PENINSULA ENERGY LIMITED

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ROSS AND KENDRICK AREAS LIFE OF MINE PLAN UPDATE

September 2023

Corporate Presentation

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.

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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.

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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.

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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

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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.

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THE PENINSULA ADVANTAGE

Independent, Long-Term Uranium Production

Flagship Lance ISR Project

One of the largest US uranium projects, with a JORC (2012) Resource of 53.7Mlbs[1] U_3O_8

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, Early Positive Cash Flow

Independent 2Mlb per annum capacity, end-to-end production of dry yellowcake, with sustainable monthly positive cash flow generated in year-one (2025)

Improved Processing Method

Lance will be the first ASX-listed, commercial US uranium operation to utilize low-pH In-Situ Recovery (ISR)

Growing Lance in Size and Scale

Resource growth through exploration and development at Kendrick and Barber areas – Barber boasts a 31.9Mlb U3O8 resource base – Majority Inferred

Proven Team

Highly experienced uranium technical, development, and operational team

Note 1 – see Appendix 1

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Key Details of Revised Production and LoM Plan

- Production scheduled to commence in late CY24
- Revised strategy delivers a robust development plan, including an accelerated production ramp-up schedule
- Plan based on a total resource base of 21.8 Mlbs U_3O_8 contained within the Ross and Kendrick production areas, less than 40% of the total Lance Projects resource
- LoM model features a complete 5,000 GPM uranium ISR plant, to produce up to 2.0 Mlbs p.a. of dry yellowcake (U_3O_8) product
- Project achieves sustainable monthly positive cash flow during first full year of production – estimated to be from Sept '25
- Competitive OPEX estimate maintained; C1 Direct Operating Cost of US$21.69/lb
- Remaining CAPEX spend to first production of $53.4 million and ramp-up phase CAPEX (first production to achieving flowrate capacity) of $17.4 million
- Funding solution pathway being progressed, sources to include debt, equity and inventory sales

Key Operational Outcomes	
LoM Model Uranium ISR Plant Flowrate Capacity	5,000 GPM
Dry Yellowcake (U_3O_8) Production Capacity	Up to 2.0 Mlbs p.a
CY2025 Projected Production Level	~1.1 Mlbs
Estimated Production Life	10 years
Estimated U_3O_8 LoM Production	14.8 Mlbs

Key Financial Outcomes	US$
LoM CAPEX	285.8 M
Remaining CAPEX to First Production[1]	53.4 M
Ramp-up stage CAPEX (first production to 5,000 GPM flow)	17.4 M
LoM Wellfield Replacement & Sustaining CAPEX	215.0 M
LoM Project Revenue from Sale of Lance Production (real)	988 M
Weighted Average Sales Price used in the LoM	67.07/lb
Average Price used for Uncontracted Production	72.62/lb
LoM Operating Cashflow (before tax)	258.2 M
NPV8	116.2 M
IRR	26%
All in Sustaining Costs (AISC)	42.46/lb
All in Costs (AIC)	50.27/lb

1) Excludes sunk CAPEX spent between January and June 2023.

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Timeline to Operational Restart

- The current Lance Project facilities at Ross were constructed in 2015 and operated from 2016 through mid-2019
- Current plant capacity of **0.82** Mlbs U_3O_8 per year loaded on resins, but licensed to produce up to **3.0** Mlbs U_3O_8 per year
- Production and LoM plan developed for steady-state production of **1.8** Mlbs U_3O_8 per year from Ross and Kendrick areas
- Expanded plant construction activities to commence **late 2023**, following final engineering and procurement work
- Wellfield development and construction activities **to continue** in advance of production restart
- Lance production restart in **late 2024**
- Once operational, Peninsula will be a fully independent, end-to-end producer of dry yellowcake





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Developing Lance at an Opportune Time

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
- Nuclear energy provides high capacity-factor, carbon free, baseload electricity
- Energy security concerns have resulted in greater appreciation of nuclear globally
- Small Modular Reactor development rapidly advancing

Uranium and nuclear energy in the US

- Bills advancing in US House and Senate to support transition away from Russian nuclear fuel supply
- Nuclear power provides 52% of America's clean energy
- PEN completed delivery of 300,000 pounds of yellowcake to the US Strategic Uranium Reserve in Q1 CY 2023

