



29 January 2019

Companies Announcement Office
Via Electronic Lodgement

PENINSULA ENERGY LIMITED PRESENTATION – JANUARY 2019

Please find attached a copy of a presentation to be made by Peninsula Energy Limited's Managing Director/CEO Mr Wayne Heili at investor sessions in Europe this week.

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

Yours sincerely

A handwritten signature in black ink, appearing to read "J Whyte", is positioned above the typed name of the signatory.

Jonathan Whyte
Company Secretary

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

EXPANDING U.S. URANIUM PRODUCTION CAPACITY

Corporate Presentation | January 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 and Metallurgical Results at Peninsula's Lance Projects is based on information compiled by Mr. Jim Guilinger. Mr. Guilinger is a Member of a Recognised Overseas Professional Organisation included in a list promulgated by the ASX (Member of Mining and Metallurgy Society of America and SME Registered Member of the Society of Mining, Metallurgy and Exploration Inc). Mr. Guilinger is Principal of independent consultants World Industrial Minerals. Mr. Guilinger has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are 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. Guilinger 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.

Investment Criteria	Peninsula
Active US uranium production assets – low pH transformation in progress	
Long term sales contract protection	
Direct exposure to Section 232 outcomes	
Strong leverage to rising uranium market price	
Ability to rapidly expand production capacity	
Low current CAPEX requirements	
Experienced technical, commercial and financial team	
Attractive valuation to ISR peers	

Capital Structure

Shares on issue*	245m
Share price (18-Jan-19)	A\$0.180
Market capitalisation (18-Jan-19)	A\$44m
Enterprise Value (18-Jan-19)	A\$58m
Available Cash (31-Dec-18)	US\$7.5m

Shareholding* Holding (%)

RESOURCE CAPITAL FUNDS	22.9%
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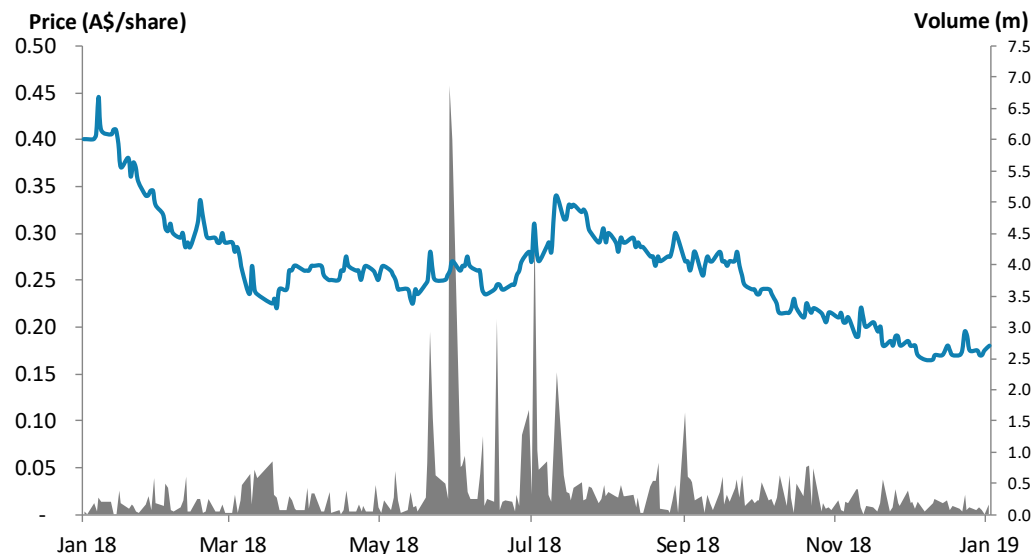
PALA	11.5%
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orano	2.4%
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COLLINS ST VALUE FUND	2.1%
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Top 20 Shareholders 53.4%

Share Price & Volume History Ticker: ASX:PEN



Research Coverage

H.C. Wainwright & Co.	Heiko Ihle
Roth Capital Partners	Joe Reagor
BMO Capital Markets	Alex Pearce
Numis	Justin Chan
VIII Capital	Dave Talbot

*Undiluted as at 18 January 2019

- **Develop and operate long-life, low-cost production assets underpinned by long-term product sales contracts**

Sales & Marketing

- Valuable long term sales contracts provide financial foundation
 - Source of current/ongoing cash revenues

Core Asset

- Lance contains resources of 53.9M lbs of U3O8²
- Currently in production

Step Change for Lance

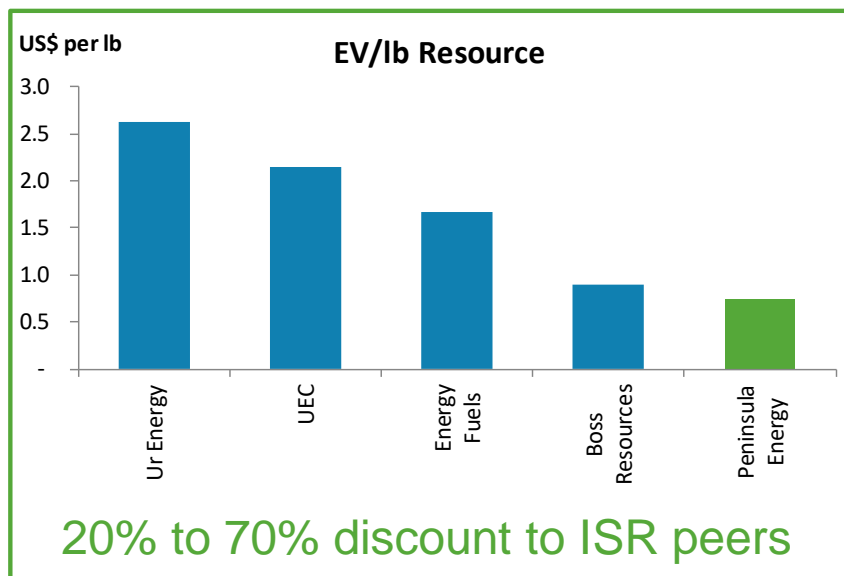
- Conversion to low pH ISR operations in 2019/2020
 - Set to transform performance and cost profile

