

10 March 2020

Companies Announcement Office Via Electronic Lodgement

COMPANY UPDATE – URANIUM MARKET, LOW pH DE-RISKING AND COST REDUCTIONS

Peninsula Energy Limited (**Peninsula or Company**) wishes to provide the following update on U.S. uranium market developments, the progress of the low pH de-risking and optimisation activities at the Lance Projects in Wyoming, USA (**Lance Project**) and additional cost reduction activities.

HIGHLIGHTS

- U.S. Secretary of Energy reiterates that the Trump Administration plans to give an immediate boost to the U.S. uranium production industry
- U.S. Department of Energy issues Request for Information on key challenges in reconstituting uranium mining and conversion in the U.S.
- De-risking and optimisation activities advancing as scheduled at the Company's Lance Project
- New low pH field demonstration in a previously unmined area is on track to commence in April 2020
- Corporate and site cost base to be further reduced yielding savings of US\$550,000 per annum

U.S. Government Support for Uranium Production

As announced by the Company on 11 February 2020, President Trump's Executive Branch is advancing proactive steps to revitalise the U.S. uranium production industry by including a US\$1.5 billion uranium buying program over the next 10 years in its budget proposal to the U.S. Congress. Separate to the Executive Branch budget proposal and actions, the U.S. Congress has mandated that the U.S. Department of Energy (**DOE**) assess the key challenges in reconstituting uranium mining and conversion in the U.S. The DOE has recently released a Request for Information (**RFI**) seeking input on a range of matters including pricing levels, production rates and length of contracts required to restart idled U.S. located uranium production facilities. As an industry participant, Peninsula views the recent actions of both the U.S. Executive Branch and Congress as strongly supportive. The Company is currently finalising its response to the DOE RFI.

Further evidence of the intent of the Trump Administration to revitalise the U.S. uranium production industry was noted during a hearing of the U.S. Senate Energy and Natural Resources Committee on 3 March 2020. Secretary of Energy, Mr Dan Brouillette, testified that the Trump Administration plans to give an immediate boost to the uranium industry. Secretary Brouillette also stated that the Department of Commerce, along with the DOE and the President of the United States, had all determined that the loss of leadership in the U.S. nuclear industry represented a national security

Unit 32, 22 Railway Road, Subiaco WA 6008

PO Box 8129, Subiaco East WA 6008

Phone: +61 (0)8 9380 9920

Fax: +61 (0)8 9381 5064

Peninsula Energy Limited - ABN: 67 062 409 303

concern. Peninsula eagerly awaits the pending publication of outcomes and recommendations from the U.S. Nuclear Fuel Working Group (**NFWG**). The NFWG was established through executive action by President Trump to examine the entire US nuclear fuel supply chain in order to protect national security interests, to plan for defence infrastructure needs and if necessary, to provide assistance to support domestic uranium supply.

Low pH De-risking and Optimisation

As the Company intends to fulfil its sales obligations in 2020 with uranium purchased from the market, the primary focus of activities at the Lance Project this year is on the low pH de-risking and optimisation programme. Central to this programme is an additional low pH field demonstration in an area that has not previously been subjected to mining operations.

Company personnel have been actively engaged in the planning and development of the new field demonstration area. The Company engaged consultants with substantial global experience in low pH uranium ISR operations to advise on technical optimisation opportunities. Laboratory tests have been and continue to be conducted to screen viable optimisation concepts. With the progress of this advanced technical planning, Peninsula is pleased to advise that the start of operations in the new field demonstration area is anticipated in early April.

Objectives of the new low pH field demonstration, combined with additional laboratory tests, will be to:

- Determine the optimal rate of mining zone acidification for future commercial operations.
- Trial the use of settlement ponds as a means of separating the majority of fines typically generated from low pH ISR operations as the mining lixiviant pH level is lowered to the target level of approximately 2.0 standard units.
- Trial the use of selected alternate ion exchange resins that are better suited to low pH conditions than the resins tested in the previous field demonstration; and
- Validate and/or enhance key parameters used in the September 2018 Low pH Feasibility Study including in-situ extraction rates, sulphuric acid consumption rates and aggregate mining zone resource recovery.

The Company anticipates operating the field demonstration throughout the remainder of the year 2020. As data and information on the above key parameters start coming to hand, other optimisation activities will proceed, including enhancements to the design of the acid storage and distribution system.

Streamlined Business Operations

Over the past 2 to 3 years, the Company has been focused on minimising its expenditures as it progresses the low pH transition at the Lance Project and awaits improvements in the market for U.S. produced uranium. Additional measures are now being implemented in order to reduce the expenditure rate without directly impacting the progression of core activities including the low pH derisking and optimisation activities.

- 1. Employment agreements for several members of the leadership team at the Lance Project have been modified to reduce the effective working week for these employees. This has the effect of decreasing the ongoing site payroll costs, yet, importantly, retaining the technical and leadership expertise and experience required for a future restart of operations.
- 2. Corporate administrative costs are to be reduced. Some functions currently undertaken by the Perth based team will be transferred either to existing personnel located at the Project site in Wyoming or to contract service providers. As a result, 3 members of the Perth

corporate team will be leaving the business in the coming weeks and the Perth office will be closed. The Company will retain a Perth presence, with the Finance Director / CFO continuing to be based there.

3. The Chairmen of the Board's two sub-committees will forego their fees in respect of the sub-committee activities.

Cash cost savings from these measures together are estimated to be approximately US\$550,000 per annum. One-off re-organisation costs of approximately US\$150,000 are expected to be incurred as a result of the changes to the Perth based activities of the Company.

Commenting on these initiatives, Wayne Heili, Peninsula's Managing Director/CEO, stated: "As we have no need to produce uranium for scheduled deliveries in 2020 and production has been idled, we will do what we can to minimise our expenditures and to reduce our future funding needs. We have made the hard decision to further reduce our cost base. Still, we have maintained our production capabilities and the capacity to make the necessary investment decision to rapidly restart and ramp-up production activities at Lance using the industry leading low pH in-situ recovery method even before completion of current site activities if our markets improve.

On behalf of the Board I would like to thank the Perth office employees for their many years of hard work and dedication. We wish each of them the best in their future endeavours. I would also like to share my appreciation for the Lance Project leadership team members that have elected to reduce their working hours and compensation.

We look forward to providing shareholders and key stakeholders with further information on governmental initiatives regarding incentivisation of the U.S. domestic uranium industry and on outcomes of the de-risking and optimisation activities at the Lance Project over the coming months as each workstream progresses."

Yours Sincerely,

Wayne Heili

Managing Director/CEO

This release has been approved by the Board of Directors.

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

About Peninsula Energy Limited

Peninsula Energy Limited (PEN) is an ASX listed uranium mining company which commenced in-situ recovery operations in 2015 at its 100% owned Lance Projects in Wyoming, USA. Following a positive feasibility study, Peninsula is embarking on a project transformation initiative at the Lance Projects to change from an alkaline ISR operation to a low pH ISR operation with the aim of aligning the operating performance and cost profile of the project with industry leading global uranium production projects.