

25 May 2018

Companies Announcement Office Via Electronic Lodgement

COMPANY PRESENTATION

Please find attached a copy of the presentation being made by Peninsula Energy Limited's Managing Director/CEO Mr Wayne Heili at a shareholder information session to be held today in Perth as well as at shareholder information sessions to be held in Melbourne on Tuesday 29 May and Sydney on Friday 1 June. For further details please refer to the ASX announcement released on 18 May 2018.

A copy of the presentation will also be available on our website at www.pel.net.au.

Yours sincerely

Jonathan Whyte Company Secretary

May/June 2018 Investor Presentations

Australia | Wayne Heili, MD/CEO







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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.

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 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.

The information in this presentation that relates to Exploration Results, Mineral Resources or Ore Reserves at Peninsula's Karoo projects is based on information compiled by Mr. George van der Walt. Mr van der Walt is a Member of the South African Council for Natural Scientific Professions (SACNASP)). Mr van der Walt is a Geological Consultant and Director of Geoconsult International (Pty) Ltd. Mr van der Walt 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 Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. van der Walt consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

Peninsula Energy's Defining Strengths



World Class Management

- Experienced technical, financial and commercial team
- Generating improving quarter over quarter results

Large Scale Project

- Long-life Lance Project in USA
- The Lance Project contains resources of 53.5 mlbs of U3O8¹

Scalable Production

- Lance is licensed to produce up to 3m pounds per annum
- 'Game Changing' low pH lixiviant initiative

Financial Strength

- Strong cash position with reliable income generation
- · Spending discipline

Valuable Contract Book

- Long-Term sales contracts underpin Peninsula's business
- Annual product sales scheduled through 2030

Agenda



- 1. Corporate Overview
- 2. Activity Summary
- 3. Lance Production Results
- 4. Unlocking the Potential at Lance
- 5. Global Uranium Market
- 6. U.S. Uranium Market
- 7. Investment Highlights



Column Leach Test Apparatus at Lance

Corporate Overview



Capital Structure	
Shares on issue*	234m
Share price (18-May-18)	A\$0.270
Market capitalisation (18-May-18)	A\$63m
Enterprise Value (18-May-18)	A\$69m
Cash and Security Deposits (31-Mar-18)	US\$28.7m

Shareholding*	Holding (%)
RESOURCE CAPITAL FUNDS ₀	22.5%
GLOBAL X	12.7%
PALA	11.3%
BLACKROCK	4.8%
AREVA	2.5%
Top 20 Shareholders	65.3%



March Quarter Share Performance

- Average Volume: 238k shares / day
- Global X URA Index Fund impact

^{*}Undiluted as at 18 May 2018

Activity Summary



Lance Projects

- Production results improved for fourth consecutive quarter
- Low pH transition actively underway

Corporate

Convertible note debt partly repaid and extended by 2 years

Sales & Marketing

- 125,000 lbs U₃O₈ sold in 1Q18 (revenue of US\$5.4m)
- US\$19.0m (net) received from contract transaction

Karoo Divestment Process

Withdrawal from any further development or progression activities

Quarterly Cost Performance



Spending discipline has resulted in substantially lower quarterly cash outflows

Payments for: (US\$'000)	Actual Jun Qtr CY17	Actual Sep Qtr CY17	Actual Dec Qtr CY17	Actual Mar Qtr CY18	F'cast Jun Qtr CY18
Exploration & Evaluation	213	270	185	169	300
Development & PPE	2,258	1,106	537	786	450
Production	3,149	2,983	2,847	3,219	2,700
Sales, Admin & Corporate (1)	227	626	361	601	500
Staff (Corporate)	289	279	253	288	300
	6,136	5,264	4,183	5,063	4,250

