

6 June 2024

**Neo Energy Metals plc
('Neo Energy' or 'the Company')**

Updated Independent Study Confirms Robust Economics for the Henkries Uranium Project

Neo Energy Metals plc, the near term, low-cost uranium mine developer, is pleased to announce that the key findings from the independent report recently completed by South African based mining consultancy group Erudite Strategies ('Erudite') have confirmed the low operating (Opex) and capital costs (Capex) and overall robust project economics of the Henkries Uranium Project ('Henkries' or 'the Project') located in the Northern Cape province of South Africa.

Summary

- **Erudite has completed an independent update of both the operating and capital cost estimates previously defined in the feasibility study completed on the Henkries Project by Anglo Operations Limited (Anglo American) in 1979.**
- **The Erudite study confirms Henkries can be accelerated into production at a lower capital and operating cost compared to many of its peers.**
- **Financial modelling of the detailed cost estimates has further confirmed the Project's robust and attractive underlying economics.**
- **The Project economics were assessed based on three potential operating scenarios, comprising; a Low Case, Competent Person Report Case and the Initial Target Case.**
- **All three scenarios demonstrated positive and robust project economics for the initial 10-year mining and processing period, at an average US\$90/lb U3O8 price and 8% discount rate.**
- **Key Results from the Competent Person Report (CPR) Case, (based on the summary resource data and technical assumptions defined in the Prospectus CPR of November 2023, which outlines the likely 7Mlb U3O8 resource) comprise:**
 - **Annual average production of 567,000 lb U3O8**
 - **Annual average sales revenue of US\$51.0M**
 - **C1 Cash operating cost US\$ 36.8/lb U3O8 produced.**
 - **Initial Capex US\$ 52.2M, Sustaining Capex US\$ 17.3M**
 - **NPV US\$ 106.6M, IRR 43.4%**
 - **Payback 2.9 years**
- **The operating and capital cost outputs of the Erudite independent study and resulting project economics have surpassed the Company's previous expectations.**

- **The Erudite Study outcomes support the Board’s view that the Henkries Project can be fast tracked to production at the earliest possible opportunity.**
- **The Company will commence resource expansion drilling in H2 2024, aimed at increasing the total JORC compliant resources to over 10Mlb U3O8.**
- **Discussions are continuing with various parties, including the Company’s major shareholder, in connection with planned uranium offtake arrangements and the mines’ development timetable and financing options.**

Erudite Study Work

Erudite completed an independent capital and operating cost update of the 1979 Feasibility Study Report completed by Anglo American on the Henkries Project (the ‘Erudite Study’).

The mining and processing assumptions used in the Erudite Study, remain unchanged from the previously completed feasibility study. The design of which was based on a 254t bulk sample of ore sourced from 211 test pits and fed into a metallurgical pilot plant over a six month period.

The Mechanical Equipment List (MEL) for the processing plant was updated in the Erudite Study in line with the most appropriate and cost effective currently available technology. Budgetary quotes were obtained for the major items of equipment, key major works (including Tailings Storage) and transport costs for construction. In line with long established engineering practices the full investment costs for the project were then factored from the MEL. Owners’ costs, contingencies and sustaining capital were added to derive a Total Investment Value.

For the mine and process plant operating costs, updated quotes were obtained for reagents, and supply services and major operating contracts. The balance of the costs for labour, fuel consumables etc. were derived from prevailing regional costs and database sources, to arrive at an equivalent of a C1 cash cost.

Financial Models were generated based on the Erudite Study outcomes, for three operating scenarios, comprising; a Low Case, Competent Person Report Case and the Initial Target Case for the development of the project defined as:

- 1) Low Case - assuming the project is developed based on the current 4.7Mlb U3O8 JORC resource,
- 2) Competent Person Report Case - assuming that JORC resources are increased to 7Mlb U3O8, as supported in the Henkries Competent Persons Report published in November 2023, (after updating the Mineral Resource Estimate based on the analysis of available historical drill samples and the infill drilling at Henkries North being completed in H2 2024), and;

- 3) Initial Target Case – assuming the 10Mlb U3O8 JORC resource target of the current exploration program is achieved.

Erudite Study Report Highlights

The update of the project's Capex and Opex confirms the excellent current economic potential for near term development of Henkries to production. The extensive data currently available on the project is more than sufficient to springboard straight into a "fast track" Front End Engineering Design (FEED) phase.

The summary report focusses on the Initial Target Case costing, but all detailed costings for each scenario have been supplied.

The Life of Mine for all scenarios for the project was set at 10 years, with a Discount Factor of 8%, with no escalation and no gearing applied to each of the three operating scenarios.

The head grade was set at the current Mineral Resource Estimate average of 399ppm U3O8, with a cut-off grade 100ppm.