Growth

- Building core production capacity for the improving market

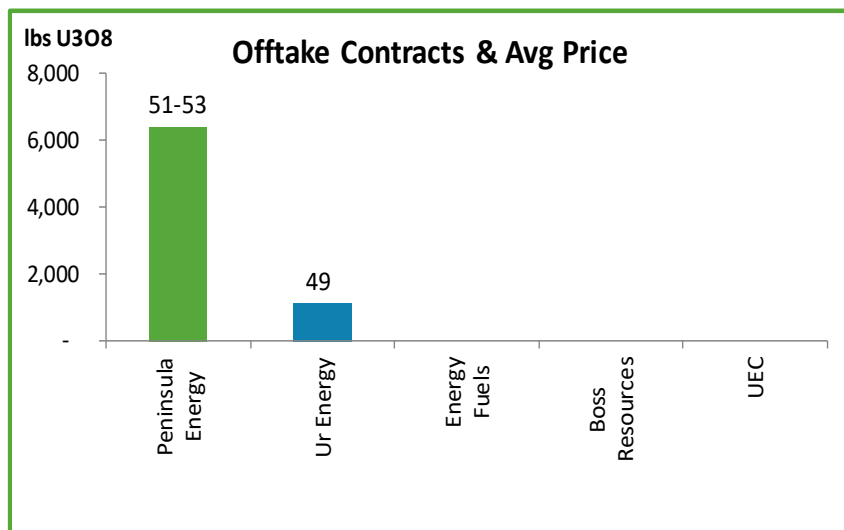
- **Our Vision: Realising 1st quartile cost basis at our Lance Project**

2 – See Appendix 2



Imminent share price re-rate events in 2019

- Completion of low pH permit amendments
- Completion of low pH field trial
- US Section 232 decision



Peer group leading revenue base

- Investment grade customer base
- Predictable base revenue
- Only 20% of LOM production under contract – substantial leverage to uranium price recovery

Lance ISR Project | Wyoming, USA

- *Wyoming is a “can do” state*



Exceptional Asset

- Lance holds the largest defined uranium resource of any currently producing project in the United States
- 53.9M lbs U3O8 JORC (2012) compliant resource base²

Home-grown Success

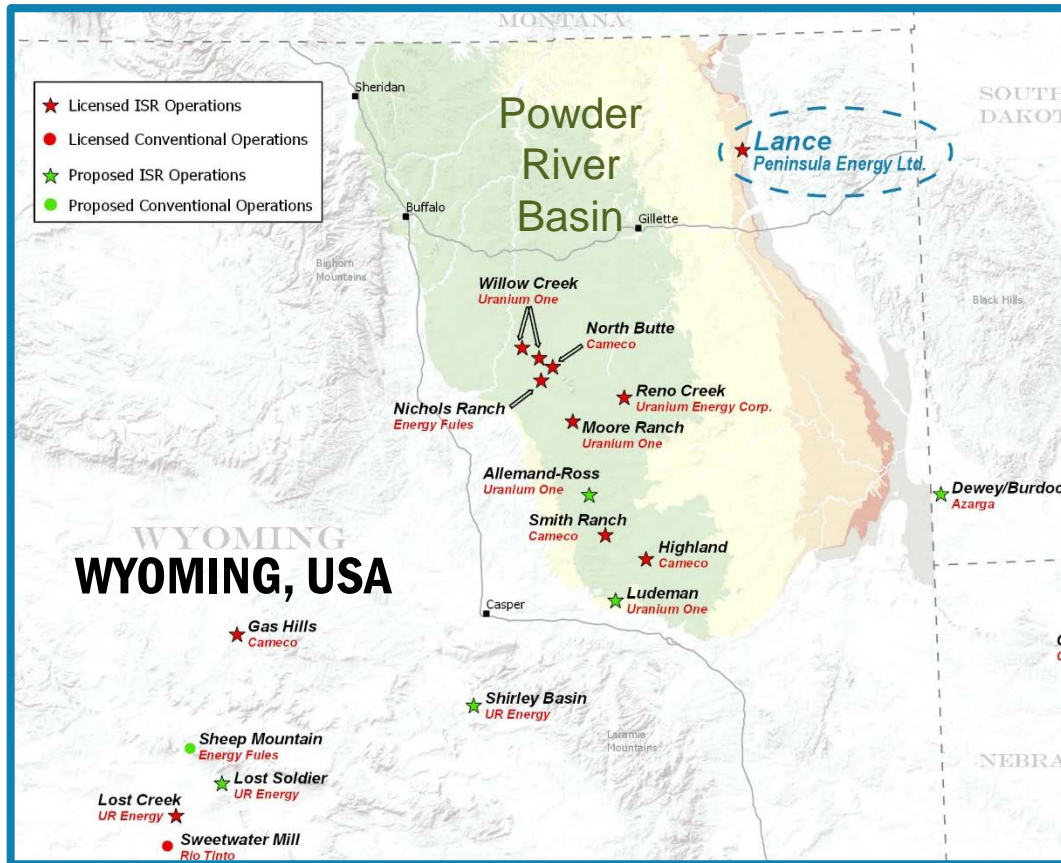
- Peninsula developed the Lance Project from conception to a producing asset
- Spent US\$140M over 12 years, with a current EV of US\$40M

Scalable Production

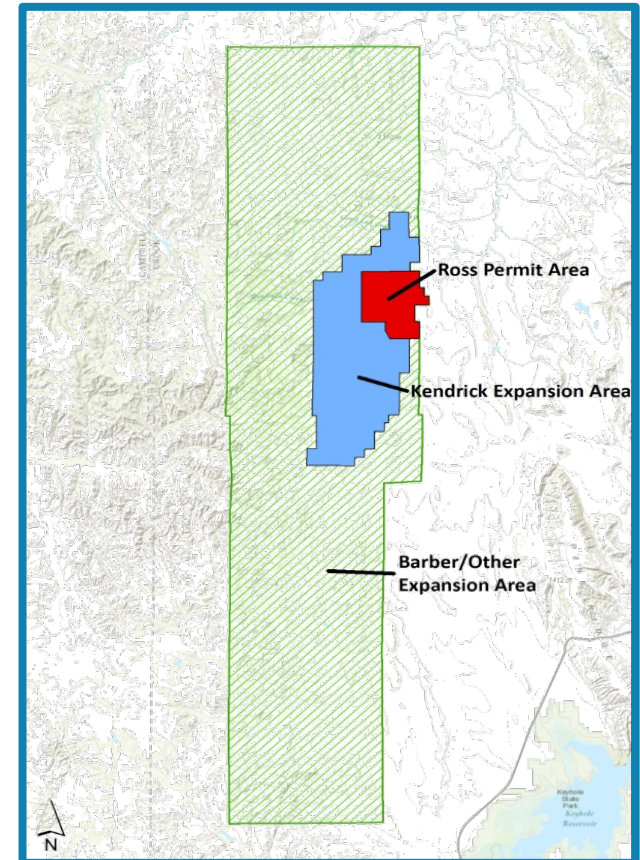
- Lance is licensed to produce up to 3M lbs U3O8 per annum
 - Would be the No.1 producer in the US and Top 10 globally
- Current (Stage-1) plant capacity of 1.15M lbs U3O8 per annum