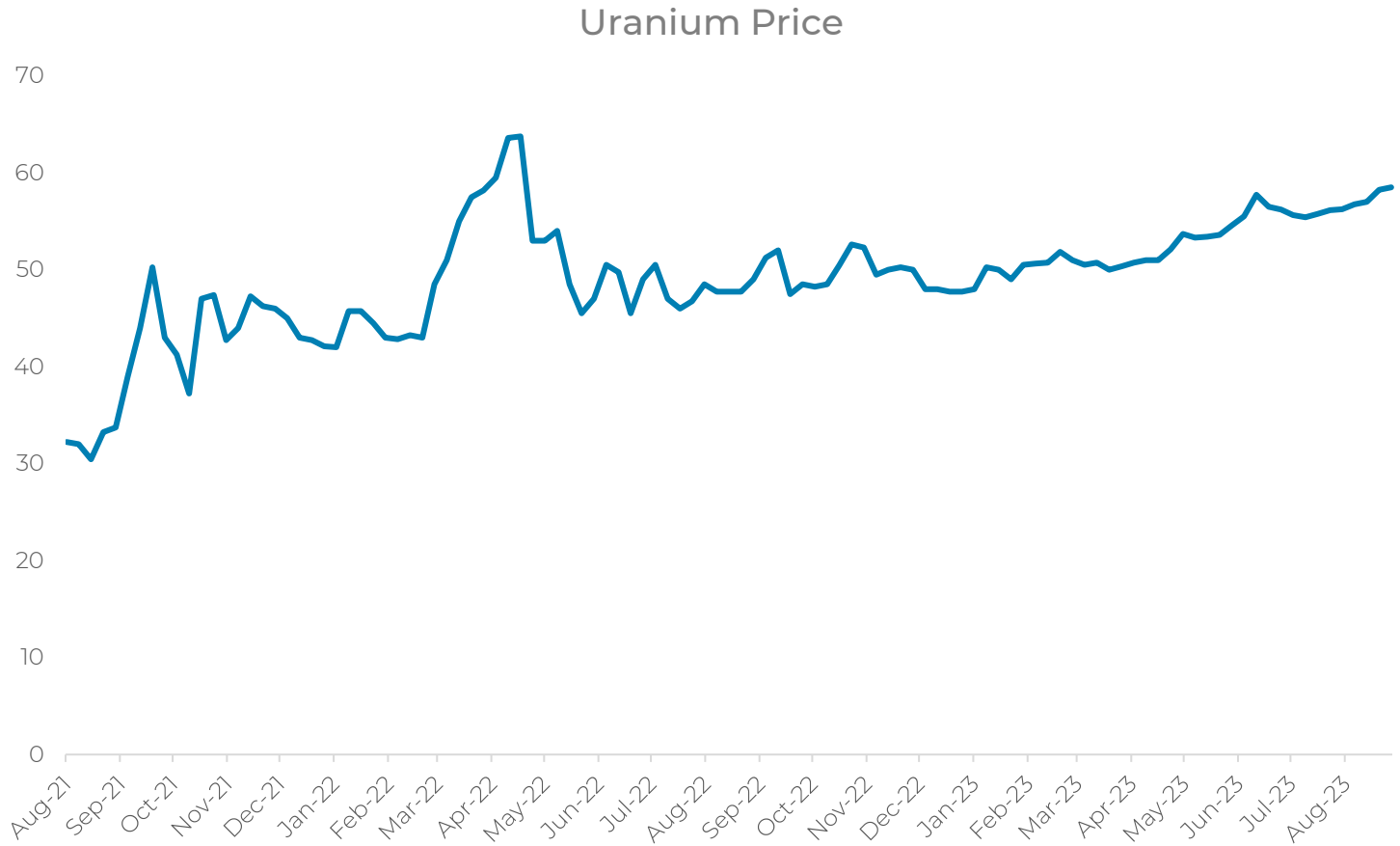
US domestic production needs to significantly increase

- Most recent US domestic uranium production report by the Department of Energy showed small levels of domestic production
- U_3O_8 production in JunQ'23 only totaled 7,443lb, all from Wyoming
- The US is the world's largest uranium consumer - if the US Government wants to improve energy security it needs developments like Lance to come online in the next 12 months

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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 above $61.00 on 31-August-2023
- Once in operation in late 2024, PEN will be well-placed to benefit from growing demand levels for uranium and strong pricing



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Sustainability Focus

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

- 2022 Report Sustainability highlights:
  - No lost-time or recordable injuries for more than 5 years
  - Rollout of ISO 14001 & ISO 9001 certification processes for environmental and quality management at Lance
  - Old trial mining areas rehabilitated at the Karoo Project

