

POISED TO BECOME LARGEST U.S. URANIUM PRODUCER

2023 AGM PRESENTATION

November 2023



Important Disclosures

This Presentation contains summary information about the current activities of Peninsula Energy Limited (the “Company”) as at the date of this Presentation. The information in this Presentation is of a general nature and does not purport to be complete. This Presentation does not purport to contain all the information that an investor should consider when making an investment decision nor does it contain all the information which would be required in a disclosure document or prospectus prepared in accordance with the requirements of the Corporations Act 2001 (Cth). It should be read in conjunction with the Company's other periodic and continuous disclosure announcements lodged with the Australian Securities Exchange, which are available at <https://www2.asx.com.au/>. To the extent permitted by law, the Company, its representatives, affiliates, related bodies corporate, officers, employees, agents and advisers make no representation or warranty (express or implied) as to the currency, accuracy, reliability, relevance or completeness of the material contained in the Presentation and disclaim all responsibility and liability for the information (including, without limitation, liability for negligence). This Presentation is not intended to form the basis of any investment decision by a prospective investor, but simply to provide an overview to allow prospective investors to decide whether to carry out their own independent investigations and seek their own advice before making a decision whether to invest in the Company. In making an investment decision, investors must rely on their own examination of the Company including the merits and risks involved. Investors should consult with their professional advisers – whether scientific, business, financial, tax or legal.

Past performance information given in this Presentation is given for illustrative purposes only and should not be relied upon as (and is not) an indication of future performance.

The Presentation contains “forward-looking statements”. All statements other than those of historical facts included in the Presentation are forward-looking statements including statements regarding the timetable and outcome of the offer, the results of the 2022 Definitive Feasibility Study and 2023 Revised Life of Mine plan, statements regarding the Company's ability to fund its operations, exploration and production targets, estimates of resources, timing of permit and license amendments, timing of uranium production, and rates of uranium extraction and recovery. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, uranium price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. The Company does not undertake any obligation to release publicly any revisions to any “forward-looking statement” to reflect events or circumstances after the date of the Presentation, or to reflect the occurrence of unanticipated events, except as may be required under applicable laws or regulations (including the ASX Listing Rules). All persons should consider seeking appropriate professional advice in reviewing the Presentation and all other information with respect to the Company and evaluating the business, financial performance and operations of the Company. Neither the provision of the Presentation nor any information contained in the Presentation or subsequently communicated to any person in connection with the Presentation is, or should be taken as, constituting the giving of investment advice to any person.

The Company believes it has a reasonable basis for providing the forward-looking statements and production targets included in this announcement. The material assumptions and JORC disclosures are included in the appendices to the 2022 Definitive Feasibility Study announcement on 15 August 2022 and the 2023 Revised Life of Mine plan announcement on 31 August 2023. The detailed assumptions regarding the JORC resources are outlined in the ASX announcement released on 14 November 2018 and 23 October 2023. Investors outside Australia should note that while ore reserve and mineral resource estimates of the Company in this document comply with the JORC Code (such JORC Code-compliant ore reserves and mineral resources being “Ore Reserves” and “Mineral Resources” respectively), they may not comply with the relevant guidelines in other countries and, in particular, do not comply with (i) National Instrument 43-101 (Standards of Disclosure for Mineral Projects) of the Canadian Securities Administrators (the “Canadian NI 43-101 Standards”); or (ii) Item 1300 of Regulation S-K, which governs disclosures of mineral reserves in registration statements filed with the United States Securities and Exchange Commission. Information contained in this document describing mineral deposits may not be comparable to similar information made public by companies subject to the reporting and disclosure requirements of Canadian or US securities laws. You should not assume that quantities reported as “resources” will be converted to reserves under the JORC Code or any other reporting regime or that Company will be able to legally and economically extract them.

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Please note that Production Targets within this Presentation are based on a proportion of inferred resources. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resource or that the production target itself will be realised.

Disclaimer & Competent Person

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Non-IFRS financial information

Investors should also be aware that certain financial data included in this Presentation are "non-IFRS financial information" under ASIC Regulatory Guide 230: "Disclosing non-IFRS financial information" published by the Australian Securities and Investments Commission and also "non-GAAP financial measures" under Regulation G of the U.S. Securities Exchange Act of 1934. Non-GAAP financial measures in this Presentation include All in Sustaining Cash Cost, All in Cost and Net Cash Margin. The disclosure of such non-GAAP financial measures in the manner included in the Presentation may not be permissible in a registration statement under the Securities Act. These non-GAAP financial measures do not have a standardized meaning prescribed by Australian Accounting Standards and International Financial Reporting Standards ("IFRS"), and therefore may not be comparable to similarly titled measures presented by other entities and should not be construed as an alternative to other financial measures determined in accordance with Australian Accounting Standards or IFRS. Although the Company believes these non-GAAP financial measures provide useful information to users in measuring the financial performance and condition of its business, investors are cautioned not to place undue reliance on any non-IFRS financial information/non-GAAP financial measures included in this Presentation.

Competent Person Statement

Only the information in this Presentation that specifically relates to Exploration Targets, Exploration Results, Exploration Potential, Mineral Resources or Ore Reserves at the Lance Projects is based on information compiled by Mr Benjamin Schiffer. Mr Schiffer is a Registered Professional Member of the Society of Mining, Metallurgy and Exploration (Member ID #04170811). Mr Schiffer is a professional geologist employed by independent consultant Western Water Consultants, Inc. d/b/a WWC Engineering. Mr Schiffer has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Schiffer consents to the inclusion in the Presentation of the matters based on his information in the form and context in which it appears.

