is an ASX listed exploration and development company currently advancing four projects at various stages from early exploration through to advanced exploration / early study work. The focus of the company is the advancement of its uranium assets within Australia (South Australia and Northern Territory), with a non-core base metals project in Northern Italy. AGE's most advanced project, the Samphire uranium project, recently conducted a scoping study confirming amenability for in-situ-recovery (ISR) mining similar to that utilised at Honeymoon (BOE), with a targeted initial project of ~1Mlbs U_3O_8 production over a 12-year mine life.

Investment view: Speculative Buy, Valuation $0.10/sh

We maintain our speculative Buy recommendation and our valuation of $0.10/sh. Our valuation for AGE is based off a risked assessment of the Samphire uranium project and assumed values for additional exploration assets within AGE's portfolio. As AGE is yet to produce revenue and cashflow from its projects it is classified as Speculative under our ratings structure.

Valuation

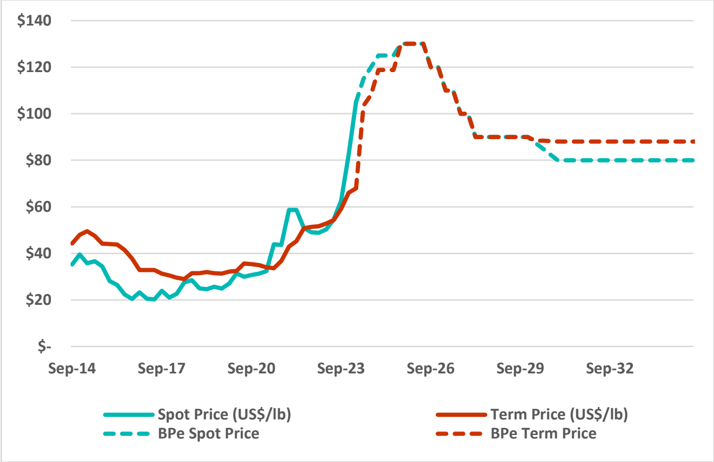
Table 5 - AGE Sum of the parts valuation

Ordinary Shares (basic)	**m**	**3,800**
Options in the money	m	9
Diluted	**m**	**3,808**
Sum-of-the-parts	**A$m**	**A$/sh**
Samphire (NPV 10%)	189	0.05
Samphire - Exploration target	86	0.02
Other exploration	100	0.03
Corporate overheads	(30)	(0.01)
Subtotal	**345**	**0.09**
Equity Investments	0	0.00
Net cash (debt)	47	0.01
Total undiluted	**392**	**0.10**
Cash from options	0	0.00
Total diluted	**392**	**0.10**