- Peninsula to bring Lance online at a time when uranium demand and the role of nuclear as a clean energy source is forecasted to continue its strong growth trajectory

"The Sustainability Report represents a significant step towards achieving key EESG goals and ensuring the Company is accountable to all stakeholders when production restarts at Lance"



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Corporate Overview

1,257m	A$0.091	A$114m	Nil	US$21.5m	210 klbs
Shares on Issue (04 Sep 2023)	Share Price (04 Sep 2023)	Market Capitalisation	Term Debt	Cash (30 June 2023)	U_3O_8 Inventory (30-June 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



Management Team

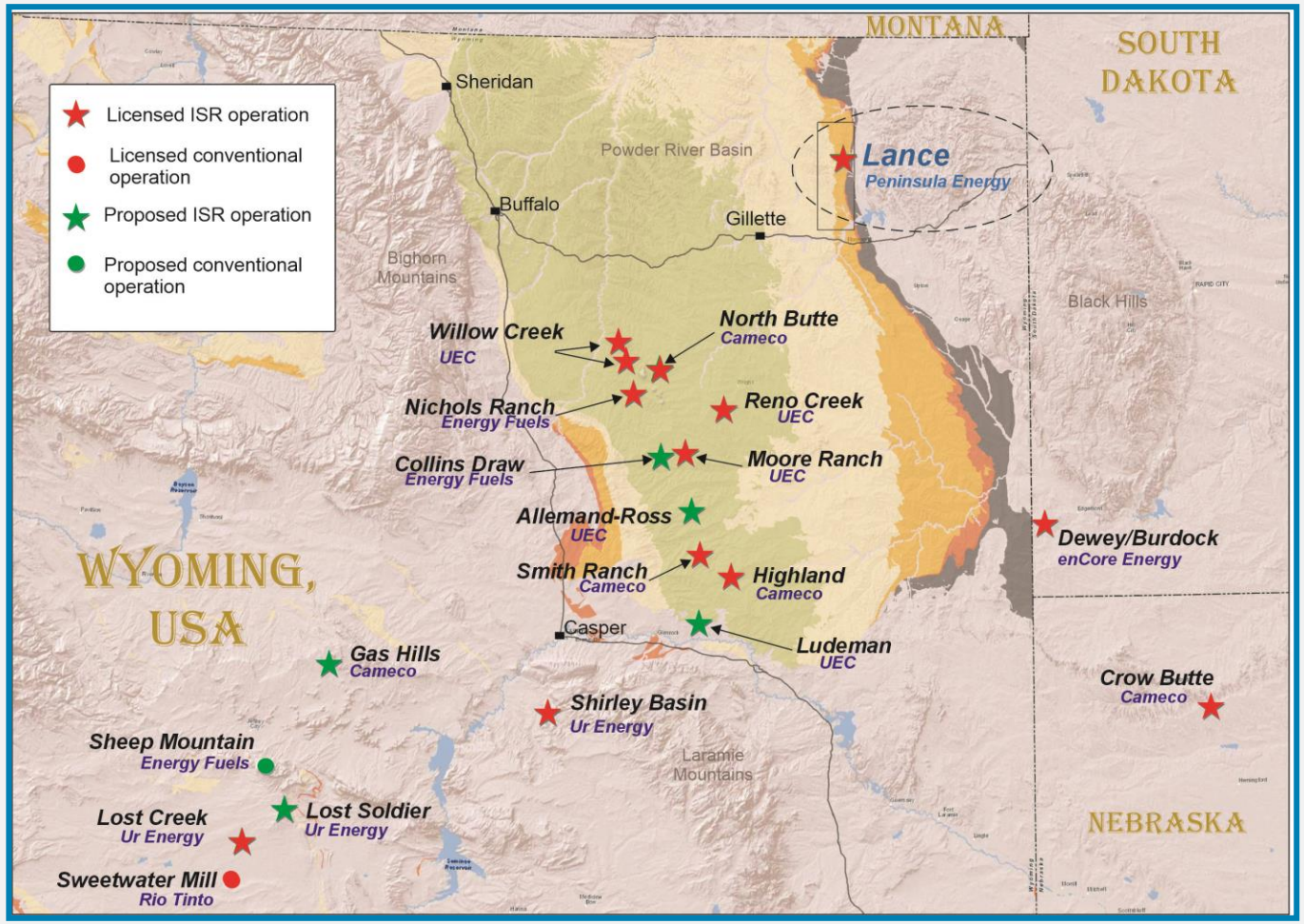
Mr Wayne Heili	Chief Executive Officer
Ms. Rachel Rees	Chief Financial Officer & Joint Company Secretary
Mr. Willie Bezuidenhout	VP – Corp. Development
Mr Ralph Knode	CEO – Strata
Mr David Hofeling	CFO - Strata
Mr Brian Pile	VP Project Development
Mr Mike Brost	VP Geology
Mr Mike Griffin	VP Regulatory, Env.
Mr Jay Douthit	VP Operations