² – See Appendix 2

- Wyoming is a premier US uranium extraction jurisdiction, hosting multiple licensed facilities



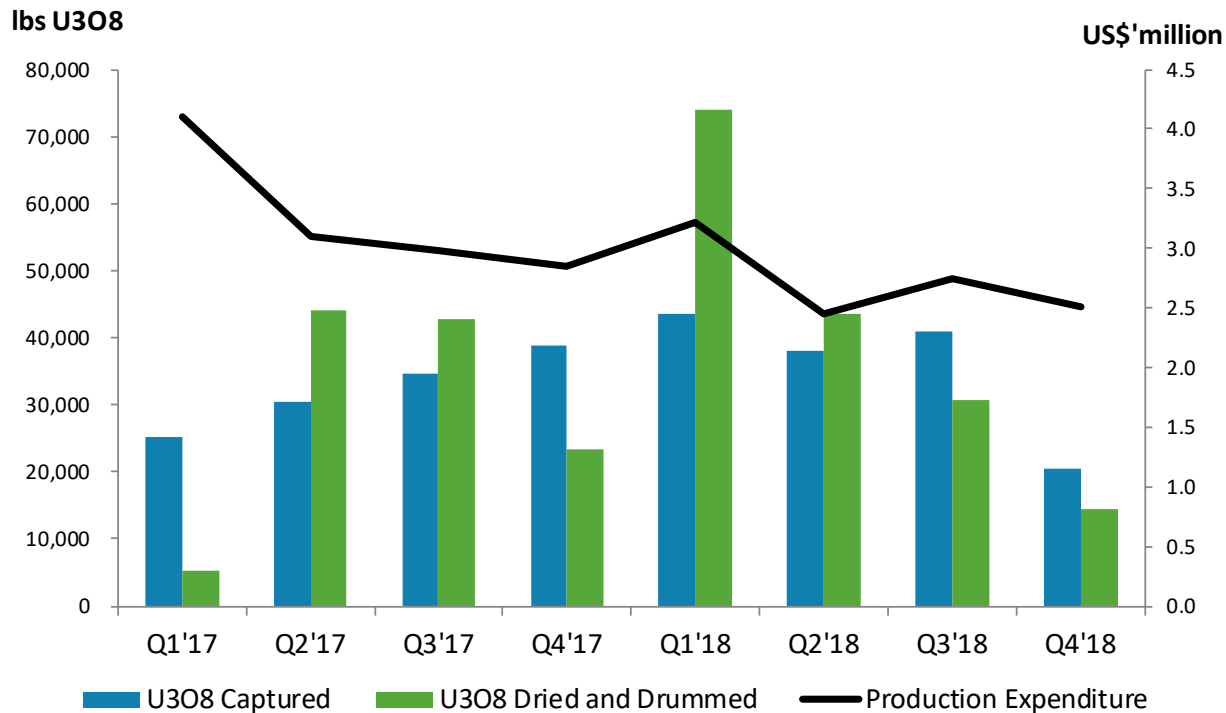
Lance Regional Setting

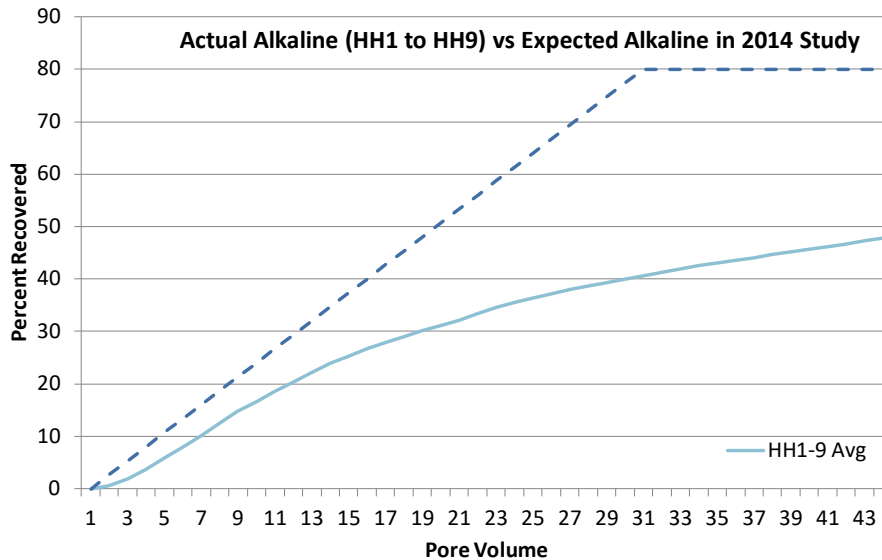


Lance Permit Areas

- **Demonstrating cost control while continuing production during low pH transition**
 - FY19 production guidance of 90,000 – 110,000 lbs
 - Production significantly cut back to preserve developed well fields for low pH operations
 - Tightly controlled production expenditures

Quarterly Production and Expenditure





- Production commenced Dec-2015
- Current mining operations use an alkaline lixiviant
- Uranium recoveries using alkaline not meeting pre-mining targets

Our response

Mineralogy and leach chemistry research initiative
Amendment requests to permit use of low pH lixiviants
Low pH Feasibility Study
Low pH Field Demonstration

- Low pH ISR transformation initiative is being actively advanced

High Potential

- Set to transform the performance and cost profile
- Feasibility Study released in September 2018
- Low pH field demonstration commenced in December 2018

