



December 2022 Quarterly Report

Boss running on time and budget at Honeymoon uranium project as market outlook continues to strengthen

Boss Energy Ltd (ASX: BOE; OTC: BQSSF) is pleased to report on another quarter of outstanding progress at its Honeymoon uranium project in South Australia.

Boss Managing Director Duncan Craib said: “Our re-development strategy is going to plan in every respect.

“We made excellent progress on the construction and development fronts during the quarter, meeting or exceeding our timetables. At the same time, we have continued to operate within our budgets.

“With our committed expenditure now at the halfway mark, we are well on track to start production as planned in the December quarter of this year.

“These achievements come despite the widely-reported cost inflation, skills shortages and delays plaguing the resources industry.

“They are also against a backdrop of increasing tightness in the uranium market, which augurs very well for the uranium price in the second half of this year, meaning we are set to close in on production in an increasingly favourable environment for uranium, especially product which is sourced from western countries.

Key Achievements in December Quarter

Committed expenditure under the re-development program has now reached the halfway mark, totalling A\$55.1M of the budgeted ~A\$105.4M CAPEX, excluding a A\$7.6M contingency. Achievement of this major milestone means the project is running on time and on budget.

Procurement

All critical path items remain on track for delivery in line with the project schedule. To mitigate possible freight and logistic delays, Boss has placed a high priority on securing long-lead items.

FOR FURTHER INFORMATION PLEASE CONTACT:

Boss Energy Limited
ABN 38 116 834 336

Level 1
420 Hay Street
Subiaco WA 6008

Duncan Craib - Managing Director/ CEO
+61 (08) 6263 4494

Paul Armstrong – Public Relations
+61 (08) 9388 1474

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www.bossenergy.com

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More than 83 procurement packages have been issued, valued at approximately A\$55.1M. The packages awarded to date are in line with the front end engineering design (FEED) released to the ASX on 31 March 2022.

Material key procurement packages include:

- Resin supply of A\$15.2M
- NIMCIX columns of A\$11.5M
- Wellfield development A\$3.6M
- Water Treatment Plant A\$2M
- 400T Crane of A\$2M

Boss remains focussed on continued improvements in reagent technologies to create ongoing production efficiencies for Honeymoon, including IX resins and oxidants for the leach solution.

55 Wells successfully drilled and cased at Honeymoon

Development of the first three start-up wellfields on the Honeymoon deposit is progressing rapidly with three drill rigs currently working to fast-track well installation. Overall initial drilling works are 40 per cent complete and scheduled to be finished in coming months.

On 23 January 2023, Boss reported that the first 55 of the planned 86 pre-start wells were successfully drilled and cased and 15 of 31 recompletions of existing wells have also been finished.

Electrical, instrumentation and piping materials for the refurbishment of the wellfields have been ordered.

Appointment of General Manager and Growth of Construction and Operational Teams

On 30 January 2023, Boss reported that it has appointed highly experienced mining professional James Davidson as General Manager of its Honeymoon uranium project.

Mr Davidson, who is based in Adelaide, South Australia, started his career in the mining industry at Rio Tinto's Technology Development Centre before moving to Senior Metallurgist roles at Mt Gordon Copper and then at ERA's Ranger Uranium Mine. In 2004, he was recruited to undertake a key Technical Development role for Heathgate Resources in the expansion of the Beverley Uranium Mine.

In 2012, he co-founded Inception Consulting Engineers, he was the Senior Process Engineer for the engineering team developing BHP's Brownfields Expansion and the Lead Engineer role for the development of an ion exchange system for BHP's Olympic Dam project.

With vast experience in the uranium sector, including key technical, operational and/or management roles in all four of Australia's recent uranium operations, Mr Davidson is well-equipped to lead the Honeymoon project to success. With strong technical knowledge of the Honeymoon operation, having led teams for the development, implementation, and construction of the IX pilot plant for Boss' Honeymoon Field Leach trial in 2017.

Jacobus (“Kobus”) van Rooyen has been appointed as Construction Manager. Mr van Rooyen has a strong track record comprising more than 30 years’ experience of structural, mechanical, and electrical experience, managing and executing major development projects.

The recruitment program for senior operational and project leads is progressing to plan. Manning on site peaked at 45 personnel prior to Christmas 2022 and continues to grow, with an emphasis on local and South Australian employees.

Annual General Meeting

On 24 November 2022, the Company held its Annual General Meeting for 2022. All resolutions were overwhelmingly passed on a poll.

Strong Balance Sheet

As at 31 December 2022, the Company held unrestricted cash and cash equivalents of A\$115.6M, which excludes a fully cash-backed environmental bond of A\$8.9M. Cash balances are being managed with a term deposit program to take advantage of the higher interest rate environment.

The Company also holds inventory of 1.25Mlb of U₃O₈, which has a current spot market value of A\$88.9M¹. Combined with unrestricted cash, Boss has liquid assets of A\$204.5M, no long-term debt obligations, and a remaining estimated CAPEX spend of A\$97.7M, leaving it well-positioned to transform Honeymoon into production.