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THE LANCE URANIUM IN-SITU RECOVERY PROJECT

Lance – A Premier Uranium Project & Location

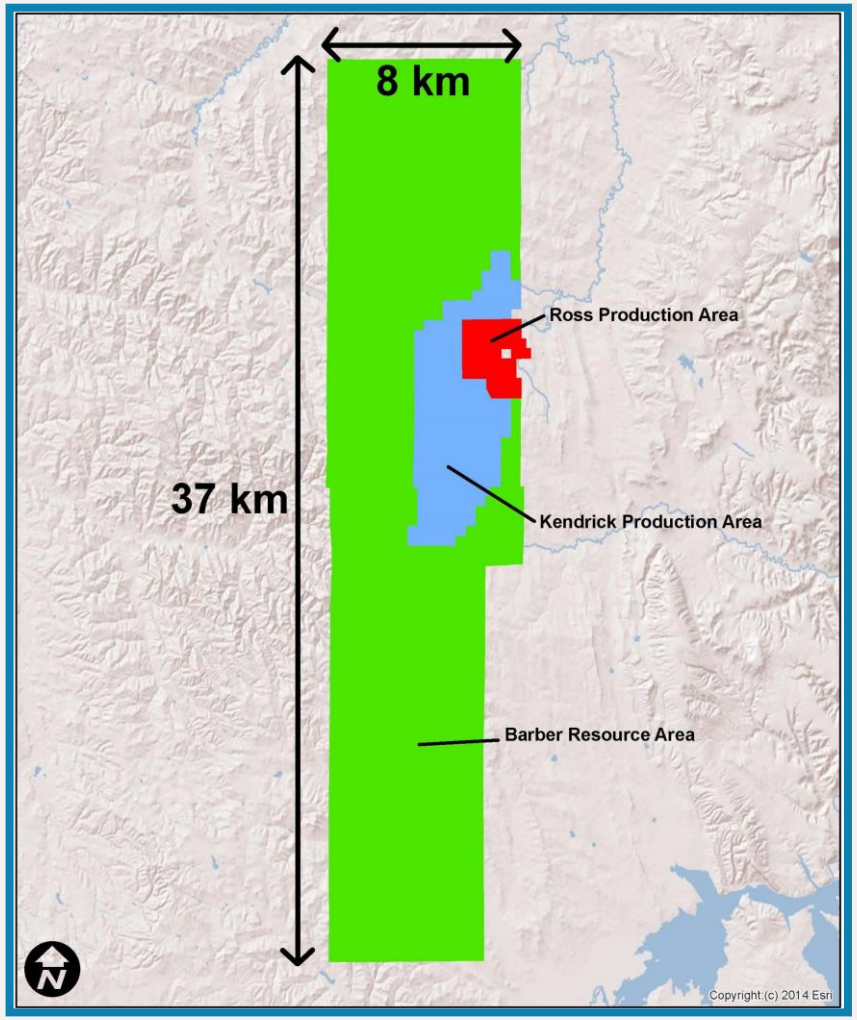


Located in Wyoming USA, a leading US uranium extraction jurisdiction

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The Lance Projects

- **Ross**
  - Fully licensed Uranium ISR production facility
  - Estimated Resource of 5.9 Mlbs U_3O_8
    - 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**
  - Estimated Resource of 15.9Mlbs U_3O_8
  - 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**
  - "Under-delineated" resource area
  - Holds over 30 Mlbs of predominantly Inferred Resources
  - Potential for resource growth through exploration
  - Current LoM plan does not include production from Barber, which provides a future expansion opportunity at Lance



The Lance Projects

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Ross and Kendrick Resource Estimate

"One of the largest US Uranium ISR Projects known"

- ✓ 53.7Mlbs U_3O_8 of JORC (2012) Resources[1]
- ✓ Exploration Target of 104 – 163 Mlbs U_3O_8 based on a combination of past exploration results and proposed exploration programmes[2]
- ✓ Resource doesn't account for any future exploration success at Kendrick and Barber
- ✓ Mine life and production extensions through resource to reserve conversion
- ✓ PEN well-placed to grow Lance in size and scale

Lance Projects Resource Estimate as at 31 Dec 2021[1]

Classification	Tonnes (million)	U_3O_8 (Mkg)	Grade (ppm U_3O_8)	U_3O_8 (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	**53.7**

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.

