

# PENINSULA ENERGY'S UPDATED ROSS AND KENDRICK LIFE OF MINE PLAN AND DAGGER ADDITION

November 2023



# Important Notice & Disclaimer

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.

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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.

# A COMPELLING URANIUM PROPOSITION

# Investment 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%<sup>1</sup>



## 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 6.9Mlbs U<sub>3</sub>O<sub>8</sub> at 1,037ppm
- Global JORC Contained Uranium of 60.6 Million Pounds U<sub>3</sub>O<sub>8</sub>



## 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 1/3<sup>rd</sup> of projected LoM production from Ross and Kendrick – Peninsula retains full flexibility and exposure to upside in commodity price on uncontracted production



## Funding Solutions

- Company assessing equity, debt and prepayment financing options to fund construction through ramp-up. 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 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 and Dagger areas. NPV at 8% discount and IRR use real 2023 price.

# CORPORATE OVERVIEW

# 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)**

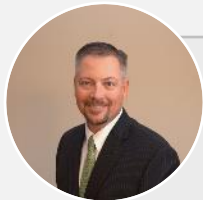
Prior to his time with Strata, Mr. Knode served as Senior Vice President for Projects for Uranium One.

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 aluminum, 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.



**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.



# Corporate Overview

**1,257m**

Shares on Issue  
(26 Oct 2023)

**A\$0.13**

Share Price  
(26 Oct 2023)

**A\$163.5m**

Market  
Capitalisation

**Nil**

Term Debt

**US\$12.5m**

Cash  
(30 Sept 2023)

