



5 November 2019

Companies Announcement Office
Via Electronic Lodgement

PENINSULA ENERGY LIMITED PRESENTATION – NOVEMBER 2019

Please find attached a presentation to be made by Peninsula Energy Limited's (**Peninsula**) Managing Director/CEO Mr Wayne Heili at investor sessions in North America, Asia and Australia over the next two weeks.

A copy of the presentation is also available on Peninsula's website at <http://www.pel.net.au> under "Announcements" subsection "Presentations".

Yours sincerely

A handwritten signature in black ink, appearing to read "J Whyte", written over a light grey circular stamp.

Jonathan Whyte
Company Secretary

For further information, please contact our office on +61 8 9380 9920 during normal business hours.



ASX Listed - U.S. Uranium Investment Opportunity

Corporate Presentation | November 2019



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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.

Competent Person Statement

The information in this presentation that relates to Exploration Results, 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 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.

Cautionary & Inferred Resources Notice



The Feasibility Study completed for the Lance Projects includes measured and indicated resources and an assumed resource conversion of 60% (inferred to indicated or greater). The purpose of the Feasibility Study is to demonstrate the Lance Projects economic viability and the robustness of the planned low pH operations over an extended mine life beyond the existing Ross production area.

The Feasibility Study itself is based on various assumptions, including homogeneity of the delineated ore body contained within the Lance Projects. This is considered reasonable by the Company's technical consultants, competent persons and independent external consultants. The Company believes that it has a reasonable basis upon which to prepare and release these Feasibility Study results, particularly given that the Lance Projects have been in operation since December 2015. Whilst the Company considers that all the material assumptions underpinning the Feasibility Study are based on reasonable grounds, there is no certainty that they will prove to be correct or that the outcomes indicated by the Feasibility Study will be achieved.

The Company believes it has a reasonable basis for providing the forward-looking statements and production targets included in this announcement. The material assumptions are included in Appendix 1 of this announcement and in the JORC table disclosures appended. The detailed assumptions regarding the resources are outlined in the ASX announcement released on 17 September 2018.

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 favourable 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 realised. 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 Feasibility Study mine plan, the first 5 years production can be sourced almost entirely from Measured and Indicated Resources. If the Inferred Resources are excluded from the Feasibility Study, 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 that it is reasonable to include Inferred Resources in the Feasibility Study, particularly given that the Lance Projects is an operating project that has been producing uranium for over three 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.

The No.1 ASX-Listed Uranium Investment Opportunity



Flagship asset: Lance Projects in-situ recovery uranium mine in Wyoming, USA

- ☞ Only US uranium ISR mine authorised to use industry leading low pH solution
- ☞ Transition to low pH solution is low cost and underway
- ☞ Ready for rapid re-start to be first to respond to improving market
- ☞ Largest contiguous US uranium ISR mineral resource
- ☞ Only US uranium mining project with long-term sales contracts beyond 2020
- ☞ Only ASX-listed uranium company with direct exposure to US NFWG outcomes
- ☞ Significant debt reduction in progress
- ☞ Compelling valuation metrics vs US listed uranium ISR peers

Use of nuclear power continues to increase in a world that is demanding more low-carbon electric power generation