Short Timeline

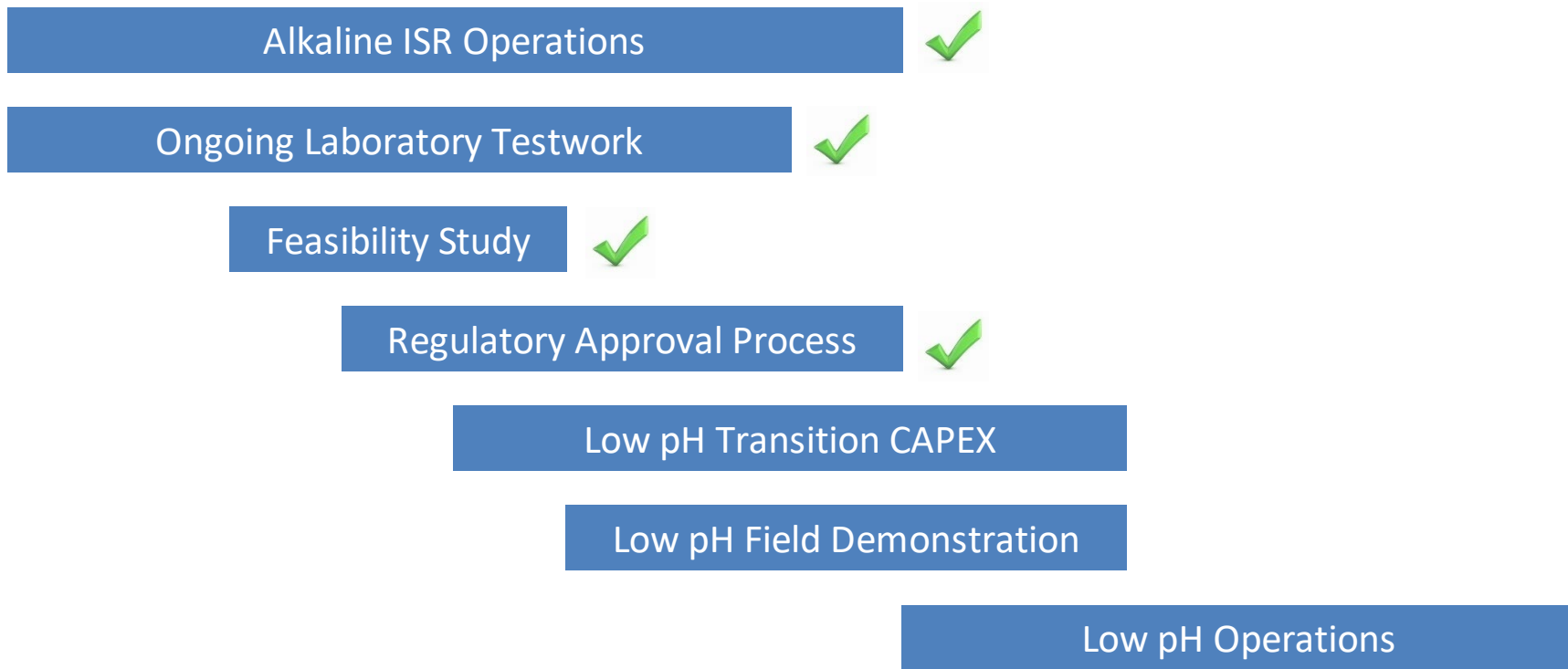
- Permit and licence amendments submitted to regulator and under review. All approvals expected in mid-CY2019
- Plant and wellfield modifications can be implemented while production from alkaline ISR operations continues

Low Capital Cost

- \$5.3M CAPEX required for process equipment modifications
- Initial low pH operations will occur in existing wellfields

Timeline for Low pH ISR Transformation

Q3 CY17 Q4 CY17 Q1 CY18 Q2 CY18 Q3 CY18 Q4 CY18 Q1 CY19 Q2 CY19 Q3 CY19 Q4 CY19 Q1 CY20 Q2 CY20 Q3 CY20 Q4 CY20

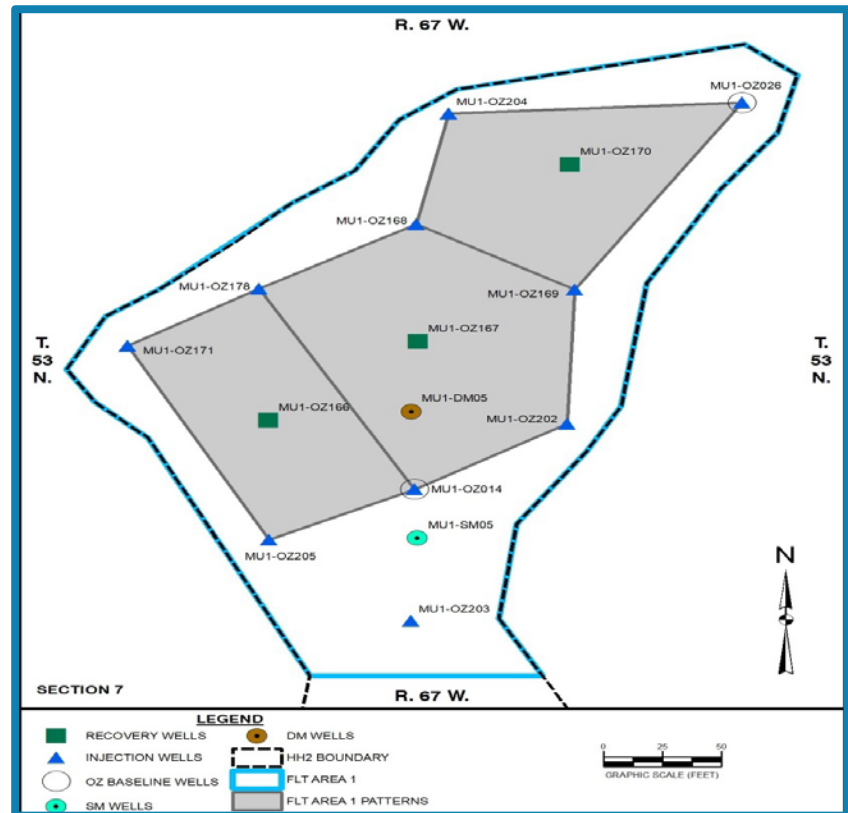


- Permit to Mine amendment request entered public notice and review process in Dec-18 signalling the completion of regulator’s review
- Source Materials License amendment request formally submitted in Oct-18. Regulator’s review is advancing