This Presentation was approved by the Board of Peninsula Energy Limited.

Unless stated otherwise, all dollar values are references to US dollar throughout the slide deck

Cautionary & Inferred Resources Notice

The August 2023 Life of Mine plan (LoM) completed for the Ross and Kendrick Production Areas within the Lance Projects includes Measured and Indicated resources, and based on historical experience at Lance, utilizes a resource conversion factor of 60% to convert Ross and Kendrick Area Inferred resources to Indicated or greater quality for use in this revised LoM.

The revised LoM itself is based on various material assumptions as noted in Appendix 1. This includes the homogeneity of the delineated ore body contained within the Lance Projects which is considered reasonable by the Company's technical consultants, competent persons and independent external consultants when preparing the 2022 Definitive Feasibility Study. The Company believes that it has a reasonable basis upon which to prepare and release these revised LoM results, particularly given that the Ross Production Area was first placed into production in December 2015. Whilst the Company considers that all material assumptions underpinning the LoM are based on reasonable grounds, there is no certainty that they will prove to be correct or that the outcomes indicated by the revised LoM will be achieved.

The Company believes it has a reasonable basis for providing the forward-looking statements and production targets included in this announcement. Detailed assumptions regarding the included resources are outlined in the ASX announcement released 14 November 2018 and the Company confirms that there have been no material changes to the determination of the resources since this date. The production target in this announcement is underpinned by measured and indicated resources (comprising 70% of the production target) and inferred resources (comprising 30% of the production target).

Investors should also note that there is no certainty that the Company will be able to raise the amount of funding for the Lance Projects when it is required or on terms that are not overly dilutive or that are favorable to the value of the Company's existing shares.

This announcement has been prepared in accordance with the JORC Code (2012) and the ASX Listing Rules. There is a low level of geological confidence associated with Inferred mineral resources and there is no certainty that further exploration and delineation work will result in the determination of Indicated mineral resources or that the production target itself will be realized. Financial information contained in this announcement is preliminary in nature and is in-part based on low-level technical and economic assessments and is insufficient to support the estimation of reserves or to provide assurance of economic development.

Under the revised LoM plan, the first five (5) years production can be majority sourced from Measured and Indicated Resources. If the Inferred Resources are excluded from the revised LoM, the economic analysis still forecasts a positive financial performance. Therefore, the Company is satisfied that the use of Inferred Resources is not a determining factor in overall Project viability, and it is reasonable to include Inferred Resources in the revised LoM, particularly given that the Lance Projects have previously been an operating entity that produced uranium for almost seven years.

In accordance with the relevant regulations governing the disclosure of mineral projects, readers are cautioned that mineable resources based on Inferred Resource material are considered too speculative geologically to enable them to be classified as reserves.

Given the uncertainties involved, investors should not make any investment decision based solely on the results of the revised LoM.

Rounding

Totals in tables may not add due to rounding.

Company Highlights



World Class Asset

- Flagship Lance ISR Project located in a tier-one mining and uranium jurisdiction
- Lance is a long-life operation, with excellent resource and life-of-mine growth upside
- Peninsula will be the largest US-based and fully independent, end-to-end producer of dry yellowcake



Near Term Producer

- Production restart targeted for Q4 2024 with a 10+ year mine life
- 2.0 Mlb p.a. production plant provides the platform for a faster ramp-up to substantial rates
- Positive cash flow generated within first year of operations – Project NPV of US\$116m and IRR of 26.2%¹



Multiple Avenues for Growth

- Resource growth potential through further exploration and development drilling at Kendrick and Barber areas
- Newly established Dagger Project provides further growth potential – initial resource of 6.9Mlbs U₃O₈ at 1,037ppm²
- Global JORC contained uranium of 60.6 Mlbs²



Favourable Market Dynamics

- Supply / demand imbalances remain, with demand growth driven by need to meet global decarbonisation targets. US Government looking to significantly increase domestic production to improve energy security
- Strong leverage to uranium spot price, contracted sales represent 1/3rd of projected LoM production from Ross and Kendrick – Peninsula retains full flexibility and exposure to upside in commodity price on uncontracted production