Corporate Overview

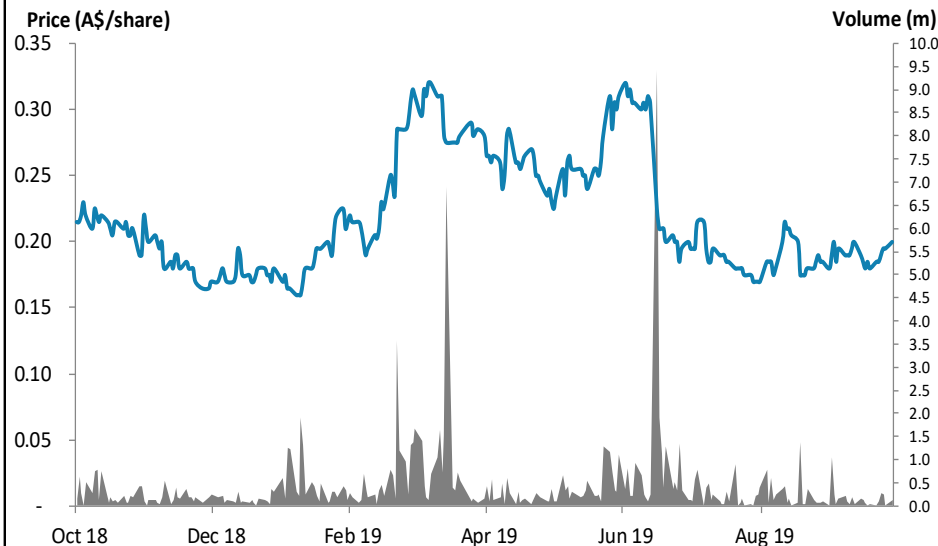


Capital Structure

Shares on issue*	250m
Share price (28-Oct-19)	A\$0.20
Market capitalisation (28-Oct-19)	A\$50m
Enterprise Value (28-Oct-19)	A\$67m
Available Cash (30-Sep-19)	US\$5.7m
Debt (30-Sep-19)	US\$17.0m

Share Price & Volume History

Ticker: ASX:PEN



Shareholding*

Holding (%)



9.6%



9.5%



2.5%



2.3%

Top 20 Shareholders

46.9%

Research Coverage

Patersons	Cam Hardie
Euroz	Michael Emery
H.C. Wainwright & Co.	Heiko Ihle
Roth Capital Partners	Joe Reagor
BMO Capital Markets	Alex Pearce

*Undiluted as at 28 October 2019

Debt Reduction Terms Agreed



Debt Reduction

- ☞ Agreement reached with Lenders¹
- ☞ Proceeds from uranium contract monetisation, when completed, of ~US\$10-11m to be applied to reduce debt

Term & Coupon

- ☞ Revised maturity date of 22 April 2021 if monetisation complete by 30 Apr 2020 (31 Oct 2020 otherwise)
- ☞ Straight term debt, bullet repayment
- ☞ Coupon reduced to 10%

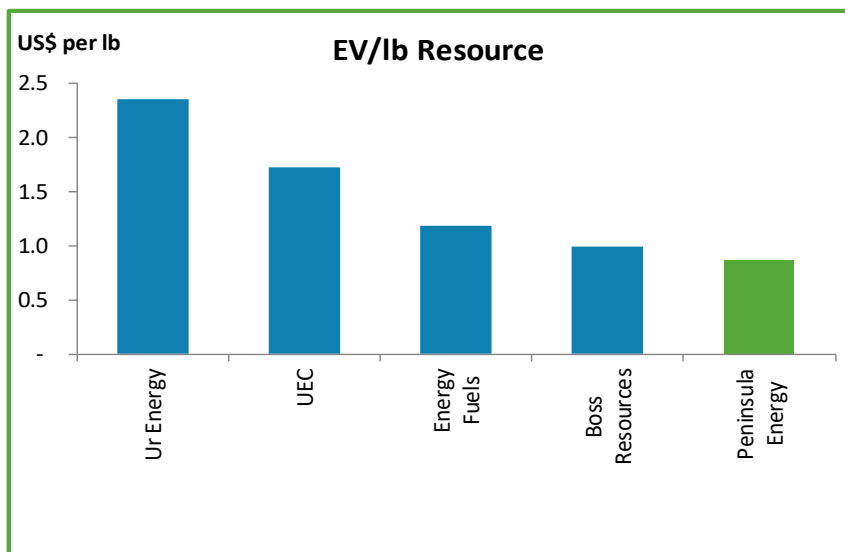
Balance Sheet

- ☞ Debt balance expected to be US\$6-7m after partial contract monetisation is completed
- ☞ Non-current liability on the balance sheet

De-risked balance sheet provides greater financing flexibility when funding for low pH transition & ramp-up occurs