Unlocking Value from Sales Contracts

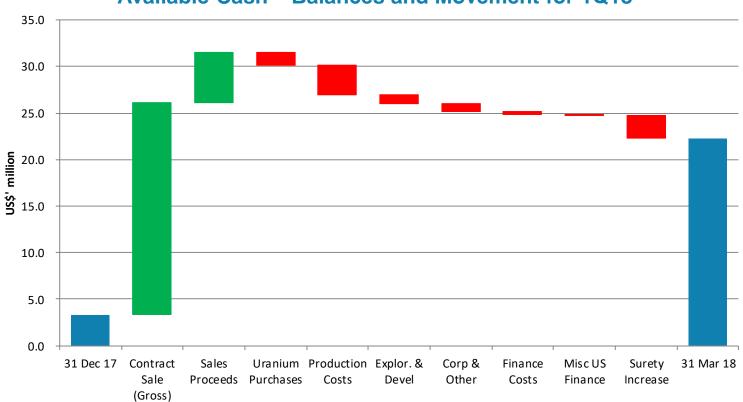


- US\$19 million (net) generated through contract transaction
 - Advances cash receipts from future dates to present
 - Reduces delivery obligations during Lance transition process
- Significant contract portfolio carries through year 2030
 - Up to 6.5 million pounds U₃O₈ remaining under contract through 2030
 - 4.6 million pounds U₃O₈ committed deliveries through 2030
 - Up to 1.9 million pounds U₃O₈ optional at customer election between 2021 and 2026
 - Term contracts weighted price between US\$51-53/lb U₃O₈
 - Next scheduled sale: First week of October 2018

Strong Corporate Financial Position





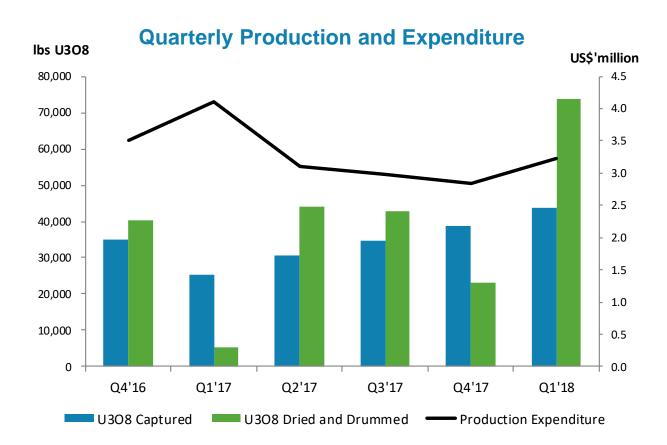


- Gross proceeds from contract sale US\$22.8 million (includes US\$3.8m VAT)
- US\$5.4 million sales proceeds received during the quarter
- On 20 April, 2-year extension and re-structure of Con Note signed with RCF and Pala
- Principal repayment of US\$3.0 million made (20 Apr), reducing Con Note debt to US\$17 million

Lance - Improved Production Results



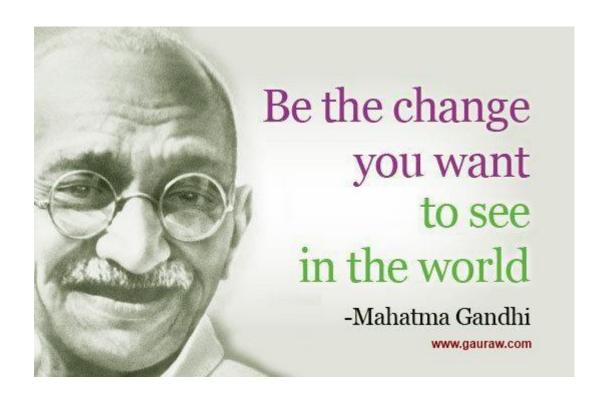
- 12% Increase on prior Quarter Production
 - 43,638 lbs produced, 73,864 lbs dried & drummed in the quarter
 - Production in first two mine units during 1Q18
 - MU-1 production subsequently suspended
 - Header house #10 construction nearing completion



Two Approaches to Change the Outcome



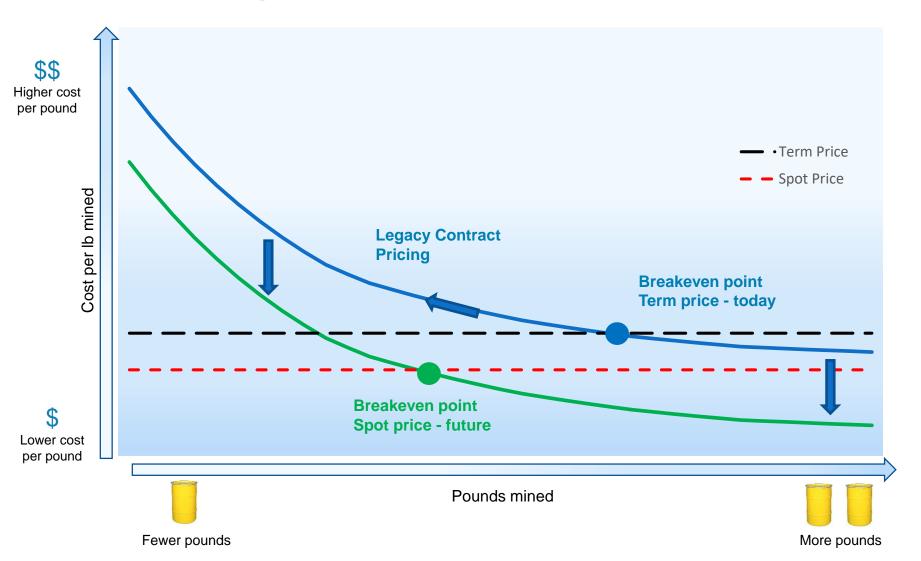
- 1. Adjust to the Market
- 2. Adjust the Market