Lance Low pH Field Demonstration

- Approved by regulators in Nov-2018
- Trial operations started Dec-2018
- Three production patterns in test area
- Planned 6-month test duration

Sulfuric Acid Addition Pump



Test Pattern Map (in MU-1)

LOM Production

- 33.4 million lbs U3O8
- 17 year minelife

Financial Metrics

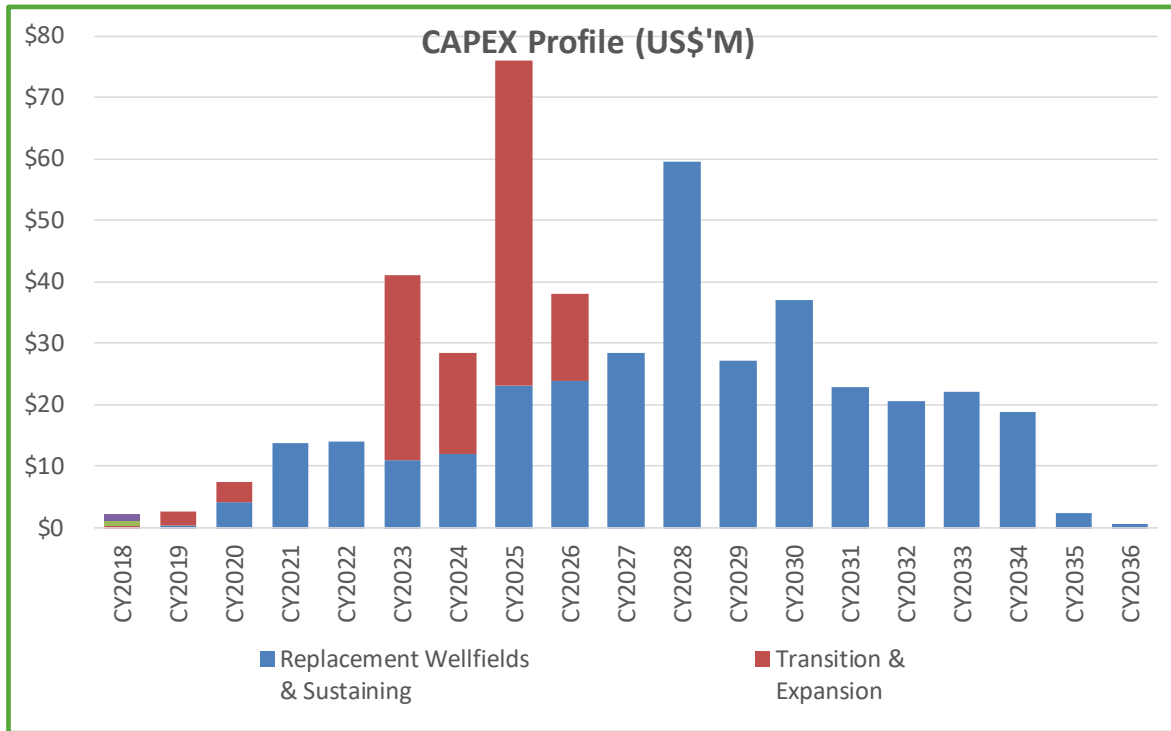
- LOM AISC of US\$31.77/lb
- NPV8 US\$157M at US\$49/lb

Three Stage Expansion Plan

Stage	Year	Capacity Mlbs/yr	Expansion CAPEX	Production Cost \$/lb.	AISC \$/lb.
Stage 1	2019	1.15	\$5.3M	\$14.67	\$40.58
Stage 2	2024	2.3	\$43.1M	\$8.93	\$31.52
Stage 3	2026	3.0	\$70.3M	\$9.16	\$30.36

Very low conversion CAPEX of only US\$5.3M

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.