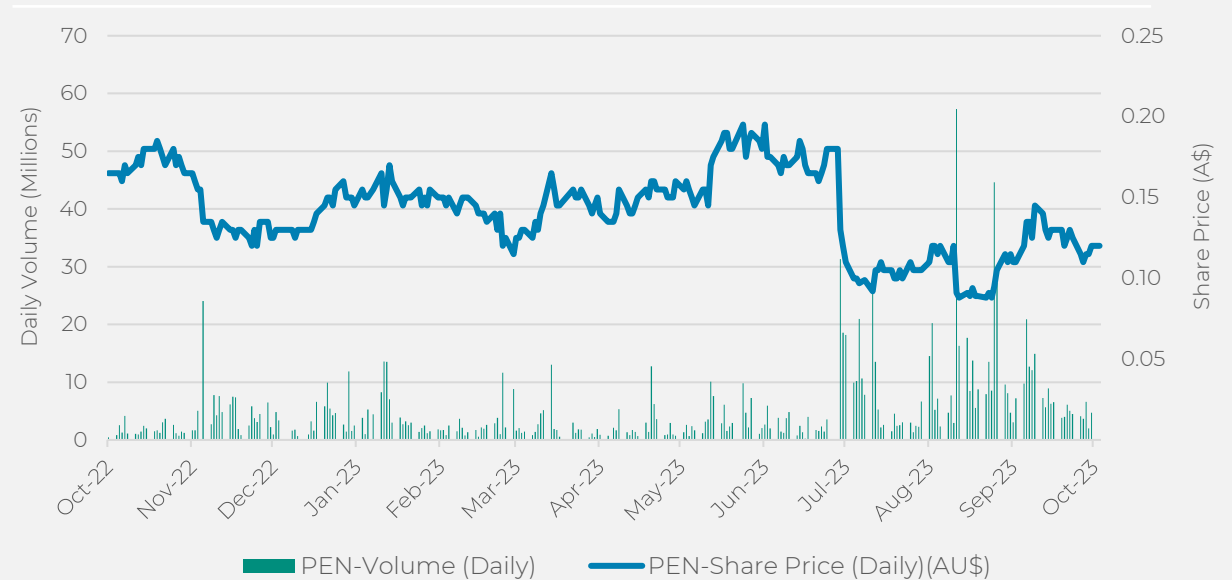
**210 klbs**

U<sub>3</sub>O<sub>8</sub> 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



# 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

# URANIUM MARKET OVERVIEW

# Potential to Become Largest U.S. Producer

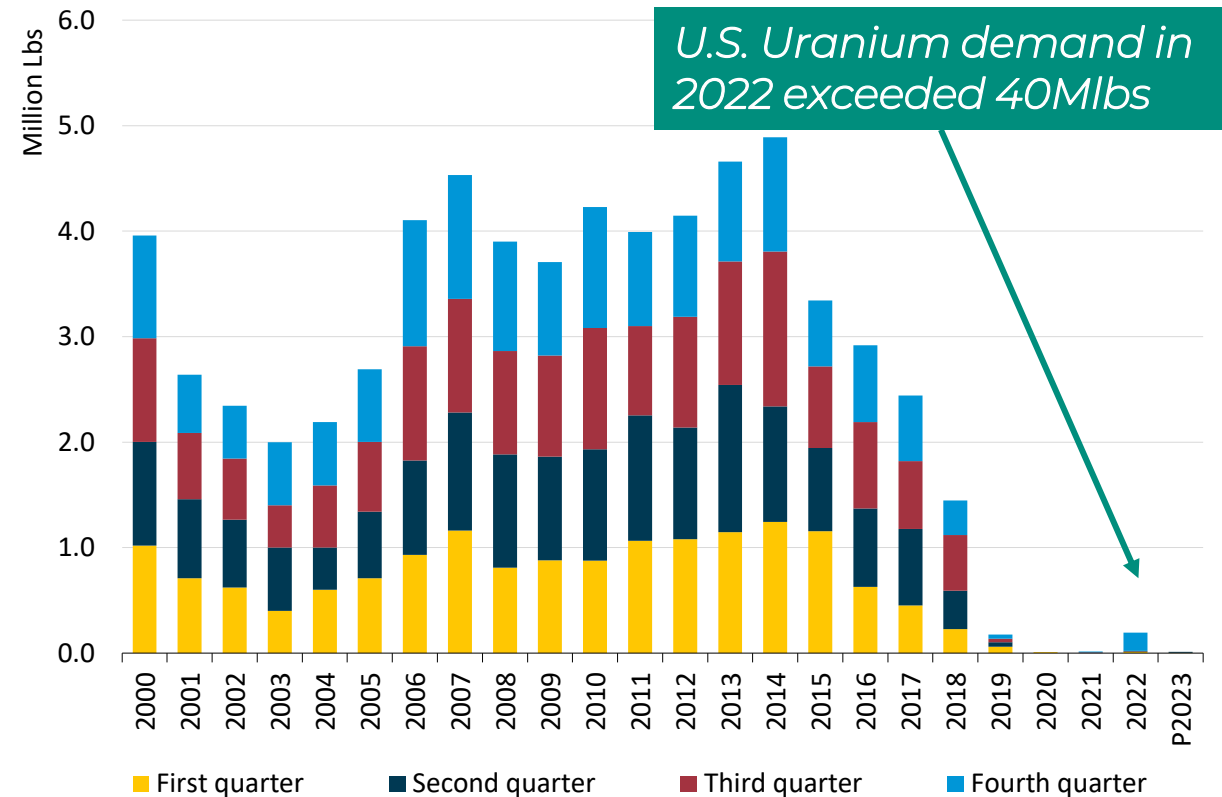
Nuclear power gaining momentum as a critical part of the green energy mix

- Growing global recognition of the important role nuclear power will play in meeting decarbonization targets

US domestic production needs to significantly increase

- Bills advancing in US House and Senate to support transition away from Russian nuclear fuel supply and encourage domestic supply of uranium
- PEN delivered 300,000 pounds of  $U_3O_8$  to the US Strategic Uranium Reserve in Q1 CY 2023
- Domestic production in JunQ'23 only 7,443lbs, all from Wyoming, against >40Mlbs of demand within the U.S.

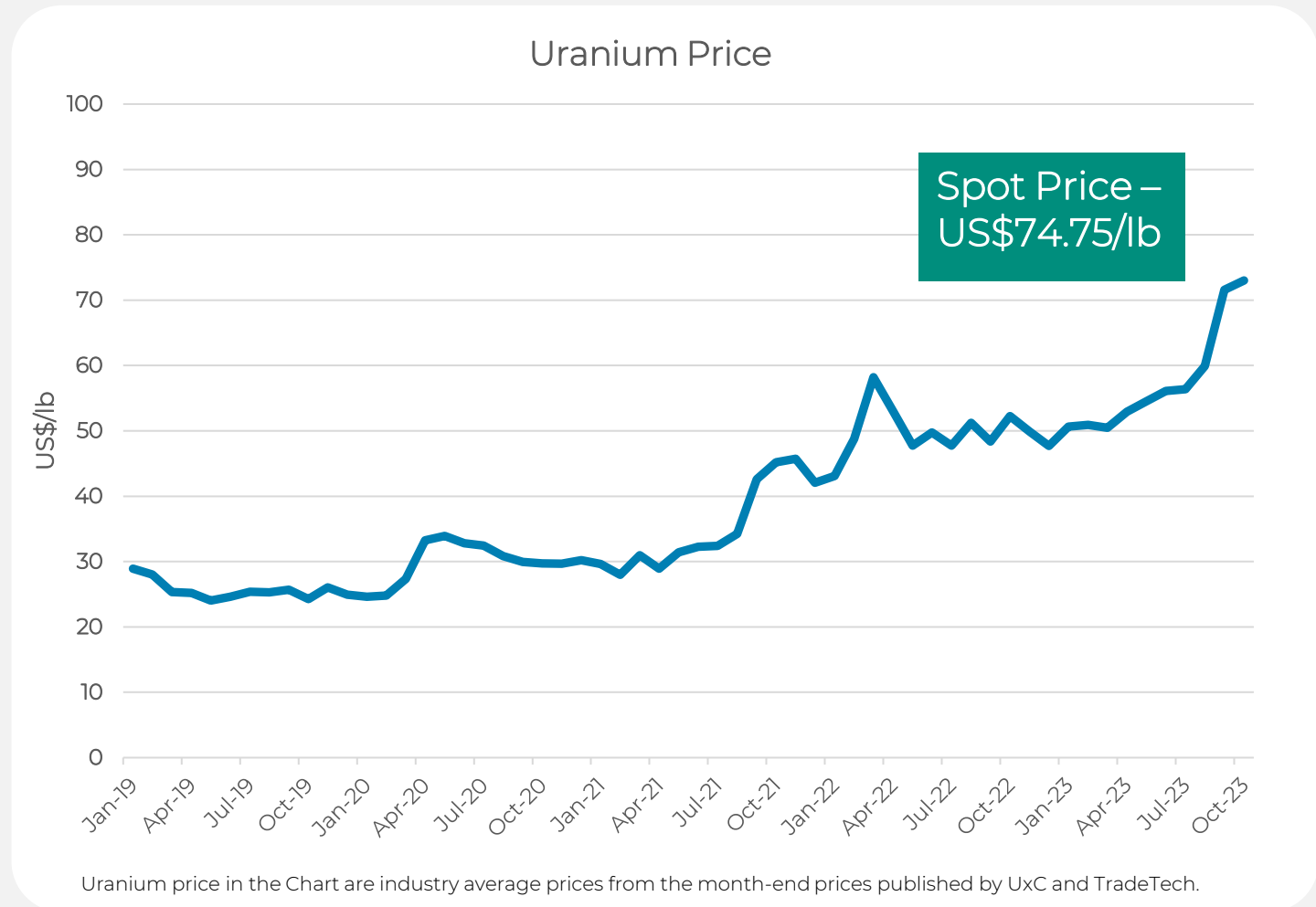
Uranium Concentrate Production in U.S.