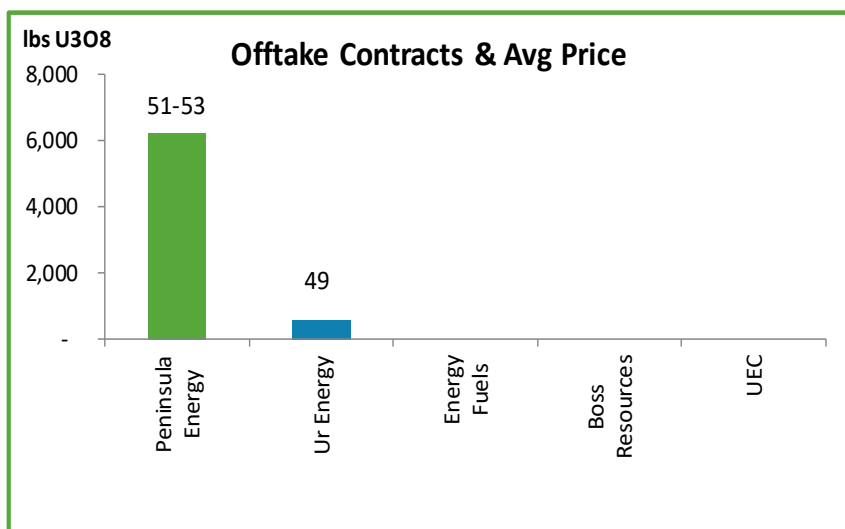
1) Refer to ASX announcement dated 05-NOV- 2019