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NEW LIFE OF MINE PLAN FOR ROSS AND KENDRICK

Key Financial Outcomes

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

Key results include :

- LoM Project Revenue (real) US$ 988M
- Project forecast to become cash flow positive within first year of production (2025)
- LoM Operating Cashflow (before tax) of US$ 258M
- NPV8 (Real) unlevered of US$ 116M
- IRR (Real) of 26.2%
- Payback period of 3.5 years from August 2025
- AISC (Real) of $42.46/lb
- LOM AIC (Real) of $50.27/lb
- Average Sales Price Received of US$ 67.07/lb
- 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

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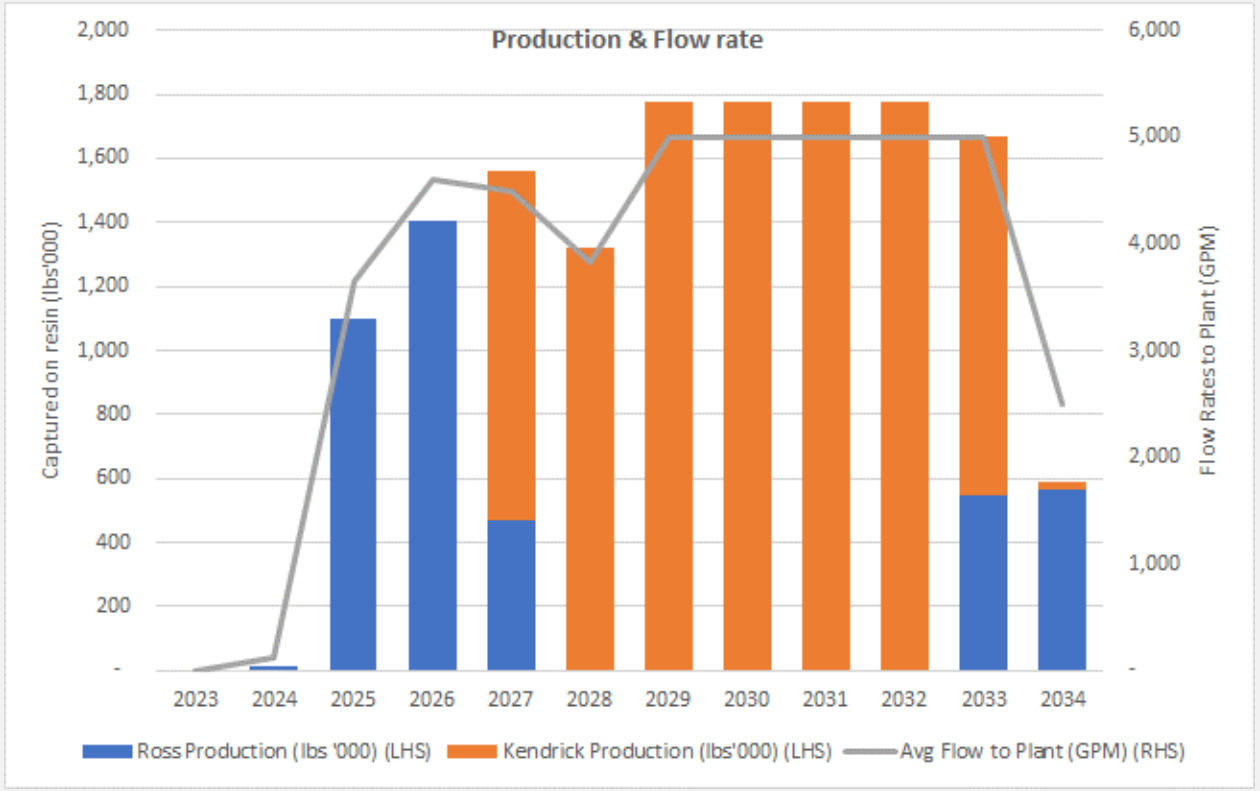
Life of Mine Production Basis