Source: U.S. Energy Information Administration: Form EIA-851A, Domestic Uranium Production Report (Annual), and Form EIA-851Q, Domestic Uranium Production Report (Quarterly). Uranium Marketing Annual Report.

# 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 **\$74.75/lb<sup>1</sup>** at end of October 2023, 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



1 – Uranium spot price reported by TradeTech® on 31 October 2023

# 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 1/3<sup>rd</sup> 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 is highly valuable to the Company

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

- Subject to formal documentation which is well advanced.

Spot Uranium v. Realised Price<sup>1</sup>



*Strong leverage to Uranium Spot Price upside*

<sup>1</sup> - 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.

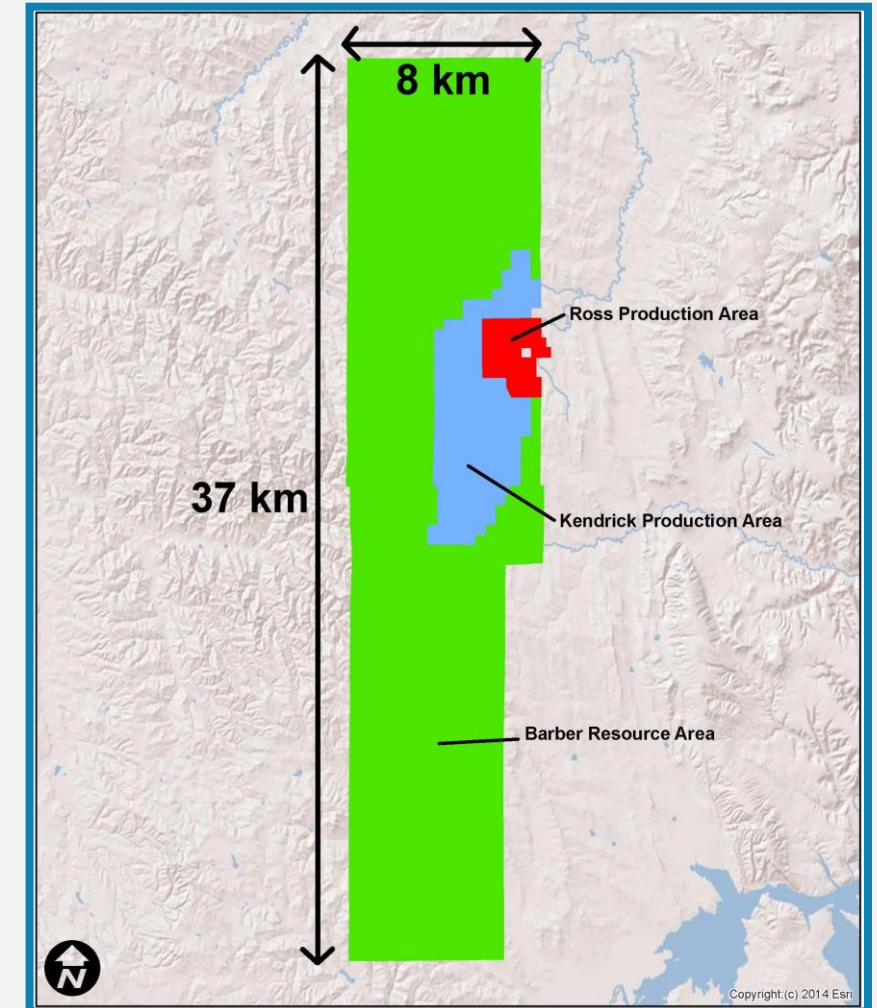
# THE LANCE PROJECTS





# The Lance Projects

- **Ross Production Project Area**
  - Fully licensed Uranium ISR production facility
  - Estimated Resource of 5.9 Mlbs U<sub>3</sub>O<sub>8</sub>
    - 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 U<sub>3</sub>O<sub>8</sub>
  - Next sequential production area
  - Amendments submitted in December 2022 to add Kendrick into the production licenses and permits
    - Estimated 18-month amendment process, on schedule
- **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 Resource Estimate