Investment Upside – Low EV/lb vs Peers



30% to 65% discount to US ISR Peers

- Offers significant upside opportunities

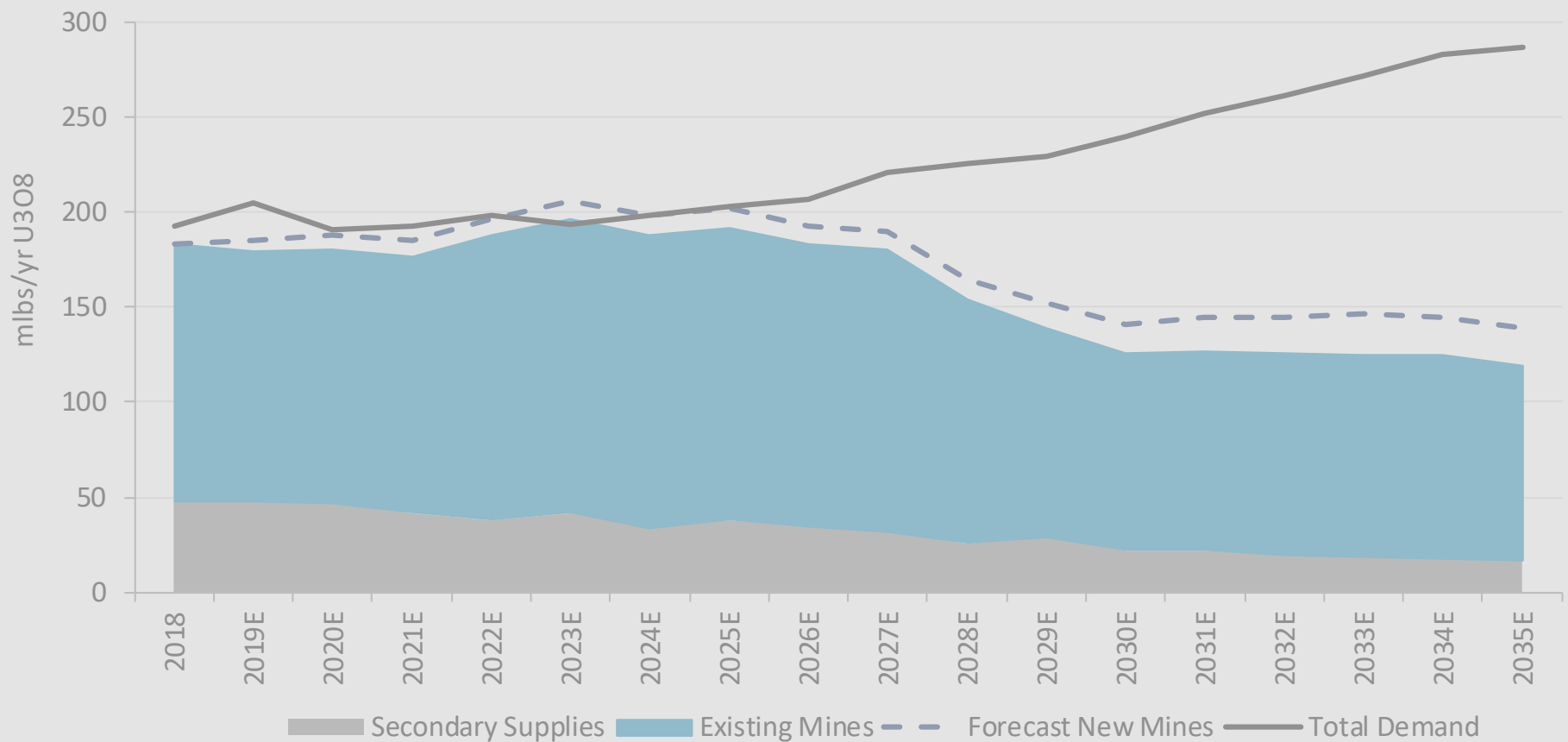


Peer group leading contract revenue base

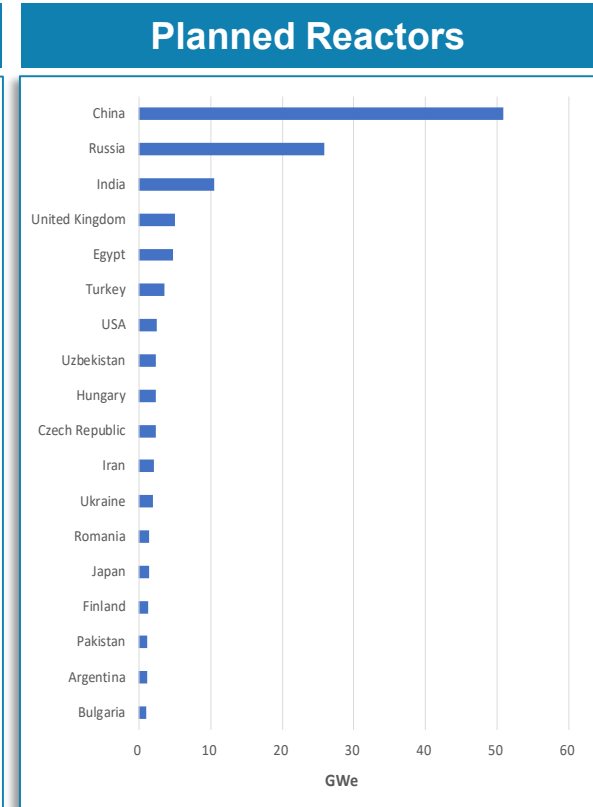
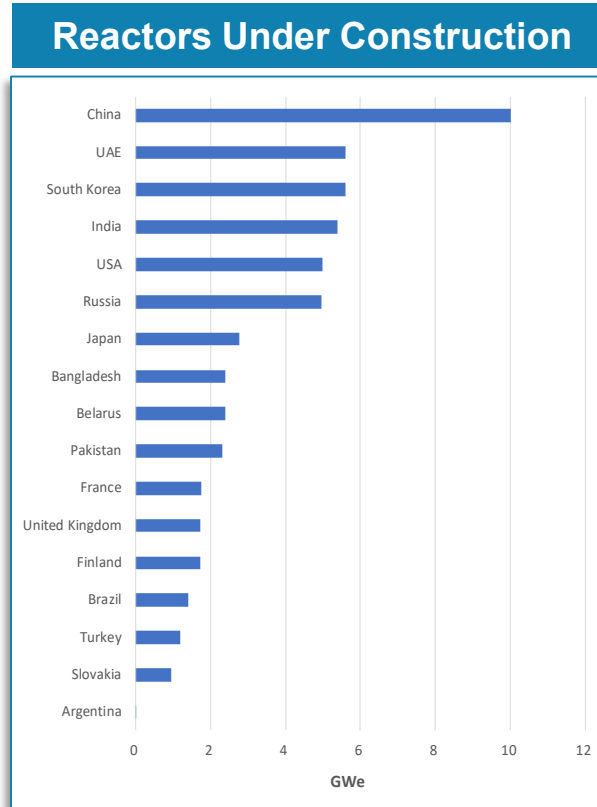
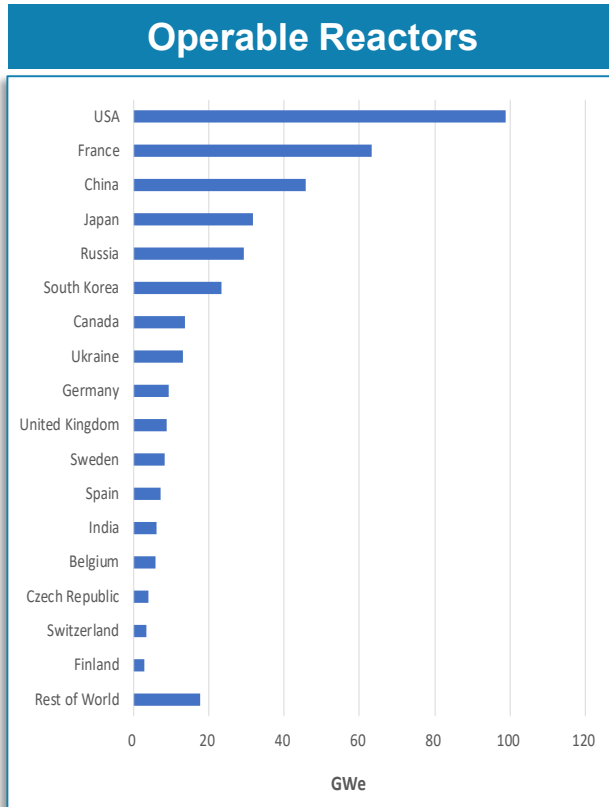
- Investment grade customer base
- In-the-money contracts hold realisable asset value
- Substantial leverage to uranium price recovery with only 20% of FS LOM production under contract