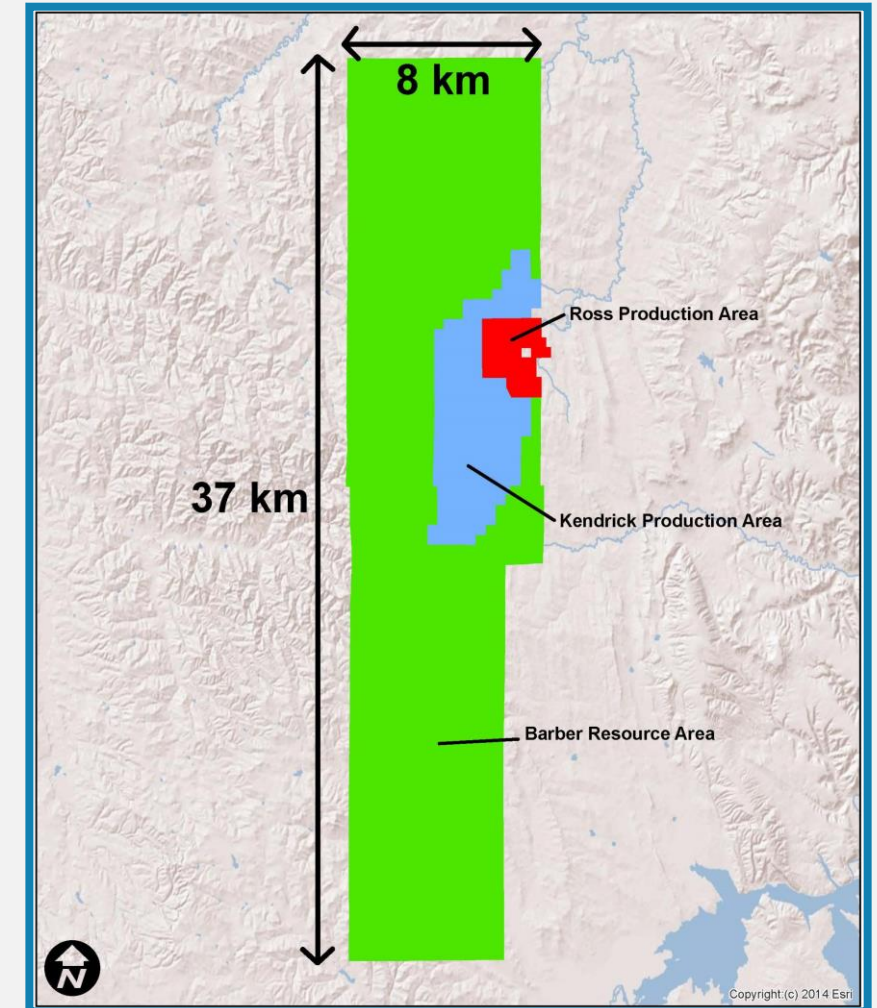
Funded to First Production

- Company assessing additional debt and prepayment financing to augment ramp-up funding, strong interest from a broad range of lenders, including government financing agencies and international banks
- Agreement reached with existing customers to realign delivery schedule, subject to finalizing formal documentation

Notes: (1) Based on revised LoM Plan Update (See ASX Presentation lodged on 5 September 2023) consistent with 2022 DFS. Base case does not include upside from further exploration and development at Kendrick, Barber areas and Dagger Project. NPV at 8% discount and IRR use real 2023 price. (2) Please refer to Appendix 1.

The Lance Projects

- **Ross Production Project Area**
 - Fully licensed Uranium ISR production facility
 - Estimated Resource of 5.9 Mlbs U₃O₈
 - 4.1 Mlbs estimated to be produced
 - 2 previously operated Mine Units (MU-1 and MU-2), with potential for an additional 2-3 Mine Units
 - MU-3 under development, monitor well installation complete
- **Kendrick Development Project Area**
 - Estimated Resource of 15.9 Mlbs U₃O₈
 - Next sequential production area
 - Amendments submitted to add Kendrick into the production licenses and permits
 - State regulators deemed application administratively complete and commenced first-round technical review
- **Barber Exploration Project Area**
 - Under-delineated resource area
 - Holds over 30 Mlbs of predominantly Inferred Resources
 - Potential for resource growth through exploration
 - Barber exploration/development can be achieved with organic cash funding generated by Ross and Kendrick operations



The Lance Projects

Lance Projects Facility Development

- Lance plant and wellfield facilities at Ross were constructed in 2015 & operated as alkaline ISR from 2016 through mid-2019
- Recently completed site transition for the low-pH ISR
- Current low-pH ISR capacity of **0.82** Mlbs U₃O₈ per year loaded on ion exchange resins (requires additional processing)
- New LoM plan developed for steady-state production of **1.8** Mlbs U₃O₈ per year of dry yellowcake (finished product)
- Plant capacity expansion construction activities now fully funded and expected to commence **late 2023/early 2024**
- Engineering firm contracted to complete detailed engineering and procurement work for the process plant expansion
- The long lead time plant building structure already on order
- Wellfield development and construction activities **to continue** in advance of production restart
- Completed installation of the 58-well monitor network for Mine Unit 3 (“MU-3”), located within the Ross Production Area



Potential to Become Largest U.S. Producer

- 2.0 Mlb p.a. production plant provides platform for a ramp-up to substantial rates
- Lance production restart in **late 2024**
- 2025 production level projected at ~1.1 Mlbs
- Steady state production rate of 1.8 Mlbs per annum
- Licensed to produce up to 3.0 Mlbs per annum
- Positive cash flow generated within first year of operations



August 2023 Ross and Kendrick LOM Model Production Profile & Plant Flow Rate

Strong Leverage to Uranium Price

Peninsula's Sales Contract Book

- Contract portfolio balances base-escalated and market pricing mechanisms providing both downside protection and upside linkage to uranium spot price
- Contracted sales represent 1/3rd of the projected LoM production from Ross and Kendrick (only)
- Peninsula retains full flexibility to maximise value from the sale of any future production from Barber and Dagger