## One of the largest US Uranium ISR Projects known

- ✓ 53.7Mlbs U<sub>3</sub>O<sub>8</sub> of JORC (2012) Resources<sup>1</sup>
- ✓ Exploration Target of 104 – 163 Mlbs eU<sub>3</sub>O<sub>8</sub> based on a combination of past exploration results and proposed exploration programmes<sup>2</sup>
- ✓ PEN well-placed to **grow Lance** in size and scale

Lance Projects Resource Estimate as at 31 Dec 2021<sup>1</sup>

Classification	Tonnes (million)	U <sub>3</sub> O <sub>8</sub> (Mkg)	Grade (ppm U <sub>3</sub> O <sub>8</sub> )	U <sub>3</sub> O <sub>8</sub> (Mlbs)
Measured	3.4	1.7	491	3.7
Indicated	11.1	5.5	496	12.1
Inferred	36.2	17.2	474	37.8
Total	50.7	24.3	480	<b>53.7</b>

1) JORC Table 1 included in an announcement to the ASX released on 14 November 2018: "Revised Lance Projects Resource Tables". 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.

2) 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.

# Timeline to Operational Restart

- The current Lance plant and wellfield facilities at Ross were constructed in 2015 & operated from 2016 through mid-2019
- Current plant capacity of **0.82** Mlbs U<sub>3</sub>O<sub>8</sub> per year loaded on resins
- Licensed to produce up to **3.0** Mlbs U<sub>3</sub>O<sub>8</sub> per year of dry yellowcake
- Production and LoM plan developed for steady-state production of **1.8** Mlbs U<sub>3</sub>O<sub>8</sub> per year from Ross and Kendrick areas
- Expanded plant construction activities to commence **late 2023**, following final engineering and procurement work
- Lance production restart in **late 2024**



# Production Profile & Plant Flow Rate

- 2.0 Mlb p.a. production plant provides the platform for a faster ramp-up to substantial rates
- Production profile based on detailed mining, metallurgical and scheduling factors
- 2025 production level projected at ~1.1 Mlbs
- Steady state production rate of 1.8 Mlbs per annum



# Construction Progress at Lance

## Plant Construction Update

- Engineering Firm contracted to complete detailed engineering and procurement work for the process plant expansion
- Long lead items for the structure of the plant building expansion ordered
- Site construction to complete the low-pH transition capital project continued during the September quarter

## Wellfield Development Update

- **Significant milestone achieved** – Completion of the installation of the 58-well monitor network for Mine Unit 3 (“MU-3”), located within the Ross Production Area
- MU-3 expected to be the first production wellfield at Lance specifically designed for operations using the low-pH in-situ recovery method, anticipated to be operationally available for first production in late-2024
- As part of the restart program, commenced a planned drilling program designed to upgrade a portion of the remaining Inferred Resource within the Kendrick Production Area



Images: Bulk acid storage facilities at Lance (Top); Ongoing Resource drilling at Kendrick (Left).



# Ross and Kendrick Project Level CAPEX Estimate

	US\$ M	
<b>Remaining CAPEX to First Production (Dec'24)</b>		
Remaining Plant CAPEX	19.3	} 53.4
Remaining General CAPEX	5.1	
Remaining Wellfield CAPEX	25.4	
CAPEX Contingency	3.6	
<b>Ramp-up CAPEX to Positive Cash Generation (Aug'25)</b>		
General CAPEX	0.8	} 17.4
Wellfield CAPEX	15.9	
CAPEX Contingency	0.8	
<b>Future Wellfield Replacement &amp; Sustaining CAPEX (Including Contingency)</b>	215.0	
<b>Life of Mine CAPEX (US\$ M - from July 2023)</b>	<b>285.9</b>	
<b>Life of Mine CAPEX (US\$/lb)</b>	<b>19.36</b>	
<ul style="list-style-type: none"> <li>• General CAPEX includes solids handling solution and mobile equipment to support wellfield construction &amp; operations</li> </ul>		

# Lance Unit Cost Outcomes (Un-escalated)

## Direct Operating Cost (“C1”)

- Direct OPEX of **\$21.69/lb U3O8** includes all project level non-CAPEX costs and contingencies from July 2023 to end of production
- Restoration and Rehabilitation costs are not included in Direct OPEX
- Royalties & local taxes are not included in Direct OPEX