The Uranium Market



Solid Growth in Uranium Demand



444 operable reactors

- 🌀 396 GWe capacity
- 🌀 Requires 176m lbs U3O8 per annum

54 reactors under construction

- 🌀 58 GWe capacity
- 🌀 Requires ~32m lbs U3O8 per annum*
- 🌀 per GWe; initial core based on 2.0m lbs

111 reactors firmly planned

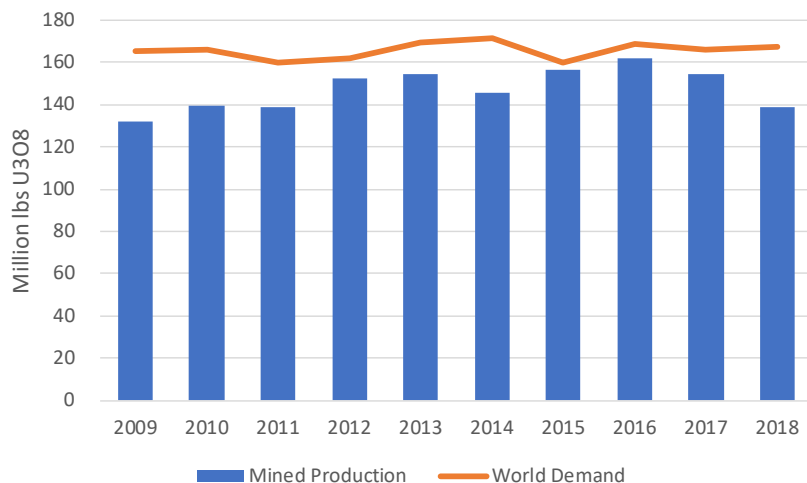
- 🌀 122 GWe capacity
- 🌀 Requires ~61m lbs U3O8 per annum*
- 🌀 >200m lbs U3O8 for initial cores*

Source: World Nuclear Association, as at August 2019

* Annual U3O8 consumption based on 550,000 lbs per GWe; initial core based on 2.0m lbs per GWe



Significant supply reductions¹



Substantial CAPEX to re-start idled mine capacity²

McArthur River	US\$70m (2 yrs.)
Langer Heinrich	US\$80m
Honeymoon	US\$68m

CAPEX to develop new projects is not currently available or warranted

Greenfield projects US\$100's of million

Secondary supplies gradually reducing

Price for uranium conversion services increasing

Demand and price for enrichment SWU will increase as roll-out of new reactors continues