- Estimated Ross & Kendrick ("R&K") Production Life of 10 years
- LoM model production of 14.8 Mlbs U_3O_8 from R&K Areas
  - Total R&K resource base of 21.8 Mlbs U_3O_8
  - Does not include the Barber Area with a resource of 31.9Mlb, highlighting significant growth upside
- Expanded process plant capacity used in LoM model is 5,000 GPM (double the existing capacity)
  - Plant flow rate capacity based on 4 IX trains
  - Existing capacity is 2 IX trains (2,500 GPM)
  - Plant expansion construction commences in late-2023, concluding in late 2024
- Steady state production rate of 1.8 Mlbs U_3O_8 per annum
- Average recovered uranium grade over LOM = 77.2 mg/L
- LoM global resource recovery of 67.7%
- Wellfield development and commissioning activities to continue throughout remainder of CY23 to CY25
- Production restart scheduled for December-2024
  - MU-3 HH-11 acidification starts in September 2024 (1 year out)

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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
- Flow rate to plant displays the average achieved over the respective time period
- Production “dip” in CY 2028 a consequential impact of applied drill rig limitations in CY24, 25 & 26



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CAPEX PROFILE – Ross and Kendrick Projects

Life of Mine CAPEX (US$ M - from July 2023)	**285.9**	
Life of Mine CAPEX (US$/lb)	**19.36**	
Remaining CAPEX to First Production (Dec'24)	**US$ M**	
Remaining Plant CAPEX	19.3	53.4
Remaining General CAPEX	5.1	
Remaining Wellfield CAPEX	25.4	
CAPEX Contingency	3.6	
Ramp-up CAPEX to >4,000 GPM Plant Flow & Positive Cash Generation (Aug'25)		
General CAPEX	0.8	17.4
Wellfield CAPEX	15.9	
CAPEX Contingency	0.8	
Wellfield Replacement & Sustaining CAPEX (Incl Contingency)	215.0	

- General CAPEX includes solids handling solution and mobile equipment to support wellfield construction & operations

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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
Total OPEX	**30.91**
Total CAPEX (see previous slide)	**19.36**
AIC Cost	**50.27**

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Sales Price Basis

Peninsula's Sales Contract Book

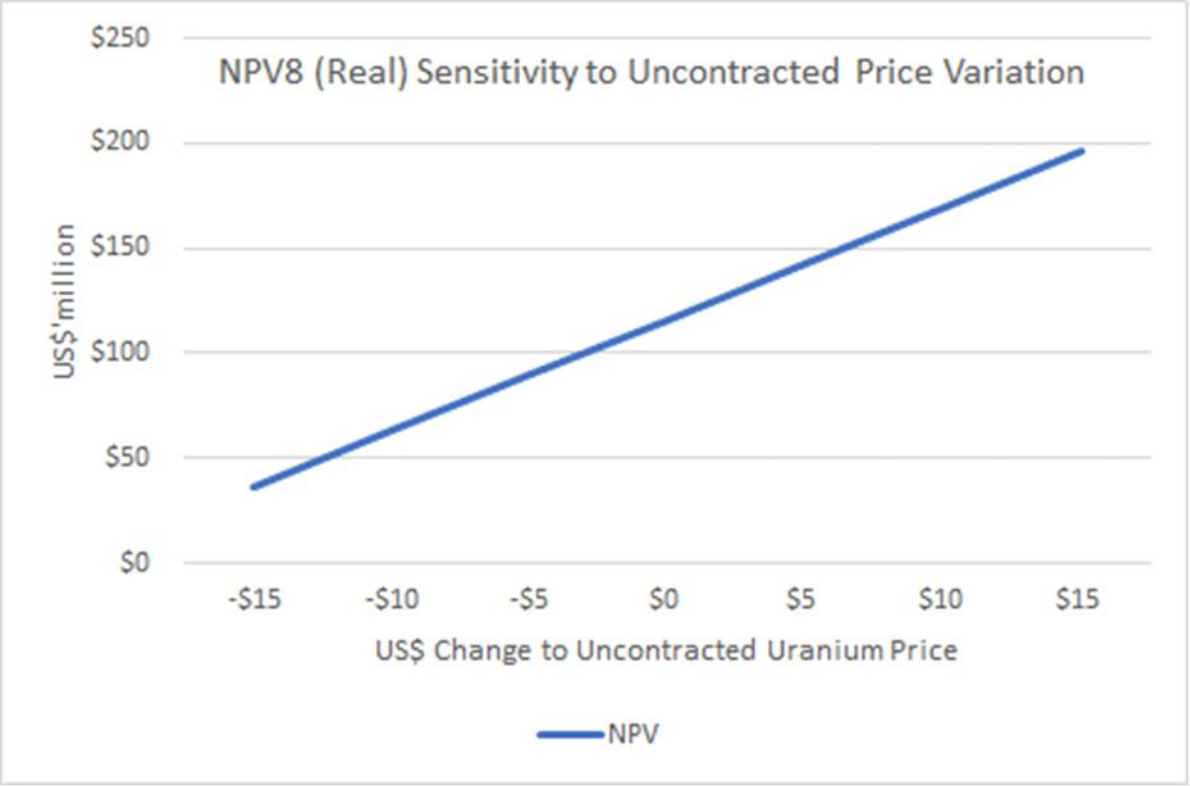
- LOM financial model uses an average Real 2023$ un-escalated sales price of $55.00 per pound for contracted sales
- Contracted sales represent 34% of the total projected LoM production from Ross and Kendrick