Approach #1: Adjusting to the Market



Operating Above the Breakeven Point Just to Survive



Unlocking the Full Potential of Lance



Low pH ISR transformation initiative

High Potential

- ✓ Potential to transform the performance and cost profile
- ✓ Permit to Mine amendment request submitted

Short Timeline

- ✓ Permit and licence amendments expected mid-CY2019
- ✓ Continued production from alkaline ISR operations

Low Capital Cost

- ✓ CAPEX for minor modifications = Minimal
- ✓ Technical studies in-progress completion expected mid-CY2018

Repositioning the Cost Curve

- The ISR Lixiviant Selection Paradigm



Alkaline Lixiviants

pH > 7.0, oxidant required, bicarbonate levels vary

Low pH (acidic) Lixiviants

• pH < 2.0 via sulfuric acid, aggressive chemistry, natural oxidant

Both work. How do you decide?

- A. Metallurgical test work
- B. Uranium mineralogy
- C. Host rock composition
- D. Geographic considerations
- E. Regulatory considerations
- F. All of the above

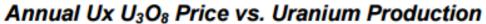
The Geography of Lixiviant Selection

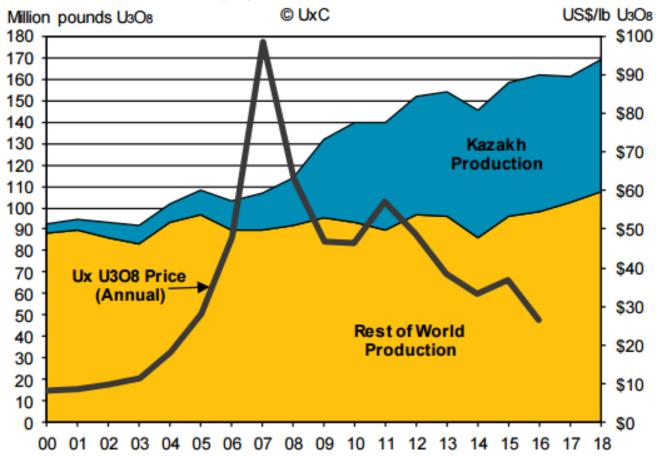


- Countries that use Alkaline Lixiviants for Uranium ISR
 - United States
- Countries that use Low pH (acidic) Lixiviants
 - Kazakhstan
 - Australia
 - Uzbekistan
 - Russia
- Countries that use both Alkaline and Low pH (acidic) Lixiviants
 - China

Kazakh Production Growth





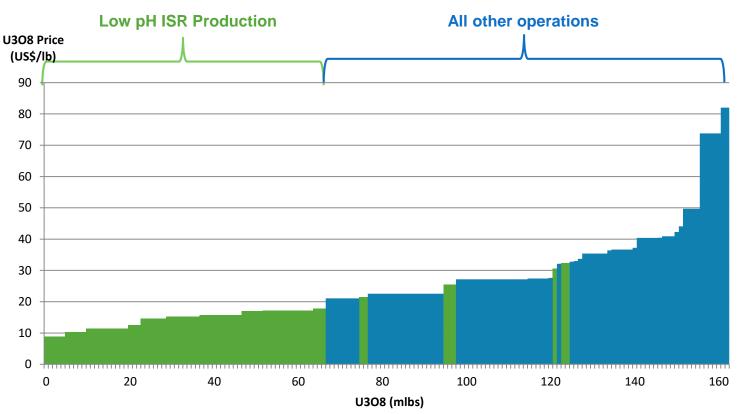


Kazakh Acceleration Rate: "Zero to Sixty" in 18 years

Low pH Leads the Way



- All 1st quartile cost uranium operations globally are in-situ recovery (ISR) facilities that utilize a low pH lixiviant
- 96% of the uranium recovered by ISR methods worldwide in 2015 came from facilities using low pH solutions (WNA 2017)



