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Companies Announcement Office  
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## UPDATED LANCE FEASIBILITY STUDY UNDERWAY FOLLOWING ANALYSIS OF MU1A FIELD DEMONSTRATION RESULTS

### HIGHLIGHTS

- Peninsula commencing Feasibility Study Update for Lance Project
- The updated study is expected to be complete in 3Q CY2022
- The update will build on the 2018 Lance Low-pH ISR Feasibility Study
- The updated study will incorporate results and conclusions from the Company's technical de-risking activities, including the recently completed MU1A Field Demonstration
- The Lance Project is a fully permitted Uranium In-Situ Recovery facility located in Wyoming, USA

Peninsula Energy Limited (**Peninsula** or the **Company**) (**ASX: PEN**) is pleased to announce that the Company's Board has approved the initiation of an update to the 2018 Low-pH Feasibility Study ("Study") on its flagship, 100% owned Lance Project ("Lance") located in Wyoming, USA. The Company is also pleased to announce the selection of Western Water Consultants, Inc. d/b/a WWC Engineering, a leading US-based consulting and engineering firm with significant Uranium In-Situ Recovery ("ISR") expertise, to author the Study.

Commenting on the importance of the Feasibility Study update, Peninsula Managing Director and Chief Executive Officer Wayne Heili said, *"With the strengthening market for uranium and with a renewed emphasis on the U.S. domestic capacity for uranium production, we want to ensure that the economic analysis that we rely upon is developed to the highest standard of accuracy and based on technically robust analysis."*

*"Our team has put in substantial effort to de-risk many facets of the Lance Project and it is appropriate that we update our financial models ahead of considering a final investment decision with respect to restarting production. The economic studies in parallel with our early preparatory works program that we are now in the process of conducting, will facilitate an accelerated timeline should we push ahead with a restart."*

Peninsula's experienced ISR team has completed its evaluation of the data obtained from the recently completed MU1A Field Demonstration. The updated Feasibility Study will incorporate important results and conclusions from the demonstration along with updated process designs, capital costs and materials and supply costs. Inflationary pressures corresponding to current supply chain issues have been noted in the US markets since early 2022. Peninsula's team and advisers will be assessing the likely longer-term impact of these more recent developments on the updated study which is expected to be completed in 3Q CY2022.

The updated Feasibility Study is expected to reflect the engineering design requirements and operational parameters observed in the outcomes of the MU1A Field Demonstration. On the capital requirements side, the Company is completing updated engineering design and costing studies for reagent addition systems, solids management systems, and process plant modifications based on the conclusions from the field demonstration. On the operational side, the Company has developed updated grade and recovery curves, ISR pattern design parameters, reagent requirement models for both sulfuric acid and hydrogen peroxide, and reagent costing models based on the field demonstration outcomes. In the field

demonstration, the reagent requirements and grade responses were shown to be related to well spacing, with closer spacing driving better results. The updated cost model will reflect the optimised balance between the capital cost of well installation and the direct operating costs.

As noted in Peninsula's release dated 17 February 2022, the Board has approved a supplementary budget of US\$3.4 million through June 2022 to be applied to early preparatory works in relation to the potential Lance commercial production restart, with workstreams already commenced. Under the early preparatory works program the following key workstreams will be undertaken:

1. Mining Unit 3 Development Drilling
2. Preparation of Mining Units 1 and 2 for low pH operations
3. Re-establishment of flow capacity and fluid circulation within Mining Units 1 and 2

The updated feasibility study and early preparatory work activities will be funded from existing cash resources and the net cash margin generated from the Company's portfolio of uranium concentrate sale and purchase agreements.

A final decision on resuming commercial production operations using the low-pH ISR method will be based upon the conclusions of the updated Feasibility Study and the prevailing uranium market conditions.

This announcement was approved and authorised by the Board of Peninsula Energy Ltd.

For further information, please contact

**Peninsula Energy**  
Wayne Heili  
Managing Director/CEO  
+61 8 6263 4461  
info@pel.net.au

or

**Citadel-MAGNUS**  
Michael Weir - +61 402 347 032  
Cameron Gilenko - +61 466 984 953

## 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. 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.*