Uncontracted Uranium Selling Price

- As all costs have been escalated to current pricing, the average sales price used in the 2022 DFS was escalated for the change in uranium price over the past 12 months
- The 2023 LoM model used $72.62/lb pricing 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_8 by $26 million



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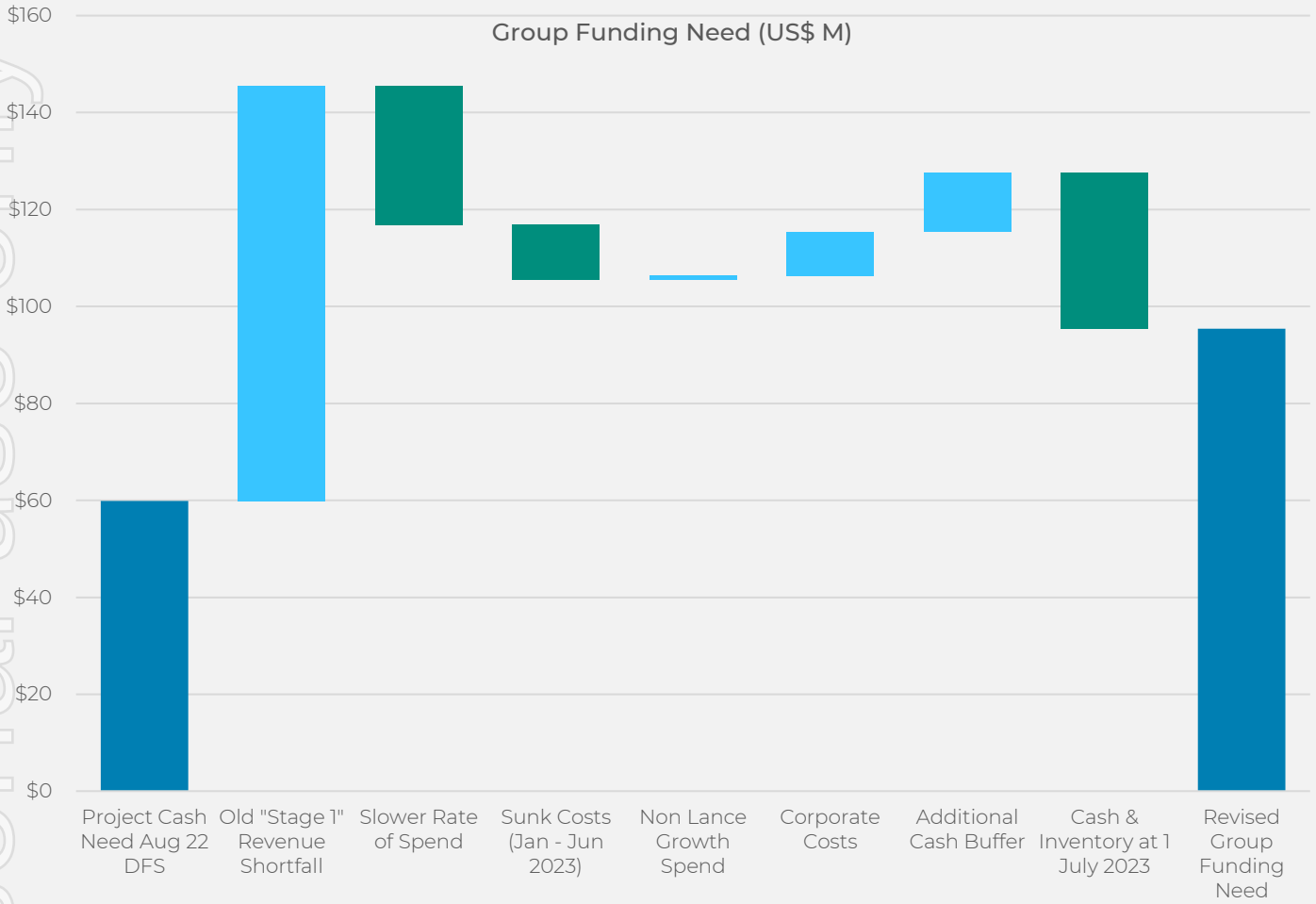
Revised LoM to 2022 DFS Comparison