Uranium Market Analysis

Uranium market fundamentals are the strongest they have been since the early 2000s. Nuclear power is being recognized as a clean energy source that is needed to meet future global climate change targets. Uranium demand in the near term is growing as existing reactor lifetimes are being extended and reactors under threat of shutdown for economic reasons are reprieved. Mid to long term demand continues to increase as new reactor programmes are announced. On the supply side, western the deglobalisation of the nuclear fuel market continues with western utilities looking to end their dependence on Russian supply. Idled mines are restarting and operating mines are moving towards full capacity operation but increased demand forecasts and reduced secondary supply are making supply deficits as early as 2023 likely. Incentive costs for new mines, with some notable exceptions, have risen, as inflationary effects are included in feasibility studies, and are estimated to be close to US\$80/lb.

Despite the tightening market, the spot price has stayed in a range from the mid US\$40s to low US\$50s per pound, reflecting the stronger influence of equity markets, from which it had historically been insulated. The improving fundamentals have been seen in the increased level of term activity, the increase in the term price, the tightening of mid to long term contracting terms such as volume flexibilities and the return of the carry trade. Security of supply is at the forefront of utility procurement strategy and this includes limiting dependence on any individual company or geographic area. The recent contracts signed with developers, despite the availability of lower cost supply from existing producers, is evidence of this. If utilities continue to work towards reducing dependence on Russian supplies, term uranium demand could increase significantly during 2023, leading to higher term prices.

¹ Strategic uranium stockpile valued at A\$88.9M based on a spot price of US\$50.50/lb as at 27 January 2023 at an exchange rate of US\$0.71 to A\$1.00.

Appendix 5B disclosures

In line with its obligations under ASX Listing Rule 5.3.5, Boss notes that the only payments to related parties of the Company, as disclosed in the Appendix 5B (quarterly Cashflow Report) for the period ended 31 December 2022, consist of executive director, company secretary and chief financial officer salaries and wages (including superannuation) and payment of non-executive director fees.

During the quarter ended 31 December 2022, the Company spent approximately \$10.3M on project and exploration activities relating to its Honeymoon Project. These activities included:

- Technical studies costs
- Construction equipment;
- Wellfield drilling and development costs;
- Engineering and construction consultant expenses.

In addition to these activities the Company continued to incur costs relating to the ongoing maintenance activities required at Honeymoon. The expenditure represents direct costs associated with these activities as well as capitalised wages which can be directly attributable to Honeymoon.

This ASX announcement was approved and authorised by the Board of Boss Energy Limited.

For further information, contact:

Duncan Craib

Chief Executive Officer

P: +61 (8) 6263 4494

E: boss@bossenergy.com

For media enquiries, contact:

Paul Armstrong

Read Corporate

P: +61 (8) 9388 1474

E: info@readcorporate.com

Appendix One:

Schedule of Mining Tenements

The following information is provided pursuant to Listing Rule 5.3.3 for the quarter ended 31 December 2022.

Tenement Name	Location	Licence Number	Interest
Yarramba	South Australia	EL6510	100%
South Eagle	South Australia	EL6081	100%
Gould's Dam	South Australia	EL6512	100%
Katchiwilleroo	South Australia	EL6511	100%
Ethiudna	South Australia	EL6020	100%
Gould's Dam	South Australia	RL83-85	100%
Honeymoon Mine	South Australia	ML6109	100%

There were no mining tenement acquisitions or divestments during the quarter. EL6512, 6511, 6020, 6510 and 6081 are subject to an earn-in agreement with FQM in respect to the base and precious metal rights. Refer ASX release dated 10 February 2022 for further information.

Honeymoon's Mineral Resource (lower cut-off of 250 ppm U₃O₈)

Classification	Tonnage (Million Tonnes)	Average Grade (ppm U ₃ O ₈)	Contained Metal (Mkg, U ₃ O ₈)	Contained Metal (Mlb, U ₃ O ₈)
Measured	3.1	1,100	3.4	7.6
Indicated	18.4	630	12.0	25.5
Inferred	30.9	570	18.0	38.5
Total	52.4	620	32.5	71.6

Reference to previous ASX announcements

In relation to the results of the Enhanced Feasibility Study announced on 21 June 2021, the Company confirms that all material assumptions underpinning the production target and forecast financial information included in that announcement continue to apply and have not materially changed.

The mineral resource estimates in this announcement were reported by the Company in accordance with listing rule 5.8 on 25 February 2019. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement and that all material assumptions and technical parameters underpinning the estimates in the previous announcement continue to apply and have not materially changed.

Forward-Looking Statements

This announcement includes forward-looking statements. These forward-looking statements are based on the Company's expectations and beliefs concerning future events. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Boss, which could cause actual results to differ materially from such statements. Boss makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of this announcement.