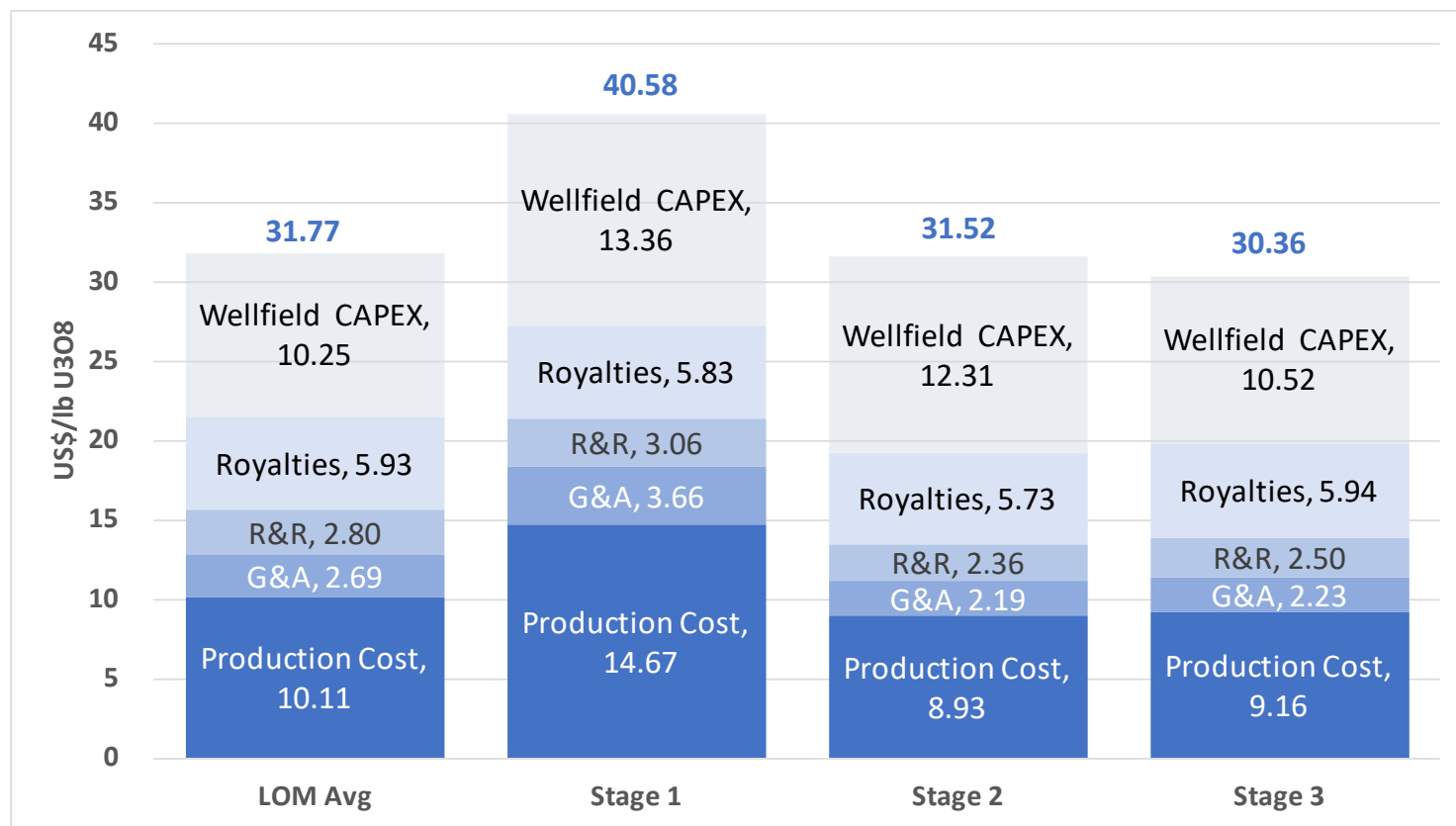


- Transition US\$5.3M
- Stage 2 exp. 2023/24
- Stage 3 exp. 2025/26
- Tight +/- 5 to 10% range of CAPEX accuracy
- Includes average contingency of 5.8%

FS CAPEX cost estimates maintain elements of conservatism

Opportunities to reduce LOM wellfield development costs identified

FS Outcomes: All-in Sustaining Cash Costs for LOM and by Stage



- Comparative basis to Kazakhstan type low pH ISR (ie, exclude royalties & local taxes, rest. & rehab, disposal wells for rest. & rehab and permitting/regulatory costs)
 - Stage 1: \$28.87/lb U₃O₈; Stage 2: \$21.03/lb U₃O₈; Stage 3: \$19.60/lb U₃O₈

Note: All-in sustaining cash costs **exclude** CAPEX for low pH transition, Stage 2 expansion and Stage 3 expansion and are calculated as at the steady state production rate for each respective stage

Technical Basis

- Over 12 months of laboratory tests completed
- More rigorous test basis than prior alkaline FS
- Almost 50% of global uranium mined using this method

Favourable Ore Body

- Carbonate content <2.0% - great for use of mild acid
- 53.9m lbs U₃O₈ resource
- Staged expansion flexible to align to uranium market needs

Leveraged to U₃O₈ price

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

Regulatory Pathway

- Substantial progress made in CY18; Clear pathway ahead

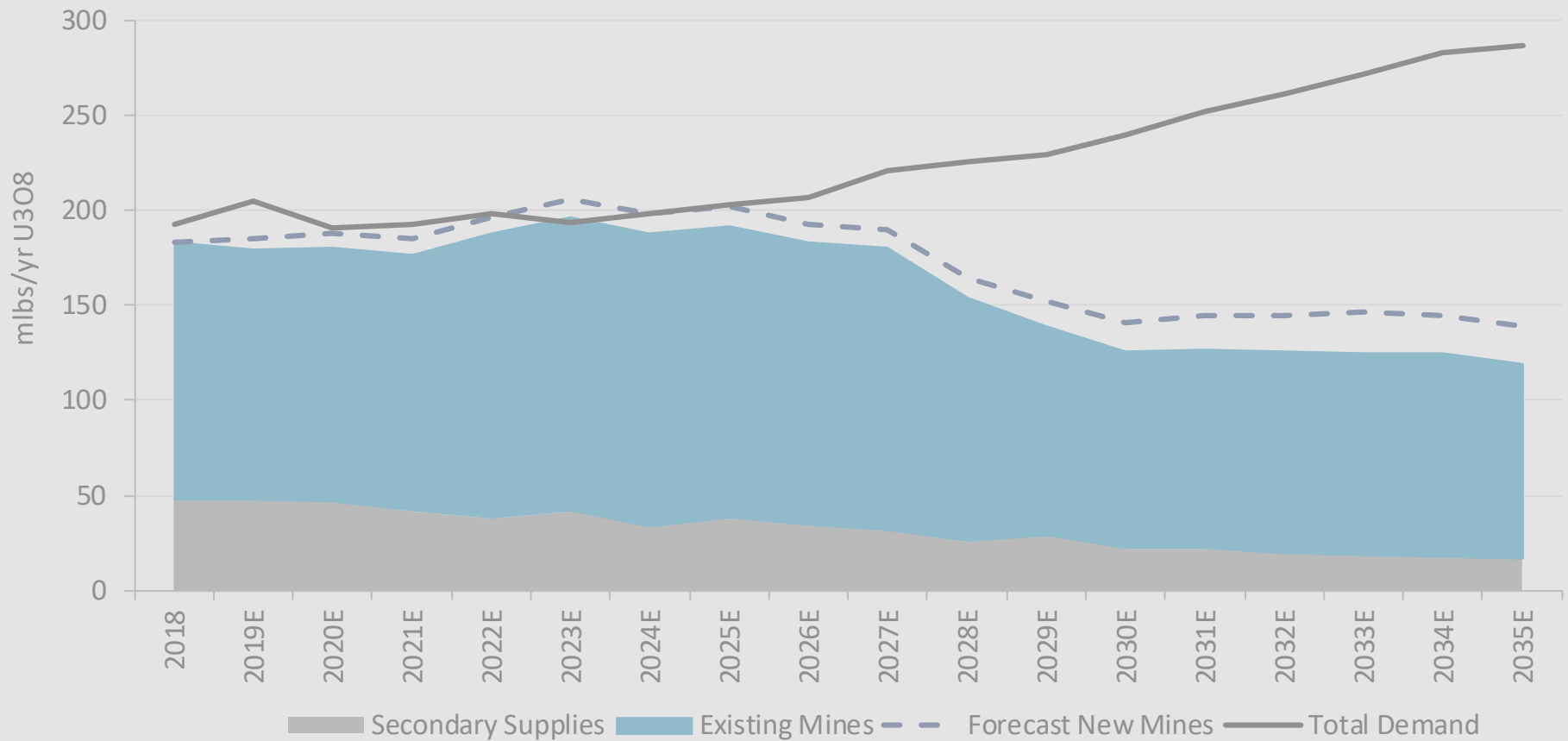
Cost Competitive

- \$31.77 / lb U₃O₈ LOM all-in sustaining cash cost
- \$34.00 / lb U₃O₈ break-even price for uncontracted production