Status of Transition



- 1. Comprehensive License Amendment Application submitted on 6-Apr-18
 - State Permit to Mine amendment application 90-day acceptance review underway
- 2. Wyoming assuming duties/roles of NRC for Source Material Licensing
 - Transition to Agreement State on schedule for the start of the next U.S. Federal fiscal year (1-Oct-2018)
 - State will be undertaking the SML review
- 3. Feasibility Study in progress
 - Present the expected economic outcome of Lance Project as a low pH ISR project
 - Mid-year completion planned
- 4. Ongoing Research and Development
 - Demonstrations & refinement of mining method effectiveness and applications
 - Demonstrations & refinement of groundwater restoration techniques
- 5. Low pH Implementation Plan
 - Utilize existing infrastructure in a progressive ramp-up in Mine Units 1 and 2

Uranium Market Overview





Uranium Market Insight

- Spot market appears well supplied
- Production restraint has occurred
- Future utility demand projections remain strongly positive

Market rebalancing is occurring now

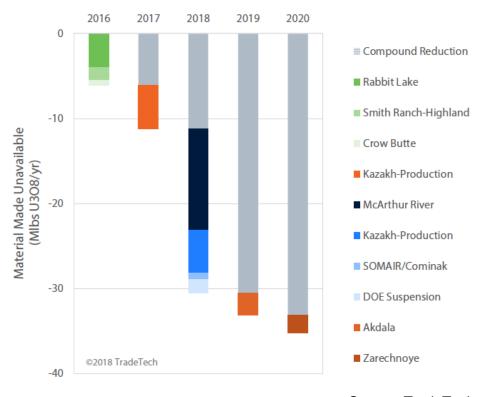
- Producer inventory drawdown
- Producer buying will test the depth of the spot market in coming months

Source: The Ux Consulting Company, LLC

Weakness In Global Production



Weak market leads to decline of global uranium production



Source: TradeTech

Production restraint has become a common theme globally

Uranium in Politics



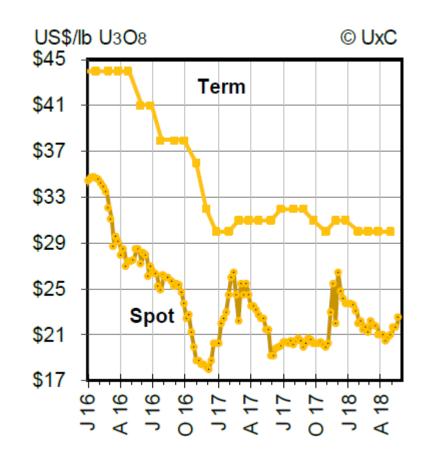
Increasing Political Activity Involving Nuclear Fuel Trade

- 1. Section 232 of the US Trade Expansion Act Petition
 - US Dept. of Commerce expected to take up investigation
 - Potential remedies could bolster price for US production
- 2. US Dept of Energy suspension of excess uranium barters/sales
 - For remainder of 2018 Fiscal Year
 - Support for permanent suspension
- 3. Review of the Russian Suspension Agreement
- 4. Russian Parliament threatened to ban on all trade with US nuclear utilities

Approach #2: Adjusting the Market



- Can that be done?
- How can it be done?
- The role of Government?



Source: The Ux Consulting Company, LLC



"The entire U.S. nuclear industry is in crisis."

- US producers have closed mines and laid off workers
- The sole US conversion facility has been idled
- There is no longer any domestic enrichment capacity
- The lead US supplier of reactor technologies went bankrupt
- US nuclear utilities are struggling to compete

Who is responsible for this?

Does it even matter?

Section 232 Petition Goals



The intended purpose of Section 232 of the Trade Expansion Act of 1962 is to protect the essential national security industries whose survival is threatened by imports.





- 1. Relief from imports of uranium products
- 2. Reverse the erosion of our critical nuclear energy infrastructure
- 3. Ensuring domestic supplies for national defense purposes