Combination of these factors means that enricher underfeeding becomes less attractive

Government policy and action

US Nuclear Fuel Working Group – recommendations now expected in mid November 2019

Russian Suspension Agreement – up for renewal in CY2020

Possible sanctions on global companies supplying goods or services to the Iranian nuclear program could disrupt the western fuel supply chain

Source: 1) World Nuclear Association; 2) respective company stock exchange filings

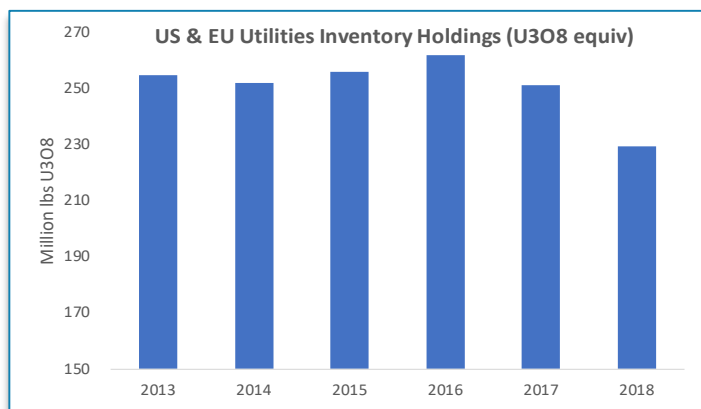
When will the Uranium Price Improve?



No one knows for sure, but watch for these signals:



- When regulatory certainty returns to the US
- Utilities can go to the market with confidence



- As utility inventories reach minimum levels
- Balances down 13% over past 2 years



- When mining companies purchase rather than produce, reducing the amount of physical uranium available for utility needs



- When utilities do not get material offered to them in the quantities they request

The foundation for all of these indicators is being laid right now!