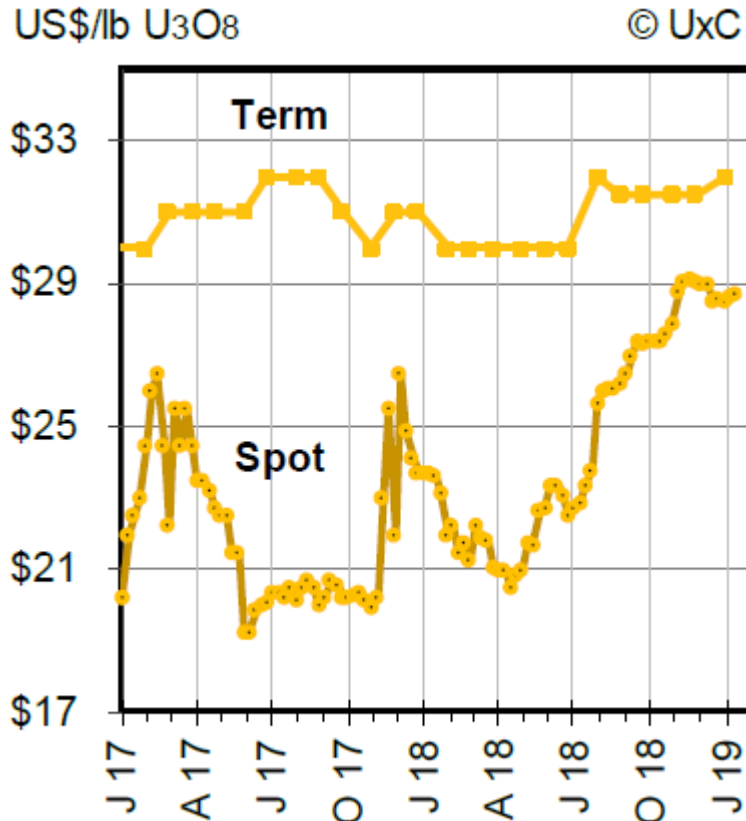
Existing Contracts

- 20% of LOM production already under contract
- Contracted revenue stream to assist financing activities

The Uranium Market



- The uranium markets have reached a turning point



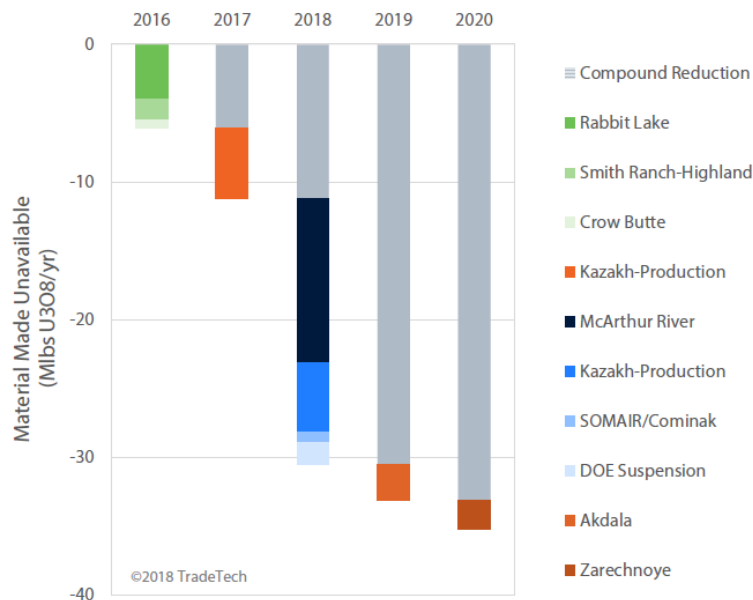
- Uranium is sold in spot & term markets
- Spot market up sharply since mid-2018
- Spot market supply depth is being tested by producer/investor buying
- Term market activity expected to open up in 2019
- Both markets are still well below pre-Fukushima levels

Source: UxC, LLC

Both Supply & Demand Factors Favour Higher Uranium Prices in 2019

Supply: Global supply restraint

- The producers keep reducing production target levels – now off 20% or 30M lbs U3O8/yr
- Available inventory stockpiles are decreasing



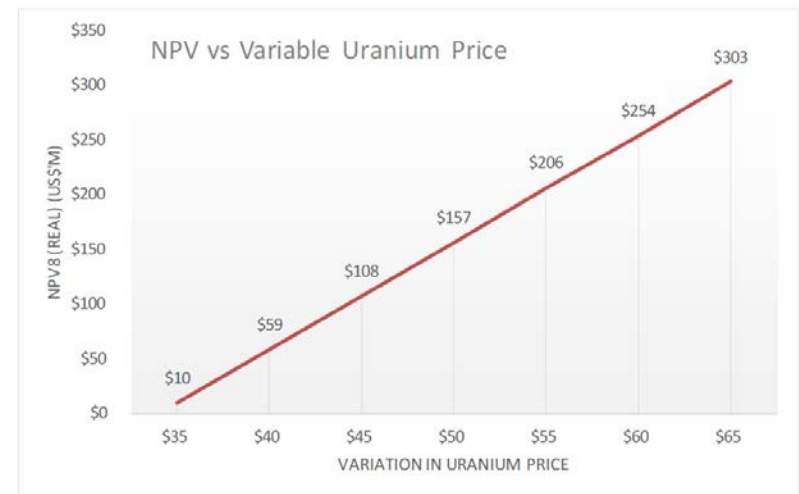
Source: TradeTech

- Excludes Langer Heinrich C&M announced by Paladin on 25 May 2018

Demand: New demand is driving the market up

- Primary producers are buying big spot volumes; Cameco purchasing 10-12M lbs U3O8 in CY19
- New investment funds are buying and holding physical uranium inventories
- Forecasts continue to show primary/utility demand growth well beyond 2030