Financial analysis of the outputs of the Erudite Study

Assuming an initial 10-year mining and processing operation and using an average US\$90/lb. U3O8 price at an 8% discount rate, the financial outcomes for the three operating scenarios comprise:

1. Low Case

- C1 Cash operating cost US\$ 42.2 /lb U3O8
- Initial Capex US\$ 41.1M, Sustaining Capex US\$ 13.6M
- NPV US\$ 63.9M, IRR 30.1%
- Payback 3.6 years

2. Competent Person Report Case

- C1 Cash operating cost US\$ 36.8 /lb U3O8
- Initial Capex US\$ 52.2M, Sustaining Capex US\$ 17.3M
- NPV US\$ 106.6M, IRR 43.4%
- Payback 2.9 years

3. Initial Target Case

- C1 Cash operating cost US\$ 33.6 /lb U3O8
- Initial Capex US\$ 64.6M, Sustaining Capex US\$ 21.5M

- NPV US\$ 195.4M, IRR 72.0%
- Payback 2.5 years

The following table details the various project inputs and financial outputs for each of the operating scenarios for the development of the Henkries Project:

Summary Table for Henkries Project		Current Case	Competent Person Report Case	Initial Target Case
		4.7 Mlb Resource	7 Mlb Resource	10 Mlb Resource
Key Physical Parameters	Unit			
Life of Mine	years	10	10	10
Total Ore (dry)	tonnes	5,341,000	7,954,000	11,362,000
Contained Uranium	lbs U3O8	4,700,000	7,000,000	10,000,000
Total waste mined (dry)	Mt	12,550,000	18,691,000	26,701,000
Plant Design Process throughput (dry)	tpa	535,000	796,000	1,137,000
Annual waste mined (dry)	tpa	1,255,000	1,870,000	2,672,000
Average Strip Ratio		2.35:1	2.35:1	2.35:1
Average Uranium Head Grade	ppm U3O8	399	399	399
Cut Off Grade	ppm U3O8	100	100	100
Forecast Uranium Recovery	%	81%	81%	81%
Total Production	lbs U3O8	3,807,000	5,670,000	8,100,000
Average Annual Production	lbs U3O8pa	380,700	567,000	810,000
Capital Costs as detailed by Erudite				
Project Capital including Owners Cost and Contingency	US\$ million	41.09	52.19	64.64
Sustaining Capital (including Tailings Storage Facility)	US\$ million	13.64	17.33	21.46
Operating Costs as detailed by Erudite				
Mining	US\$/lb U3O8 produced	5.87	4.56	3.75
Processing	US\$/lb U3O8 produced	36.30	32.25	29.81
Combined C1 Cash Cost	US\$/lb U3O8 produced	42.17	36.81	33.56
Financial Inputs				
Life of Mine Average Uranium Price	US\$/lb U3O8	90	90	90
ZAR:US\$ exchange rate	ZAR	18.58	18.58	18.58
Valuation Returns and Key Ratios - C1 Cash Cost Basis				
NPV (Pre-Tax, real basis, ungeared) C1	US\$M	63.9	106.6	195.4
IRR (Pre-Tax, real basis, ungeared) C1	%	30.1	43.4	72.0
Payback Period (Pre-Tax, real basis, ungeared)	Years	3.6	2.9	2.5

Summary Table for Henkries Project		Current Case	Competent Person Report Case	Initial Target Case
Pre-tax NPV/Pre-Production Capex	x	1.6	2.0	3.0
Cashflow Summary at the Mine Gate				
Sales Revenue Gross	US\$M	342.6	510.3	729.0
Total Operating Costs C1	US\$M	160.5	208.7	271.9
Project Operating Surplus	US\$M	182.1	301.6	457.1
Pre-Production Capex	US\$M	(41.1)	(52.2)	(64.6)
LOM sustaining Capex (incl. closure costs)	US\$M	(18.8)	(23.8)	(29.6)
Project Net Cashflow (Pre-Tax and Royalties)	US\$M	122.3	225.6	362.9

Neo Energy Metals, Chief Executive Officer, Sean Heathcote said,

"We are thrilled to confirm the robust economic potential of our Henkries Uranium Project in all our operating scenarios. The project's financial metrics of low capital intensity, combined with a significant IRR and quick payback periods, in the strong uranium market, will put the project at the forefront for early and fast-tracked development in the sector. In addition, the forecast operating costs compare extremely well with our peers and confirms the Henkries Project as one of the lowest cost producers of all new uranium projects under development."

"The Company aims to fast track the Henkries project to the Target Case, in the shortest time possible. To this end the work in the coming months will focus on, increasing the resource base, testing and confirming the value engineering options tabled by Erudite to improve the project economics further and continuing to discuss both the offtake and financing options with the various interested parties."

This announcement contains inside information for the purposes of the UK Market Abuse Regulation, and the Directors of the Company are responsible for the release of this announcement.

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About NEO Energy Metals Plc

Neo Energy Metals plc is a Uranium developer and mining company listed on the main market of the London Stock Exchange (LSE: NEO). The Company holds up to a 70% stake in the Henkries Uranium Project, an advanced, low-cost mine located in South Africa's Northern Cape Province. It has been estimated by some that the historical investment in the project was over US\$30 million in exploration and feasibility studies, Neo Energy Metals aims to increase the project's mineral resources and complete an updated feasibility study ahead of a determination of the development schedule at the end of 2024 to bring Henkries into production.

The company is led by a proven board and management team with experience in uranium and mineral project development in Southern Africa. Neo Energy Metals' strategy focuses on an accelerated

development and production approach to generate cash flow from Henkries while planning for long-term exploration and portfolio growth in the highly prospective Uranium district of Africa.

The Company's shares are also listed on the A2X Markets (A2X: NEO), an independent South African stock exchange, to expand its investor base and facilitate strategic acquisitions of uranium projects, particularly within South Africa.

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