SOURCE: BELL POTTER SECURITIES ESTIMATES

Charts and tables

Figure 6 – Bell Potter Uranium Price Outlook



SOURCE: BELL POTTER SECURITIES ESTIMATES

Table 6 - ASX - U_3O_8 Comp table

Company	Market Cap (A$m)	Main project	Location	Project stage	Est C1 (US$/lb)	CAPEX (US$m)	Resource (Mt)	Avg Grade (ppm U_3O_8)	Contained U_3O_8 (Mlbs)	MV/Resource (A$/lb)
Paladin Energy (PDN)	3,955	Langer Heinrich	Namibia	Restarting	27	118	167	448	356	10.74
Boss Energy (BOE)	2,137	Honeymoon	South Australia	Restarting	18	81	52	620	72	28.97
Deep Yellow Limited (DYL)	1,155	Tumas, Mulga	Namibia, WA	Approaching FID	35	435	700	269	415	2.71
Bannerman Resources Ltd (BMN)	536	Etango	Namibia	DFS in progress	35	317	429	220	208	2.39
Lotus Resources Limited (LOT)	588	Kayelekera	Malawi	Approaching FID	29	50	43	500	46	12.42
Alligator Energy Limited (AGE)	266	Samphire, SA	South Australia	Scoping Study	na	na	95	230	47	4.71
Peninsula Energy Limited (PEN)	278	Lance	Wyoming, USA	Restarting	20	291	51	480	54	4.11
Berkeley Resources Limited (BKY)	138	Salamanca	Spain	PFS completed	25	170	65	427	62	0.95
Toro Energy Ltd (TOE)	56	Lake Maitland	Wiluna, WA	Scoping in progress	31	200	79	482	84	0.62
Global Uranium Ltd (GUE)	28	Tallahassee,	North America	Exploration	na	na	42	540	50	0.52
NexGen Energy CDI's (NXG)	525	Rook 1	Saskatchewan	Feasibility	6	1300	0	31000	257	0.63
Silex Systems (SLX)	1,213	GLE Tech	US	Feasibility	na	na	0	0	0	na
Elevate Uranium Ltd (EL8)	187	Koppies	Namibia	Exploration	na	na	108	200	48	3.53
Aura Energy Ltd (AEE)	157	Tiris	Mauritania	Approaching FID	29	88	113	236	59	2.48
DevEx Ltd (DEV)	146	Narbalek, U40	NT Australia	Exploration	0	0	0	0	0	na
Laramdie Ltd (LAM)	18	Churchrock	QLD/ US	Exploration	0	0	0	0	0	na
Basin Energy Ltd (BSN)	10	Geikie	Saskatchewan	Exploration	0	0	0	0	0	na
Cauldron Energy Ltd (CXU)	57	Bennet Well	WA	Scoping Study	23	82	0	360	39	1.45
Aurora Energy Metals (1AE)	26	Aurora	Oregon US	Scoping Study	0	0	0	485	51	0.46
Minimum								**200**		**0.46**
Weighted average								**1,786**		**10.47**
Maximum								**31,000**		**28.97**

SOURCE: COMPANY DATA AND BELL POTTER SECURITIES ESTIMATES

Reactor data – January 2024

Table 7 - Recent reactor grid connections

Reactor Name	Model	Process	Net Capacity (MWe)	Grid Connection	Location
Ostrovets 2	VVER V-491	PWR	1110	13/05/2023	Belarus
Vogtle 3	AP1000	PWR	1117	1/04/2023	United States Of America
Mochovce 3	VVER V-213	PWR	440	31/01/2023	Slovakia
Fangchenggang 3	HPR1000	PWR	1000	10/01/2023	China
Barakah 3	APR-1400	PWR	1345	8/10/2022	United Arab Emirates
Shin Hanul 1	APR-1400	PWR	1414	9/06/2022	South Korea
Hongyanhe 6	ACPR-1000	PWR	1061	2/05/2022	China
Olkiluoto 3	EPR	PWR	1600	12/03/2022	Finland
Karachi 3	HPR1000	PWR	1014	4/03/2022	Pakistan
Fuqing 6	HPR1000	PWR	1075	1/01/2022	China

SOURCE: WORLD NUCLEAR ASSOCIATION

Table 8 - Reactors shutdown (2022 & 2023)

Permanent shutdowns	Country	MWe	Date shutdown
EMSLAND	Germany	1335	Apr-23
ISAR-2	Germany	1410	Apr-23
NECKARWESTHEIM-2	Germany	1310	Apr-23
KUOSHENG-2	Taiwan	985	Mar-23
TIHANGE-2	Belgium	1008	Feb-23
DOEL-3	Belgium	1006	Sep-22
HINKLEY POINT B-1	UK	485	Aug-22
HINKLEY POINT B-2	UK	480	Jul-22
HUNTERSTON B-2	UK	495	Jan-07
PALISADES	USA	805	May-22

SOURCE: WNA

Table 9 - Reactors under construction

Country	Mwe	Reactors	Est Annual U3O8 consumption Mlbs*
China	29,731	26	16.32
India	6,700	8	3.68
Russia	2,810	3	1.54
Turkey	4,800	4	2.63
South Korea	2,680	2	1.47
Bangladesh	2,400	2	1.32
Egypt	4,800	4	2.63
Japan	2,756	2	1.51
Ukraine	1,900	2	1.04
United Kingdom	3,440	2	1.89
USA	1,250	1	0.69
Argentina	29	1	0.02
Brazil	1,405	1	0.77
France	1,650	1	0.91
Iran	1,057	1	0.58
Slovakia	471	1	0.26
UAE	1,400	1	0.77
Total	**69,279**	**62**	**38.03**