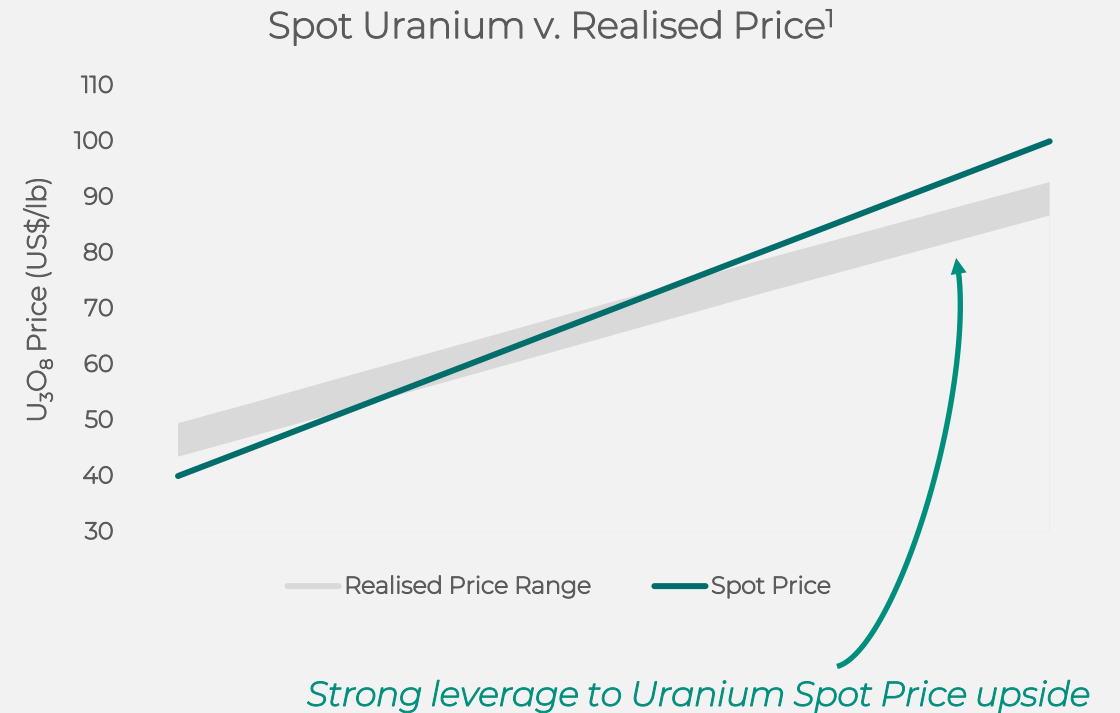
Customer Relationships

- Peninsula has long standing relationships with its customers, built over the past 8 years. Customers remain very supportive of the Lance Project
- The current contracts and relationships with customers are highly valuable to the Company

Agreement with customers to adjust delivery schedule to align with forecast production

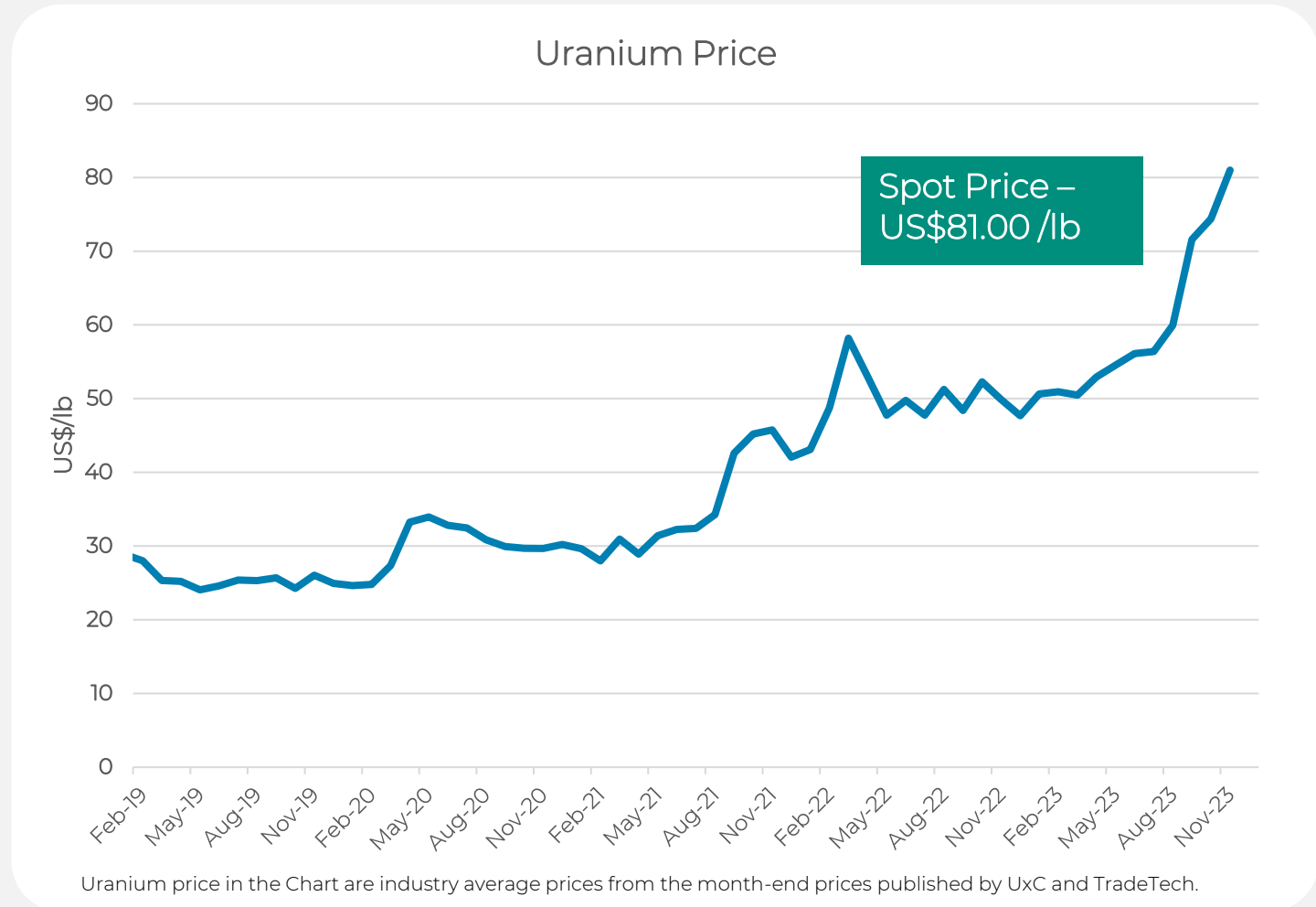
- Subject to finalizing formal documentation