Lance ISR Project | Wyoming, USA

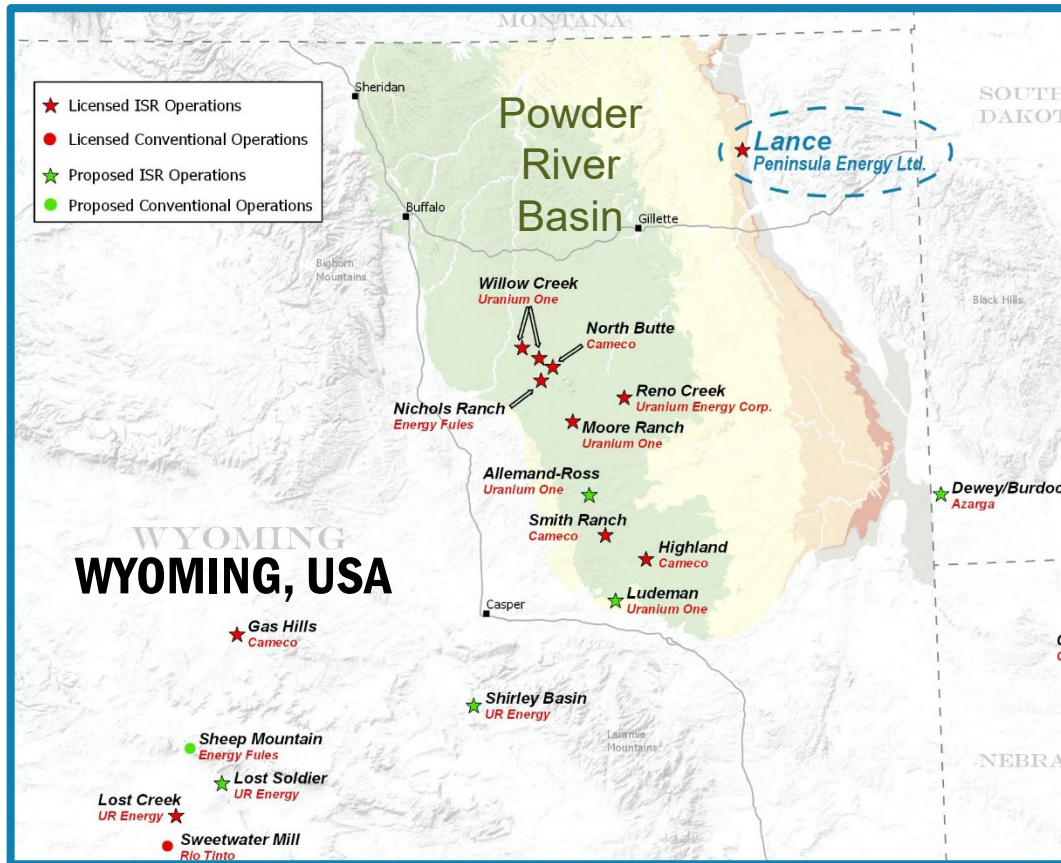
A Premier US Uranium Project



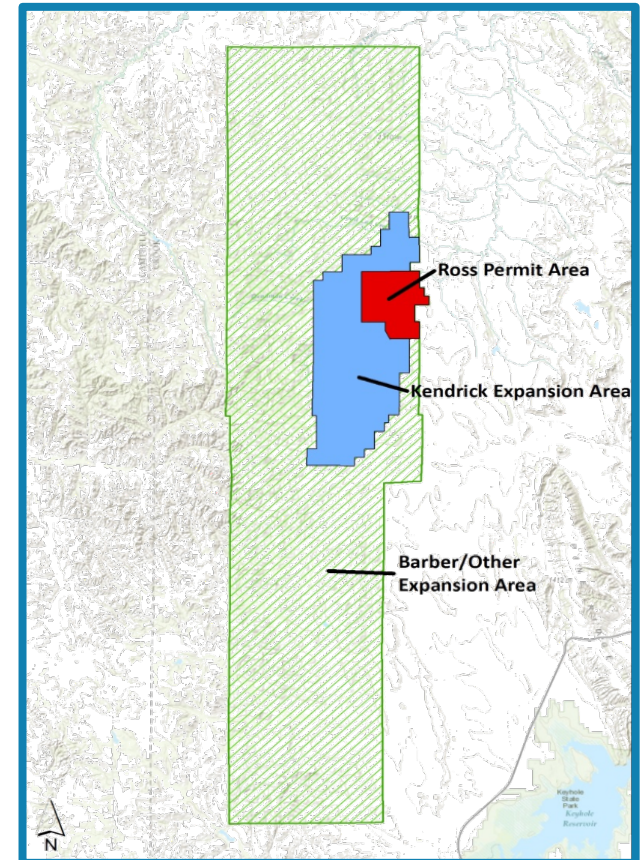
Lance – In a Favourable Jurisdiction



- Wyoming is a leading US uranium extraction jurisdiction, hosting multiple projects; and
- Lance is one of the largest in-size and scale.



Lance Regional Setting



Lance Permit Areas

Lance – Fully Licensed and Developed



Exceptional Asset

- ☉ Lance holds the largest defined uranium resource of any recently producing project in the United States
- ☉ 53.6M lbs U3O8 JORC (2012) compliant resource base²

Scalable Production

- ☉ Lance is licensed to produce up to 3M lbs U3O8 per annum
 - Would be the #1 ISR producer in the US & Top 10 globally
- ☉ Current (Stage-1) plant capacity of 1.15M lbs U3O8 per annum

Restart Ready

- ☉ Two fully developed Mine Units on standby and are available for further recovery operations
- ☉ Recovery operations idled in 2019 due to low level of near term production requirements

² – See Appendix 2

Unlocking the Full Potential of Lance



Peninsula is leading the US industry by transitioning to low-pH ISR

High Potential

- 🌀 Transform the future performance and cost profile
- 🌀 Feasibility Study released in September 2018

Short Timeline

- 🌀 Two main regulatory approvals now completed
- 🌀 Plant and wellfield modifications can be implemented in minimal time following investment decision

Low Cost Optimisation

- 🌀 Modest CAPEX needed for process modifications
- 🌀 Initial low pH operations to occur in existing wellfields



LOM Production

- 33.4 million lbs U₃O₈
- 17 year mine life

Financial Metrics

- LOM AISC of US\$31.77/lb
- NPV8 US\$157M at US\$49/lb

Three Stage Transition & Expansion Plan

Stage	Year	Capacity Mlbs/yr	Expansion CAPEX	Production Cost \$/lb.	AISC \$/lb.
Stage 1	0	1.15	\$5.3M	\$14.67	\$40.58
Stage 2	5	2.3	\$43.1M	\$8.93	\$31.52
Stage 3	7	3.0	\$70.3M	\$9.16	\$30.36

- Each US\$10/lb increase in U₃O₈ price assumption for uncontracted production increases NPV8 by almost US\$100m

Note: 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 realised.