## All-in Sustaining Cash Cost (“AISC”)

- AISC of **\$42.46/lb U3O8**
- CY 2026 to CY 2033 best represent ongoing sustainable rates of project investment and production
  - Adopted this period to determine the All-in Sustaining Cash Cost

## All-in Cost (“AIC”)

- LoM AIC of **\$50.27/lb U3O8**
- Sum of all project level OPEX and CAPEX costs
  - From July 2023 to end of mine rehabilitation

	\$/lb U3O8
Direct OPEX	21.69
Restoration & Rehabilitation	1.80
Royalties & Local Taxes	7.42
<b>Total OPEX</b>	<b>30.91</b>
<b>Total CAPEX (see previous slide)</b>	<b>19.36</b>
<b>AIC Cost</b>	<b>50.27</b>

# Key Financial Outcomes of AUGUST 2023 LOM PLAN

Project remains economically attractive and financial returns are consistent with 2022 DFS expectations

Key results include :



LoM Project Revenue (Real)  
US\$ 988M



Payback period of 3.5 years  
from August 2025



Project forecast to become cash flow positive  
within first year of production (2025)



AISC (Real) of  
\$42.46/lb



LoM Operating Cashflow (before tax) of  
US\$ 258M



LOM AIC (Real) of  
\$50.27/lb



NPV8 (Real) unlevered of  
US\$ 116M



Average Sales Price (Real) Received of  
US\$ 67.07/lb



IRR (Real) of  
26.2%



Lower-Cost Expansion for Barber  
Ross and Kendrick economics carry  
complete plant cost, providing a “free  
carry” for future production from 30Mlb  
Barber Area resource



# Sales Price Basis and Sensitivity

## Sales Contract Book Contribution

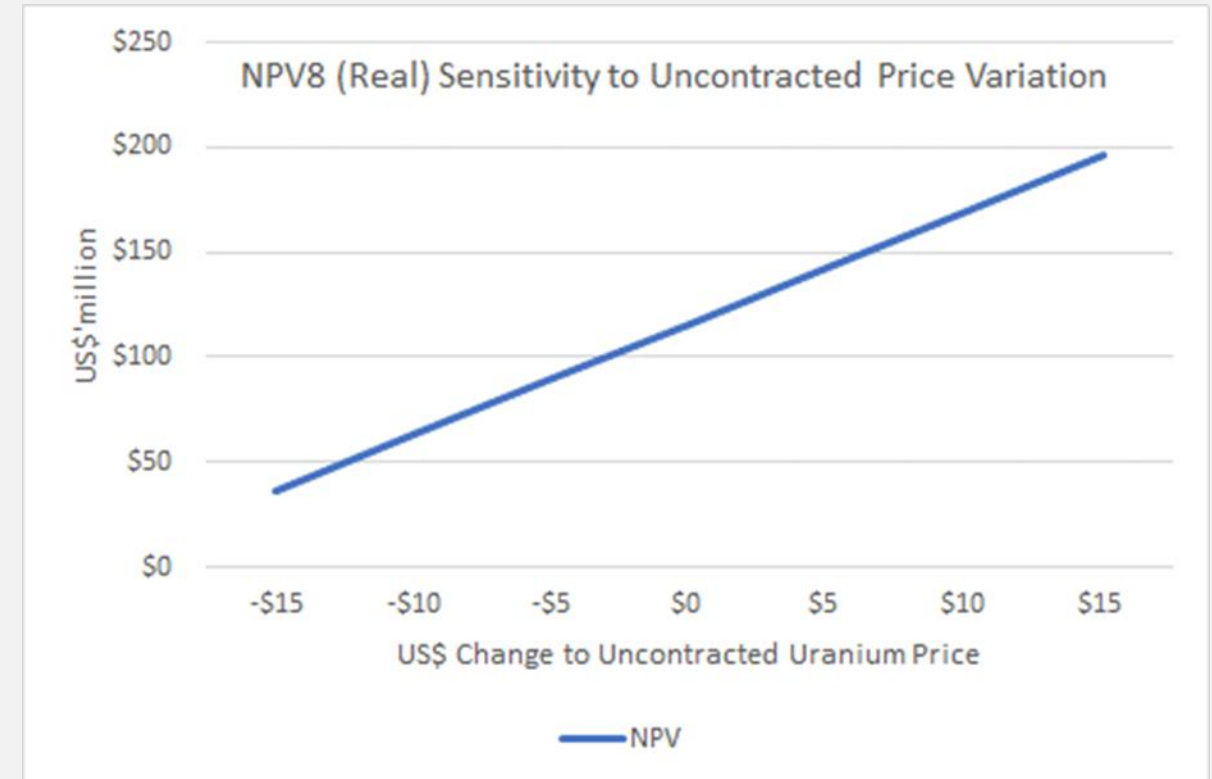
- LoM financial model uses an average Real 2023\$ un-escalated sales price of \$55.00 per pound for ~5 Mlbs of contracted sales
- Contracted sales represent 1/3<sup>rd</sup> of the projected LoM production from Ross and Kendrick

## Uncontracted Uranium Selling Price Assumption

- The LoM model uses average Real 2023\$ price of \$72.62/lb for all uncontracted uranium sales