Note: (1) The chart plots the range of the weighted average realised price (contracted and uncontracted sales) forecast for various Uranium Spot Price assumptions (flat) over the Life of the Project.



Uranium Price Continues to Strengthen

- Supply/demand imbalance remains
- Robust growth forecasts for uranium demand due to the critical requirement of nuclear energy in meeting global decarbonization targets
- The reported uranium spot price closed at **\$81.00/lb¹**, a post-Fukushima high
- Once in operation in late 2024, PEN will be well-placed to benefit from growing demand levels for uranium and strong pricing



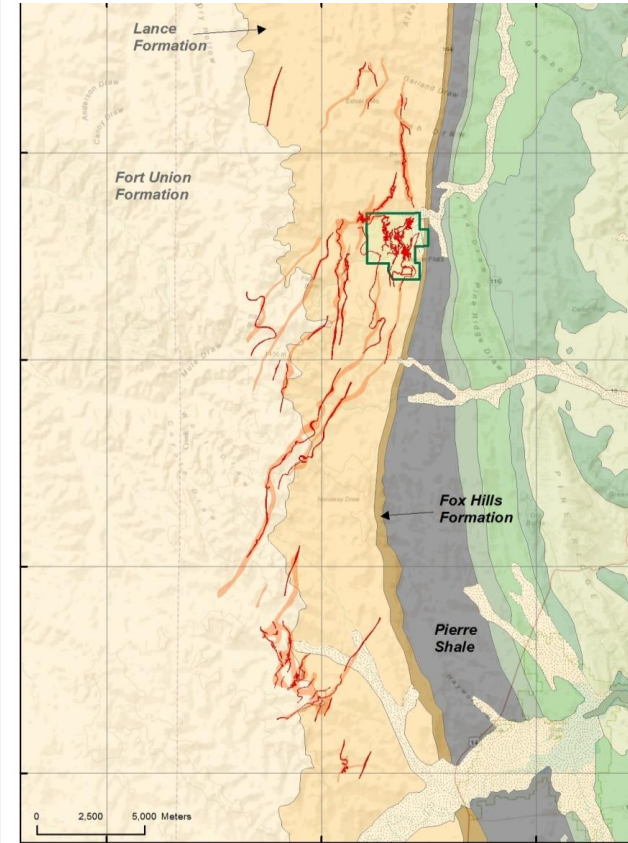
Note: (1) Uranium spot price reported by UxC as at 24 November 2023.

Lance Exploration Upside

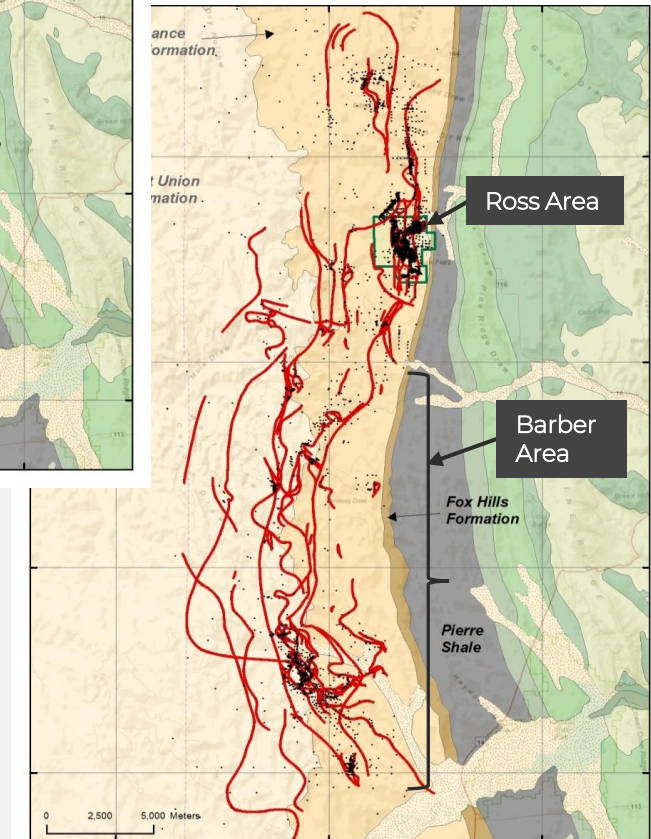
- Exploration Target of 104 – 163 Mlbs eU₃O₈
 - Based on a combination of past exploration results and proposed exploration programmes¹
- Between 1971-1980, 4,700 drill holes completed by Nuclear Dynamics and Bethlehem Steel
- Between 2008-2013, 2,800 drill holes completed by Peninsula
- Greater than 300 linear km of redox fronts mapped
- Fronts defined by wide spaced drilling are mapped linearly due to insufficient data points
- The sinuosity and true areal extent of redox fronts can only be understood through closer spaced drilling (see following page for illustration)
- Only a limited amount of close-spaced drilling has been conducted in the Kendrick area Barber areas