Key Ross & Kendrick Operational Outcomes	2022 DFS	Revised LoM	Comments
Uranium ISR Plant Flowrate Capacity	6,250 GPM	5,000 GPM	LoM based on 4 trains of IX columns; DFS based on 5 sets
Dry Yellowcake (U_3O_8) Production Capacity	2.0Mlbs p.a	2.0Mlbs p.a	Drying capacity in the plant the same
Estimated Production Operating Life	11 years	10 years	Slightly shorter mine life due to elimination of toll milling period
Average Recovered Grade	76mg/L	77mg/L	Minor updates to pattern designs based on MU-3 wellfield design
Average Acid Consumption per lb U_3O_8	53.5 lbs	67 lbs	Consumption updated to reflect pattern design & planned injection rates
Estimated U_3O_8 LoM Production	14.4Mlbs	14.8Mlbs	Wellfield pattern area parameters updated to bring more pounds under pattern

Key Ross & Kendrick Financial Outcomes (Real US$ M unless stated)	2022 DFS	Revised LoM	Comments
LoM Project Revenue from Sale of Lance Production	895.2	988.0	Slightly higher pounds produced and uplift in uncontracted price
Weighted Average Sales Price (US$/lb)	62.38	67.07	Uplift in price for uncontracted uranium using 12-month spot price increase %
LoM CAPEX (1)	290.6	285.8	Despite cost escalation, wellfield design enhancements keep this steady
LoM OPEX (before Royalties & Local Taxes) (1)	283.0	346.8	Cost escalation between 2022 and 2023 and increased site support services
NPV8	124.8	116.2	Stays roughly the same over Life of Mine period
IRR (%)	43%	26%	Impact of deferred revenue from removing early toll milling period production
All-in Sustaining Costs (AISC) (US$/lb)	39.08	42.46	Reflects cost escalation between 2022 and 2023
All-in Costs (AIC) (US$/lb)	45.74	50.27	Reflects cost escalation and carrying site fixed costs for longer pre-production

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Group Funding Analysis



- Up to $95 million additional funding required to reach sustainable positive monthly cash flows
  - Lower early revenue from no period of toll milling operations has biggest impact
  - Now incorporates **all group costs**
  - Includes **discretionary** cash buffer allowance of $12.5 million
  - Funding can be progressive – not all needed in a lump sum
- Next Steps
  - Further engagement with govt & non-govt debt providers
  - Funding solution pathway being progressed, sources to include debt, equity and inventory sales
  - Existing cash & value of inventory provide runway

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URANIUM SALES AND INVENTORY

Peninsula's Key Differentiator

"An established uranium sales contract book"

- A junior uranium company with a track record of meeting delivery requirements since 2016
- Sales contracts in place for up to 4.95 Mlbs U3O8 currently under contract for delivery between now and the end of 2033
  - With major utilities in both the United States and Europe
  - Weighted average price (escalated) of ~US$60/lb U_3O_8
  - Sales under existing contracts comprise up to 34% of the R&K LoM planned production
- PEN held discussions with customer base to address recent developments regarding production plans and implications for scheduled deliveries in CY2023 and CY2024
  - Customer base has been respectful of the delay to production plans and have individually indicated a willingness to cooperatively revise the near-term delivery schedules
- Current Inventory of 210,000 lbs. of uranium concentrate
  - Working capital option

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A COMPELLING URANIUM PROPOSITION

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 at Barber
- 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
- The only ASX-listed uranium company providing US production and direct market exposure

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FURTHER INFORMATION

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Appendix 1 – Resources

Lance Projects Resource Estimate as at 31 December 2021[1]

Classification	Tonnes (million)	U_3O_8 (Mkg)	Grade (ppm U_3O_8)	U_3O_8 (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	53.7

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.

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Appendix 2 - Lance Exploration Target Additional Disclosure

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Exploration Target[1]

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 U_3O_8

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

Exploration Target	Tonnes (million)		Grade (ppm eU_3O_8)		eU_3O_8 (mlbs)	
Range	From	To	From	To	From	To
Total	118	145	426	530	104	163

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.

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Appendix 2 - Lance Exploration Target Additional Disclosure

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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.