Low pH Implementation Plan



Phase 1

- ✓ Field Demonstrations of Mining and Initial Restoration
- ✓ **Complete**

Phase 2

- ✓ Commercial use of low pH in MU's 1 & 2
- ✓ **Authorised**

Phase 3

- ✓ Field groundwater restoration demonstration
- ✓ Interim Restoration Report (**IRR**) for WDEQ approval
- ✓ **Ongoing Activity**

Phase 4

- ✓ Upon approval of IRR, commercial use of low pH authorised in all future new mine units



🌀 Regulatory Benchmarks

- Completed major amendments for low pH ISR
- Progress & complete Phase 3 demonstrations during 2nd half CY2019

🌀 Low pH Technical De-risking & Optimisation

- Conduct low pH resin optimisation test work and studies
- Evaluate design improvements for fines removal methods
- Revise the design of acid storage and distribution system

🌀 Operational Readiness at Lance

- Two fully developed wellfields with remaining recoverable resources
- Project ready for implementation funding and operational green light

Uranium Sales Portfolio



Only US Uranium Mining Company with a Long-Term Contract Portfolio



☉ Five sales agreements with major utilities

- Weighted sales price between US\$51-53/lb U_3O_8
- Contract portfolio carries through year 2030

☉ Up to 6.2 million pounds U_3O_8 remaining under contract

- 4.2 million lbs U_3O_8 committed deliveries
- Up to 1.9 million lbs U_3O_8 optional at customer election between 2021 & 2026

☉ Material origin clauses allow purchased U_3O_8 for deliveries in CY2020

- Already contracted to purchase 100,000 lbs U_3O_8 for delivery in March 2020 at fixed purchase price of US\$25/lb U_3O_8

☉ Sales portfolio represents ~20% of projected Lance FS LOM production

Conclusion



Take-Away Points



U.S. Domestic Producer

- ⦿ Peninsula is positioned to benefit from U.S. Government initiatives and ongoing corporate activities
- ⦿ The only low pH uranium ISR project in the U.S.

Long Life Project

- ⦿ Lance has the largest defined ISR uranium resource in the US with clear visibility and short timeline to re-start production

Valuable Contract Book

- ⦿ The only U.S. based uranium project with long- term sales contracts extending to 2030

Attractive Valuation

- ⦿ Low EV/lb resource compared to peer group with substantial share price re-rating events over next 12 months
- ⦿ Uranium markets are poised for a strong upward move

Contact Details

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FURTHER INFORMATION

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David Coyne Finance Director / CFO +61 8 9380 9920

Appendix 1 - Board and Management



Board of Directors

- John Harrison, Non-Executive Chairman
- Wayne Heili, Managing Director & CEO
- David Coyne, Finance Director & CFO
- Harrison Barker, Non-Executive Director
- Mark Wheatley, Non-Executive Director

Capital Markets

Exec. Leadership & Technical

Finance & Risk Management

Nuclear Fuel Markets

Mining CEO & ISR Technical

Management Team

- Ralph Knode
- David Hofeling
- Mike Brost
- Jay Douthit
- Mike Griffin

CEO USA

CFO USA

VP Geology USA

VP Operations USA

VP Permitting, Regulatory & Environment USA

Appendix 2 – Resources & Competent Person Statement



Lance Projects Resource Estimate as at 31 December 2018

Classification	Tonnes (million)	U3O8(kg)	Grade (ppm U3O8)	U3O8(lbs)
Measured	3.4	1.7	487	3.7
Indicated	11.1	5.5	495	12.1
Inferred	36.2	17.2	474	37.8
Total	50.7	24.4	479	53.6

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.