Forms of Relief

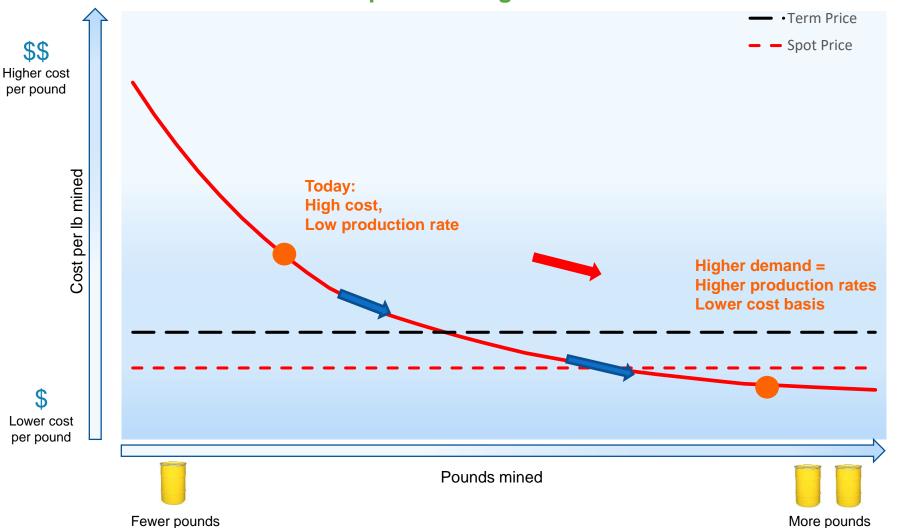


- The U.S. Government is asked to take action in support of the critical domestic nuclear industries
 - Import quotas
 - Buy American policy for US government agencies
 - Tariffs on imports
 - Subsidies, tax breaks, other ideas?
- The Department of Commerce investigation should occur
 - Consider what will benefit the U.S.

Moving Along the Curve to Lower Costs



Can a fair solution generate enough demand for the industry to be profitable again?



Karoo Projects – South Africa



All development and progression activities suspended

Divestment Status

- ✓ No satisfactory offers made to Peninsula during sale process
- ✓ Reflects market view of hard rock uranium assets today

Retention Option

- ✓ Fully explored by Peninsula
- ✓ Cost of retention rights in SA is prohibitively expensive

Next Steps

- ✓ Fulfil restoration and rehabilitation obligations
- ✓ Seek consent to divest freehold farm land to fund rehabilitation

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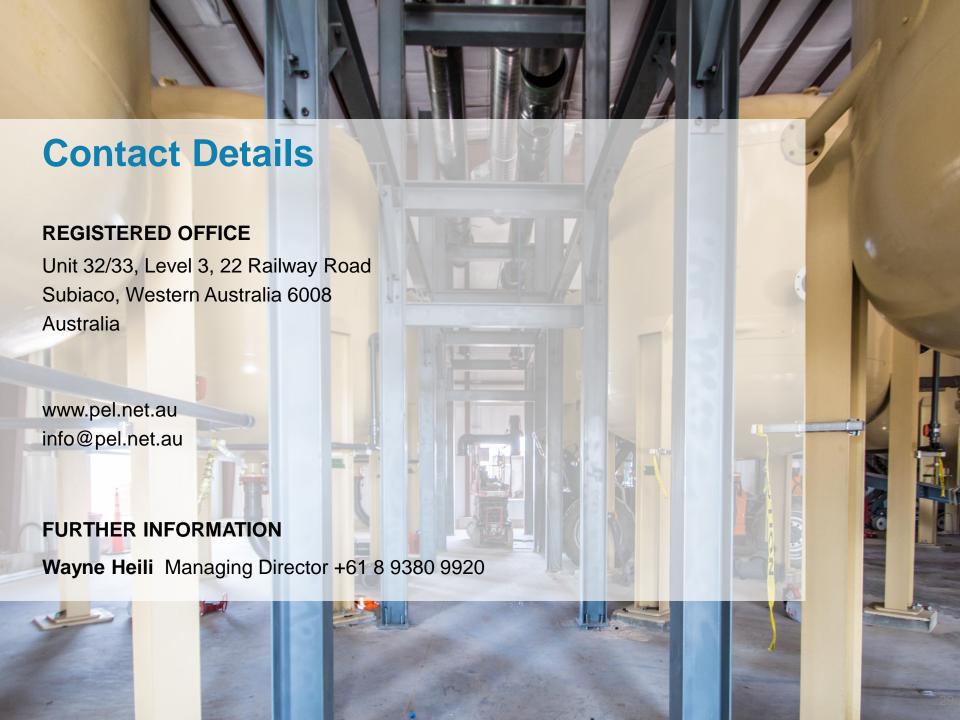
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Appendix 1 - Lance JORC Resource



Classification	Tonnes (million)	U3O8(kg)	Grade (ppm U3O8)	U3O8(lbs)
Measured	3.7	2.0	489	4.3
Indicated	10.0	5.1	466	12.7
Inferred	37	17.5	463	36.5
Total	50.7	24.6	473	53.5

'JORC Table 1 included in an announcement to the ASX released on 27th March 2014:"Company Presentation – Mines and Money Hong Kong". 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.