## Uranium Price Sensitivity

- Each \$5/lb. increase in the price received for uranium sold that is not currently under contract increases NPV<sub>8</sub> by \$26 million



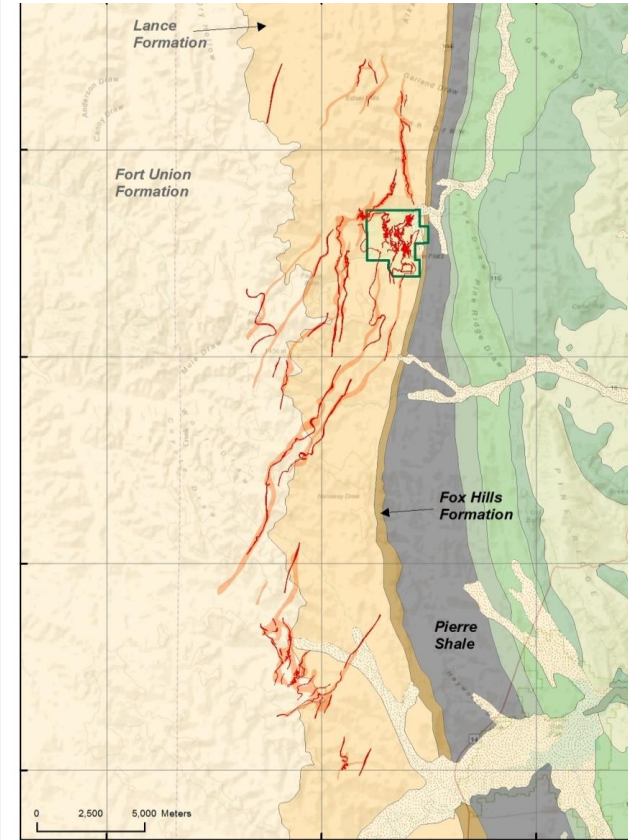
# SIGNIFICANT EXPLORATION UPSIDE

# Lance Exploration Upside

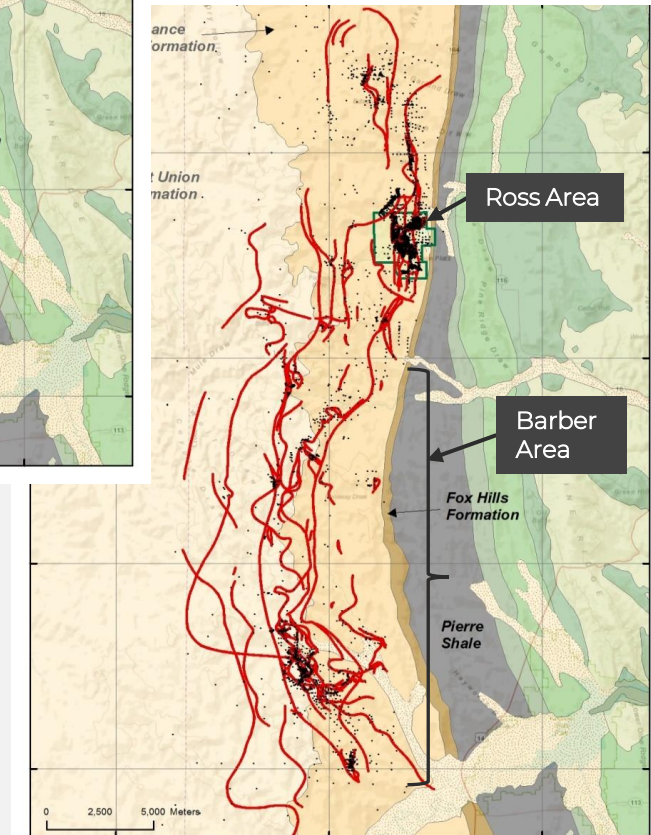
- Exploration Target of 104 – 163 Mlbs eU<sub>3</sub>O<sub>8</sub>
  - Based on a combination of past exploration results and proposed exploration programmes<sup>1</sup>
- Explored by Nuclear Dynamics and Bethlehem Steel
  - 4,700 drill holes (1971-1980)
- Further explored by Peninsula
  - 2,800 drill holes (2008-2013)
- 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

<sup>1</sup>) 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 4.