Lance is leveraged to rising prices



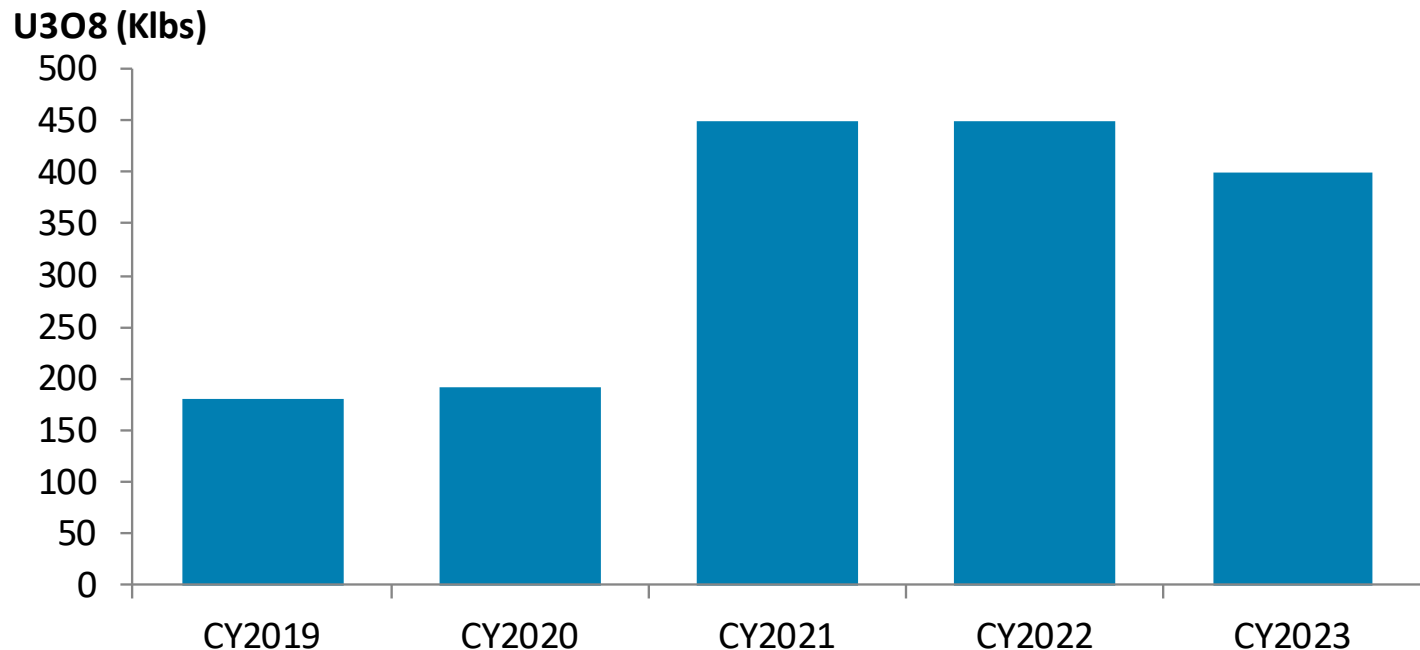
Uranium Sales Portfolio



- **Five sales agreements with global customer base**
 - Weighted sales price between US\$51-53/lb U₃O₈
 - Contract portfolio carries through year 2030
- **Up to 6.4 million pounds U₃O₈ remaining under contract**
 - 4.5 million pounds U₃O₈ committed deliveries
 - Up to 1.9 million pounds U₃O₈ optional at customer election between 2021 and 2026
- **Material origin clauses allow blending production with purchased U₃O₈**
 - Contracted to purchase 225,000 lbs U₃O₈ as needed in 2019/20 at fixed purchase prices averaging US\$23.69/lb U₃O₈
- **Portfolio represents ~20% of projected Lance LOM production**

- Near and mid-term sales contracts underpin Peninsula's business
- CY2018 completed deliveries of 225,000 lbs of U3O8

5-Year Sales Profile (*)



(*) Committed deliveries only and excludes optional delivery quantities that customers may elect from 2021 onwards.

Conclusion

“Peninsula will be one of the most exciting uranium production companies to follow in 2019.”

Wayne Heili – CEO



Amendment Progression

- Permit to Mine public comment period ends in late Jan'19
- Source Material License amendment request under review

Testing & Planning

- Conduct low pH field demonstration in H1 CY2019
- Continue alkaline based mining at reduced rates until low pH approved

Mine Unit 3 Funding

- Investment in Mine Unit 3 wellfields to commence H2 CY2019
- MU3 sustaining development CAPEX cost ~US\$9M
- Funding options being considered

Customer Base

- Continue to engage with our existing & potential new customers
- Seek opportunities for new long term contracts – at acceptable prices

U.S. Domestic Producer

- Peninsula is well positioned to benefit from current market trends and initiatives, including Section 232 outcomes

Long Life Project

- Lance has the largest defined US uranium resource currently in production
- Low pH transition to transform production and cost base

Valuable Contract Book

- Up to 6.4M lbs sales at weighted price between **US\$51-53/lb** U_3O_8

Financial Strength

- Robust cash position with peer group leading revenue base

Attractive Valuation

- Low EV/lb resource compared to peer group with substantial share price re-rating events forecast throughout 2019

Contact Details

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FURTHER INFORMATION

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Board

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

CEO USA

David Hofeling

CFO USA

Mike Brost

VP Geology USA

Jay Douthit

VP Operations USA

Mike Griffin

VP Permitting, Regulatory & Environment USA

Appendix 2 – Resources & Competent Person Statement

Lance Projects Resource Estimate as at 31 December 2017

Classification	Tonnes (million)	U3O8(kg)	Grade (ppm U3O8)	U3O8(lbs)
Measured	3.8	1.8	488	3.9
Indicated	10.9	5.4	495	11.9
Inferred	36.3	17.3	476	38.1
Total	51.0	24.5	479	53.9

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.