Note: (1) Please note that in accordance with Clause 17 of the JORC (2012) Code, the potential quantity and grade of the "Exploration Target" in this presentation must be considered conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Refer Appendix 2

Past Exploration



Peninsula's Exploration Success

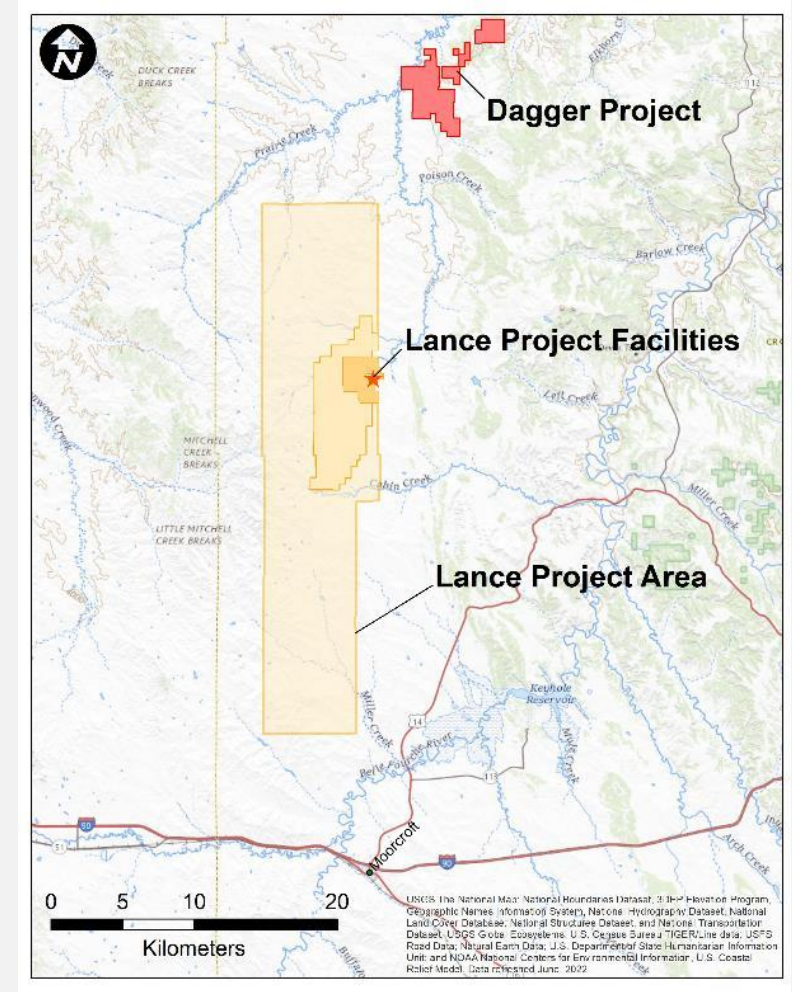


Dagger Project Introduced in 2023

New High Grade Satellite Deposit

- ✓ 6.9Mlbs U₃O₈ of JORC (2012) Inferred Resources¹
- ✓ >2x Grade of U₃O₈, compared to Lance Resource
- ✓ Mineral rights and data set established through in-house efforts for only US\$800K (or US\$0.12/lb U₃O₈)
- ✓ Opportunity to extend Lance project life through Satellite In-Situ Recovery operation

Classification	Tonnes (Mtonnes)	Grade (U ₃ O ₈ ppm)	U ₃ O ₈ Metal (Ktonnes)	U ₃ O ₈ Metal (Mlbs)
Inferred	3.0	1037	3.1	6.9
Total	3.0	1037	3.1	6.9



Note: (1) JORC Table 1 included in an announcement to the ASX released on 23 October 2023: "Peninsula Establishes Significant New Uranium Development Project". Peninsula confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

EQUITY RAISING OVERVIEW

Offer Structure and Size	<ul style="list-style-type: none"> • A\$60.0 (US\$39.0¹) million equity raise comprising: <ul style="list-style-type: none"> • A\$50.0 million Institutional Placement (“Placement”) to issue 666.7 million new fully paid ordinary shares in the Company at A\$0.075 per share (“New Shares”); and • A\$10.0 million Share Purchase Plan (“SPP”) to issue 133.3 million New Shares together with attaching options on the same terms as the Placement (together “the Offer”) • New Shares under the Placement and SPP will be issued subject to shareholder approval to be sought at the Company’s upcoming Extraordinary General Meeting on or around 10 January 2024
Options	<ul style="list-style-type: none"> • Participants in the Offer will receive one (1) free unlisted attaching option for every two (2) New Shares allocated (“Attaching Options”). Attaching Options will be exercisable at A\$0.10 per option and will expire 14 months from the date of the issue
Offer Price	<ul style="list-style-type: none"> • A\$0.075 per share representing a 37.5% discount to the Company’s closing share price on 15 November 2023 • The offer price represents <ul style="list-style-type: none"> • 31.8% discount to the 5-day VWAP of A\$0.1100 as at and including 15 November 2023 • 33.5% discount to the 10-day VWAP of A\$0.1129 as at and including 15 November 2023
Ranking	<ul style="list-style-type: none"> • Shares to rank equally with the existing ordinary shares
Use of Proceeds	<ul style="list-style-type: none"> • Pre-Production Capex; • Pre-Production Opex; and • General working capital and issue costs
Syndicate & Advisors	<p>Canaccord Genuity (Australia) Limited and Shaw and Partners Limited acted as Joint Lead Managers and Joint Bookrunners. Red Cloud Securities acted as Broker to the Placement. H.C. Wainwright & Co. acted as U.S. financial advisor to the Company and BurnVoir Corporate Finance acted as financial advisor to the Company.</p>

Notes: (1) Assumes AUD/USD of 0.65; (2) refer to risk factors in Equity Raise Presentation released 20 November 2023.