SOURCE: WNA, BELL POTTER SECURITIES ESTIMATES

Investment risks

Risks include, but are not limited to:

- **Commodity price and exchange rate fluctuations**. The future earnings and valuations of exploration, development and operating resources companies are subject to fluctuations in underlying commodity prices and foreign currency exchange rates.
- **Infrastructure access.** Bulk commodity producers are particularly reliant upon access to transport infrastructure. Access to infrastructure is often subject to contractual agreements, permits, and capacity allocations. Agreements are typically long-term in nature (+10 years). Infrastructure can be subject to outages as a result of weather events or the actions of third party providers.
- **Operating and capital cost fluctuations.** Markets for exploration, development and mining inputs can fluctuate widely and cause significant differences between planned and actual operating and capital costs. Key operating costs are linked to energy and labour markets.
- **Resource growth and mine life extensions.** Future earnings forecasts and valuations may rely upon resource and reserve growth to extend mine lives.
- **Sovereign risks.** Mining companies' assets can be located in countries other than Australia and are subject to the sovereign risks of that country.
- **Regulatory changes risks.** Changes to the regulation of infrastructure and taxation (among other things) can impact the earnings and valuation of mining companies.
- **Environmental risks.** Resources companies are exposed to risks associated with environmental degradation as a result of their exploration and mining processes. Fossil fuel producers (coal) may be particularly exposed to the environmental risks of end markets including the electricity generation and steel production industries.
- **Operating and development risks.** Mining companies' assets are subject to risks associated with their operation and development. Risks for each company can be heightened depending on method of operation (e.g. underground versus open pit mining) or whether it is a single operation company. Development assets can be subject to approvals timelines or weather events, causing delays to commissioning and commercial production.
- **Occupational health and safety risks.** Mining companies are particularly exposed to OH&S risks given the physical nature and human resource intensity of operating assets.
- **Funding and capital management risks.** Funding and capital management risks can include access to debt and equity finance, maintaining covenants on debt finance, managing dividend payments, and managing debt repayments.
- **Merger/acquisition risks.** Risks associated with value transferred during merger and acquisition activity.
- **COVID-19 risks:** Mining companies' rely on freedom of movement of workforces, functioning transport routes, reliable logistics services including road, rail, aviation and ports in order to maintain operations and get their products to market. They also rely on liquid, functioning markets to sell their products. Measures being put in place to combat the COVID-19 pandemic are posing risks to these conditions.

Recommendation structure

Buy: Expect >15% total return on a 12 month view. For stocks regarded as 'Speculative' a return of >30% is expected.

Hold: Expect total return between -5% and 15% on a 12 month view

Sell: Expect <-5% total return on a 12 month view

Speculative Investments are either start-up enterprises with nil or only prospective operations or recently commenced operations with only forecast cash flows, or companies that have commenced operations or have been in operation for some time but have only forecast cash flows and/or a stressed balance sheet.

Such investments may carry an exceptionally high level of capital risk and volatility of returns.

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Speculative Risk Warning:

The stocks of companies without established revenue streams are regarded as speculative in character. Stocks with 'Speculative' designation are prone to high volatility in share price movements. In the case of 'Speculative' Resource companies, additional risks include but are not limited to Government approvals and permitting, mine and infrastructure development, commodity price and exchange rate fluctuations, resource growth and mine life extensions and regulatory and sovereign risks. Investors are advised to be cognisant of these risks before buying such a stock including Boss Energy Ltd, Paladin Energy Ltd, Deep Yellow Ltd and Alligator Energy Ltd (of which a list of specific risks is highlighted within).

Disclosure: Bell Potter Securities acted as joint lead manager for AGE's Sept-23 $25.5m placement and received fees for those services. Bell Potter Securities acted as joint lead manager for BOE's Dec-23 $205m placement and received fees for those services.

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