## Past Exploration



## Peninsula's Exploration Success

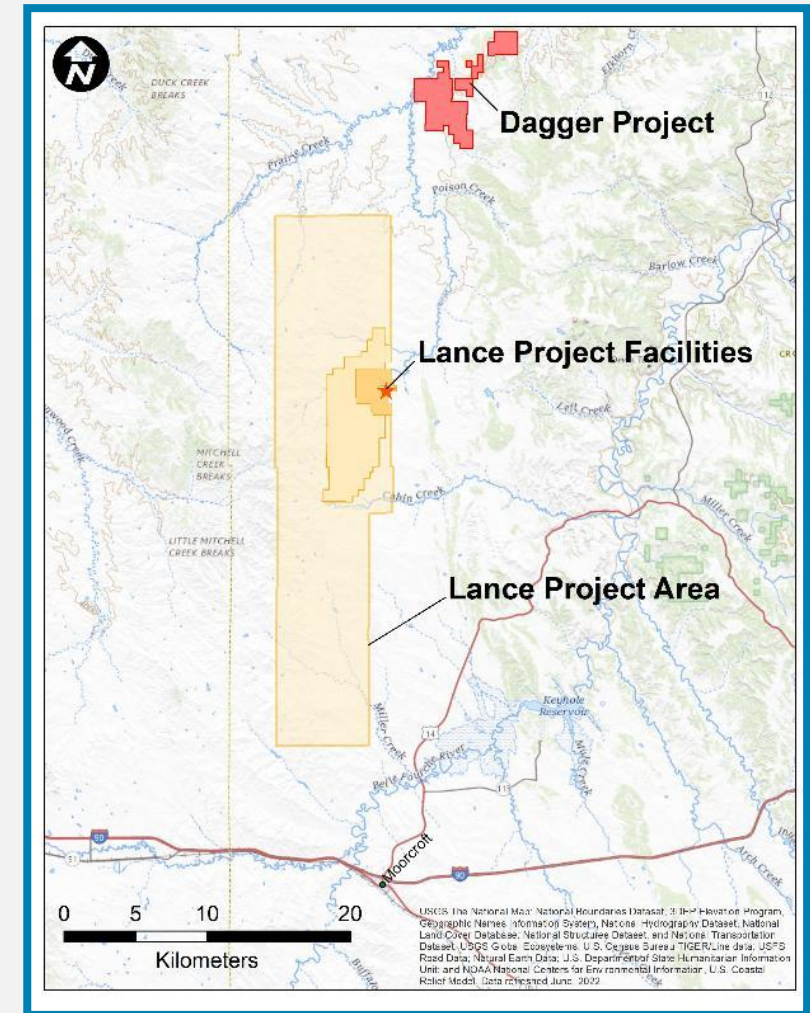




# New High-Grade Satellite Deposit - Dagger

- ✓ 6.9Mlbs U<sub>3</sub>O<sub>8</sub> of JORC (2012) Inferred Resources<sup>1</sup>
- ✓ >2x Grade of U<sub>3</sub>O<sub>8</sub>, compared to Lance Resource
- ✓ Mineral rights and data set established through in-house efforts for only US\$800K (or US\$0.12/lb U<sub>3</sub>O<sub>8</sub>)
- ✓ Opportunity to extend Lance project life through Satellite In-Situ Recovery operation