Indicative Timetable

Process	Date
Trading halt and Placement Offer opens	Before open on Thursday, 16 November 2023
Trading halt lifted and announcement of results of Placement	Before open on Monday, 20 November 2023
Extraordinary General Meeting (EGM) to approve issue of Placement Shares and SPP Launch	Wednesday, 10 January 2024
Issue of Placement Shares (upon shareholder approval)	Thursday, 11 January 2024
SPP Record Date	Friday, 17 November 2023
Opening Date for SPP	Wednesday, 10 January 2024
Closing Date for SPP	Wednesday, 24 January 2024
Announcement of SPP Results	Tuesday, 30 January 2024
SPP Shares begin trading on ASX	Thursday, 1 February 2024

Sources & Uses of Funds - A\$60m Equity Raise (US\$39m)

Indicative sources and uses of funds until Peninsula is forecast to achieve first production outlined below

Uses of Funds	Total US\$m ¹
Pre-Production CAPEX	36.5
Pre-Production OPEX	19.5
Working Capital & Escalation	6.5
Corporate and Exploration Costs	7.5
Costs of the Offer	1.6
Total	71.6

Sources of Funds	Total US\$m ¹
Proceeds of the Placement	32.5
SPP	6.5
Cash Balance (30 Sep 2023)	12.5
Uranium Sales	11.2
Sunk Capex / Opex (Jul '23 – Sep '23) ²	8.9
Total	71.6

- The uses of funds above is subject to change at Peninsula's sole discretion

- A\$60m (US\$39m) enables Peninsula to complete plant construction and wellfield development to achieve first production in December 2024
- Peninsula will augment funding with other sources including term debt, offtake prepayment, working capital facilities and potential proceeds from exercise of the options to facilitate ramp-up

Pro forma capitalisation	m
Shares on issue	1,257.8
Placement shares	666.7
SPP shares	133.3
Total shares on issue post Offer	2,057.8

Notes: (1) Assumes AUD/USD of 0.65; (2) Sunk CAPEX represents cash spent towards the Project in the September 2023 quarter

Corporate Overview

1,257m

Shares on Issue
(27 Nov 2023)

A\$0.105

Share Price
(As of 27 Nov 2023)

A\$132m

Market
Capitalisation

Nil

Term Debt

US\$12.5m

Cash
(30 Sept 2023)

210 klbs

U₃O₈ Inventory
(30 Sept 2023)

Board of Directors

Mr John Harrison	Non-Executive Chairman
Mr Wayne Heili	Managing Director
Ms Rachel Rees	Finance Director
Mr Harrison Barker	Non-Executive Director
Mr Mark Wheatley	Non-Executive Director
Mr Brian Booth	Non-Executive Director

Share Price Performance



Experienced Management Team

Experienced in design, construction and operation of Uranium ISR facilities in Wyoming, USA



Wayne Heili
Managing Director

Mr Heili has spent the bulk of his 35+-year professional career in the uranium mining industry.

Previous Roles –

- *President & CEO of Ur-Energy, Inc. where he successfully oversaw the design, construction, commissioning and ramp-up of the Lost Creek in-situ uranium project in Wyoming USA.*
- *President of the Uranium Producers of America*



Rachel Rees
Executive Director – Finance and Corporate Affairs

>25 years in senior executive roles in multinational listed and unlisted companies.

Previous Roles –

- *Vice President for Uranium One Inc. and Executive Director and Chief Financial Officer of its Australian subsidiary*



Ralph Knode
CEO – Strata (Project Co)

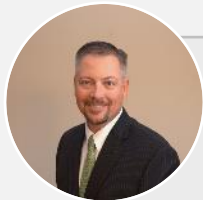
Prior to his time with Strata, Mr. Knode served as Senior Vice President for Projects for Uranium One.

Over the past decade, Mr. Knode has held several high-ranking positions with major uranium developers and now brings this extensive experience to the Strata team.



Dave Hofeling
CFO – Strata (Project Co)

>20 years' experience. During his 16 years with Rio Tinto, Mr. Hofeling was responsible for financial oversight including global finance, governance, compliance, tax optimization & risk management at numerous domestic and international aluminium, copper, gold and nickel capital and exploration projects. Mr. Hofeling also worked for six years in Nevada gold operations.



Brian Pile
VP – Project Development

>22 years of project experience ranging from development of feasibility studies, engineering, and construction through operational start-up, related to in-situ recovery of uranium in Wyoming, Nebraska, and Kazakhstan.

Mr. Pile's primary responsibility is the evaluation of the learnings from the MU1A field demonstration and Project studies.



Jay Douthit
VP - Operations

>22 years in the uranium-specific mining industry. He served as Wellfield Operation Superintendent for Ur-Energy Inc., where he oversaw the wellfield construction and design of the project as well as operational startup and commissioning.

Mr. Douthit also has experience in operations and restorations during his time with Ur-Energy and Cameco Resources.

Sustainability Focus

Peninsula's Annual Sustainability Report is built around the pillars of Employees, Environment, Social and Governance ("EESG")

- **2023 Report Sustainability highlights:**
 - Recipient of Wyoming Governors Safety Award (2 consecutive years), reflective of our commitment to Safety
 - Certification of ISO 14001 & ISO 9001 processes for environmental and quality management at Lance
 - Extensive environmental impact assessment completed for Kendrick Project Area

The Sustainability Report represents a significant step towards ensuring the Company is accountable to all stakeholders

2023 SUSTAINABILITY REPORT

PENINSULA
ENERGY LIMITED

Supplying the fuel to
power a greener future

Independent, Long-Term Uranium Production

Flagship Lance ISR Project

One of the largest US uranium projects, with a JORC (2012) Resource of 53.8Mlbs¹ U₃O₈

Growing Lance in Size and Scale

Resource growth potential through further exploration and development drilling at Kendrick, Barber and Dagger areas

A Robust Production Plan

Detailed and resilient Life of Mine (LoM) plan developed for Ross and Kendrick production areas, with operations to start in late 2024

Expanded Production Profile

2Mlb per annum capacity, end-to-end production of dry yellowcake, no longer relying on third-party processing

Early Positive Cash Flow

Sustainable monthly positive cash flow generated in year-one of production (2025)

Proven Team

Highly experienced uranium technical, development, and operational team

Note: (1) See Appendix 1

Contact Details

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US Office Phone: +1 (307) 467-9401
[email: info@pel.net.au](mailto:info@pel.net.au)



Appendix 1 – Resources

Lance Projects Resource Estimate as at 31 December 2022¹

Classification	Tonnes (million)	U ₃ O ₈ (Mkg)	Grade (ppm U ₃ O ₈)	U ₃ O ₈ (Mlbs)
Measured	3.5	1.7	489	3.8
Indicated	11.3	5.5	492	12.2
Inferred	36.2	17.2	474	37.8
Total	51.0	24.4	479	53.8

Dagger Resource Estimate as at 23 October 2023¹

Classification	Tonnes (million)	U ₃ O ₈ (KTonnes)	Grade (ppm U ₃ O ₈)	U ₃ O ₈ (Mlbs)
Inferred	3.0	3.1	1037	6.9
Total	3.0	3.1	1037	6.9

Note: (1) JORC Table 1 included in an announcement to the ASX released on 14 November 2018: “Revised Lance Projects Resource Tables”, updated in the “Annual Report to Shareholders” released on 29 September 2023 and ASX Announcement released on 23 October 2023: “Peninsula Establishes Significant New Uranium Development Project”. Peninsula confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

Appendix 2 - Lance Exploration Target Additional Disclosure

Exploration Target¹

The Lance Projects cover a significant proportion of the Powder River Basin mobs Cretaceous sandstones of Wyoming, which are believed to represent an Exploration Target of between 104 and 163mlbs eU₃O₈

Lance Projects Exploration Target (excluding the existing JORC (2012) Code Compliant Resource)

Exploration Target	Tonnes (million)		Grade (ppm eU ₃ O ₈)		eU ₃ O ₈ (Mlbs)	
	From	To	From	To	From	To
Range	118	145	426	530	104	163
Total						

Basis of Exploration Target

Exploration Target is based on a combination of Exploration Results and on proposed exploration programmes.

Exploration Results

Approximately 7,500 drillholes, of which over 2,500 have been drilled and PFN logged since 2009. The data from these holes has been used to determine a JORC (2012) Code compliant resource and to extrapolate between areas of limited drilling but still within the mineralised trends.

Proposed Exploration Programs

The Company has minerals rights to 122.2 square kilometres. This package covers the most prospective mineralised redox /roll front trends that have a cumulative strike length of over 300km. The Company intends to continue exploration over this ground with drilling in order to validate the exploration target and convert to resources.

Note: (1) Please note that in accordance with Clause 17 of the JORC (2012) Code, the potential quantity and grade of the "Exploration Target" in this presentation must be considered conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

Appendix 2 - Lance Exploration Target Additional Disclosure

Basis of Grade and Tonnage Range Determination

The level of exploration activity on which the Exploration Target is based is considered to be high due to the combination of a database of approximately 7,500 drillholes and several decades of geological research.

The known Lance resources are located in the upper Lance Formation and in the lower Fox Hills horizons in which roll fronts have been identified over a cumulative length of over 300kms. These horizons have only been partially explored and towards the south (Barber area) the lower unit of the Fox Hills has not been systematically tested. JORC-compliant resources have been estimated in localised areas in which reliable drilling data is available. The zones between the JORC (2012) Code compliant resource areas form the Exploration Target because of the following:

- Continuity of the prospective sandstone established by geological mapping and regional drilling
- Historic estimates of mineralisation based on drilling which has not yet been validated by Peninsula

The Exploration Target is based on a combination of:

- A tonnage calculation that incorporates the total cumulative prospective strike length of the identified redox fronts multiplied by the average width, thicknesses as determined in the resource estimate
- A grade range representing the lowest resource area grades and highest resource area grades

Proposed Exploration Activities Designed To Test Validity of the Exploration Target

Over the life of mine, ongoing exploration drilling is proposed to expand the JORC (2012) Code compliant resource within the Exploration Target areas. The initial program will be focussed on the Kendrick area. Exploration activities will mostly comprise geophysical logging of additional drillholes.