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

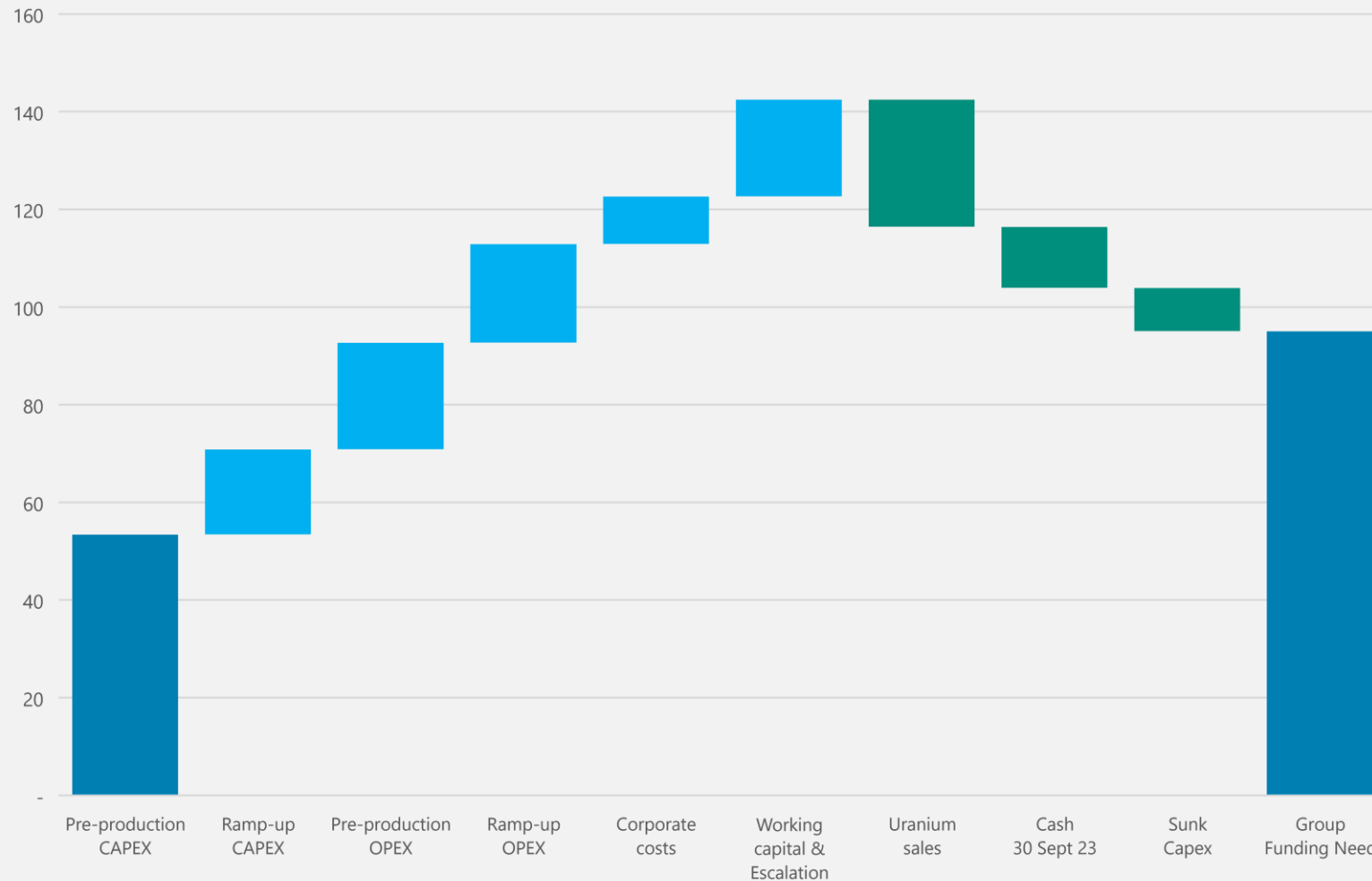


1) JORC Table 1 included in an announcement to the ASX released on 23 October 2023: "Peninsula Establishes Significant New Uranium Development Project". Peninsula confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that 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.

# GROUP FUNDING REQUIREMENTS/SOLUTIONS

# Group Funding Analysis

Group Funding Needs (US\$M)



- US\$95 million additional funding required for PEN Group to reach sustainable positive cash flows
  - Incorporating all group costs, ramp-up costs, contingency and escalation allowance
  - Includes discretionary cash buffer allowance of US\$12.5 million
- Funding can be progressive
  - not all needed in a lump sum
- Existing cash & value of inventory provide runway

# Group Funding Solution

## Funding Strategy – secure the most cost competitive and value maximizing option

- PEN is assessing various funding options, including debt, equity, product prepayments and inventory sales.
- PEN'S funding objectives are to secure the most cost effective and value maximizing solution which minimizes dilution to existing shareholders.
- All funding strategies are being progressed, to align with the development plan timeline.

## Funding process commenced and lender engagement underway

- BurnVoir Corporate Finance has been appointed as financial adviser to arrange the additional funding required for the expanded plant construction activities, wellfield development, commissioning and ramp-up.
- Peninsula is in discussions with Government funding agencies and is receiving interest from international banks and other financiers in relation to funding the Lance Project.
- Financiers are appreciative of the advanced stage of the Lance Project as a near term project, providing US production and direct market exposure into a growing uranium market.

## Current cash balance and liquid inventory ensures development

- Cash balance of ~US\$12.5M (as at 30 Sept 2023)
- Inventory of 210,000lbs can be monetized by satisfying nearer term offtake requirements.
- Additional funding to be progressively deployed to ensure development plan remains on track.



## CONCLUSION

# The Peninsula Advantage

- ✔ Flagship Lance 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
- ✔ Production restart set for late 2024, positive cash flow generated within first year of operations
- ✔ Once in operation, PEN will be an independent, low-cost uranium producer of dry yellowcake
- ✔ Talented/Experienced team in place who are capable of efficiently executing the revised plan
- ✔ Focus on long-term Sustainability
- ✔ Well-positioned to supply into a growing uranium market, and to play a role in meeting aggressive decarbonization targets
- ✔ Providing US production to an undersupplied Western-oriented market

# Contact Details

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## FURTHER INFORMATION

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# Appendix 1 – Resources

## Lance Projects Resource Estimate as at 31 December 2022<sup>1</sup>

Classification	Tonnes (million)	U <sub>3</sub> O <sub>8</sub> (Mkg)	Grade (ppm U <sub>3</sub> O <sub>8</sub> )	U <sub>3</sub> O <sub>8</sub> (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
<b>Total</b>	<b>51.0</b>	<b>24.4</b>	<b>479</b>	<b>53.8</b>

## Dagger Resource Estimate as at 23 October 2023<sup>1</sup>

Classification	Tonnes (million)	U <sub>3</sub> O <sub>8</sub> (Mkg)	Grade (ppm U <sub>3</sub> O <sub>8</sub> )	U <sub>3</sub> O <sub>8</sub> (Mlbs)
Inferred	3.0	3.1	1037	6.9
<b>Total</b>	<b>3.0</b>	<b>3.1</b>	<b>1037</b>	<b>6.9</b>

<sup>1</sup> - 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 Target<sup>1</sup>

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 eU<sub>3</sub>O<sub>8</sub>

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

Exploration Target	Tonnes (million)		Grade (ppm eU <sub>3</sub> O <sub>8</sub> )		eU <sub>3</sub> O <sub>8</sub> (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.

*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.