

31 July 2024

Companies Announcement Office
Via Electronic Lodgemen

LANCE PROJECT UPDATE

KEY POINTS

- Site preparations at the Company's flagship Lance Uranium Project, located in Wyoming, USA have rapidly progressed throughout July with the objective to recommence production operations in late 2024
- Overall construction activities to expand the plant continue progressing as scheduled
- Procurement of major equipment is also tracking the budget and the schedule with all major equipment now ordered and early deliveries of significant major process equipment
- Key workstreams to develop a new production wellfield, Mine Unit 3, also remain on track for the start of uranium recovery operations prior to year-end 2024
- Low pH pre-conditioning flows in Mine Unit 1 commenced in July
- Laboratory and pilot plant scale process optimization tests are being conducted with the objective to further improve uranium recoveries and to ensure a high quality finished product
- Initial ramp-up production profile expectations adjusted, timing of sustaining cash flow projection unaltered

Peninsula Energy Limited and its wholly owned U.S. subsidiary, Strata Energy Inc. (together "**Peninsula**" or the "**Company**") (ASX:PEN, OTCQB:PENMF) are pleased to announce that plant construction and wellfield development activities at the Company's Lance Projects ("**Lance**") in Wyoming USA, continue to progress on schedule and close to budget.

Peninsula is currently modifying and expanding the Ross uranium recovery process plant and auxiliary facilities at Lance, which were originally constructed in 2015 as an alkaline In-Situ Recovery ("**ISR**") satellite plant, for an expanded production capacity using the low-pH ISR process, and to include the complete central processing plant ("**CPP**") capability of producing a finished dry yellowcake product. The expanded CPP ("**Phase II**" expansion) will house additional ion-exchange circuit capacity along with new resin elution, precipitation, filtration and product drying circuits. On completion of Phase II construction, the Lance Projects will be home to a 5,000 GPM uranium recovery ion-exchange process plant with the capability to independently produce up to 2 million pounds per annum of dry yellowcake (U₃O₈) product.

In June 2024, the Company was awarded the Wyoming Governor's Safety Award during the Wyoming Mining Association Annual Convention. This is the third year running that the Company has been honoured with this award that recognizes the Company's commitment to safety and its outstanding record of seven consecutive years with no employee lost time accidents.

Peninsula's Managing Director and Chief Executive Officer Mr Wayne Heili said: "*Rapid progress was evident across the Lance projects in July as teams of workers were busy preparing the project to resume uranium production operations by the end of this year. The entire site is buzzing with the energy and excitement of a construction project in full swing. We are very pleased to confirm that our preparations are continuing to proceed safely, smoothly and on schedule.*"

Plant Construction Update

All major piping and tank modifications for low-pH ISR operations have been completed inside the previously constructed Ross Satellite Plant.



Figure 1: Modified/Upgraded piping systems inside the Ross Satellite Plant

To date, the Phase II expansion project efforts have remained focused on major equipment procurement and preparation of the building foundations. Approximately 87% of building foundations have been installed (approximately 250 cubic yards or 191 cubic meters of concrete placed), with the remaining foundations being intentionally left open for better access to set structural steel and process equipment within the plant building footprint. Concrete work will continue into August after which the plant construction schedule will be shifted to an around the clock rotation, allowing the different trades to work with less interference.

The structural steel and additional materials for the processing plant building have been delivered to site. The building will be erected once the concrete foundations and slab have met design strength and the major equipment is placed. Sections of the steel building structure are being pre-fabricated at the site so they can be moved into place when needed.

Equipment procurement activities remain on schedule with all of the major equipment on order. Expected delivery dates are meeting or exceeding the requirements of the construction schedule. The first piece of major equipment for the project was received six weeks ahead of anticipated delivery, and process tanks for the southern half of the building have all been received at site. To date, overall, equipment costs are tightly tracking the budget.



Figure 2: Concrete foundations at the Ross CPP expansion location



Figure 3: Process tanks for the plant expansion being received at Lance

In addition to the Phase II expansion construction work, the Company is also preparing auxiliary facilities designed to improve low-pH ISR operations. In recent months, a free standing building was constructed to house fine solids separation and removal equipment. The process equipment has been installed in the building and the site construction team has started to install the piping and electrical connections. Removing suspended solids from the ISR production stream enhances operational efficiency.



Figure 4: Interior of the new fine solids removal building with major equipment placed

Wellfield Development Update

In addition to plant construction activities, the Company's employee and drilling contractor teams continue to advance the development of new wellfield facilities. The previously developed wellfield areas of Mine Units 1 and 2 ("**MU-1**", "**MU-2**") are available for resumption of uranium recovery operations. The Company is actively developing a new wellfield production area named Mine Unit 3 ("**MU-3**").

The Company completed installation of the required monitoring well network for MU-3 in 2023. A complete data package documenting the baseline water quality and hydrologic properties of the unit was submitted to the Wyoming regulatory authorities as is required for all new ISR production areas. Regulatory review and approval typically follow a 90-day timeline.

The Company currently has eleven drilling rigs under contract to install ISR pattern wells (injection and production wells) in the new MU-3 area. Header House 11 ("**HH-11**") will be the first of three modules placed into production in MU-3.

- Installation of the pattern wells for HH-11 is 97% complete
- The surface facilities for HH-11 which include the header house building, well plumbing and electrical connections, and meter runs are 63% complete
- Construction of wellfield infrastructure (pipelines, powerlines, fences, roads) for MU-3 are 71% complete

The preparation of HH-11 is on schedule to allow the start of pre-conditioning operations in Q3 2024.



Figure 5: Active well installation at Mine Unit 3



Figure 6: Preparation of MU-3, Header House 11 building interior

Operational Activities

The production restart scheduled for late CY2024 will be marked by the progressive commissioning of the new CPP circuits following the initial recovery of uranium delivered to the plant ion-exchange circuit from wellfield solutions.

The Company is pleased to announce that it has recommenced wellfield preconditioning operations in MU-1 at Lance during the month of July. To successfully employ the low-pH ISR methodology, it is necessary to reduce the wellfield solution pH from the natural level (baseline) down to a pH of approximately 2.0 standard units. To accomplish this, the host formation is flushed with low pH solutions (preconditioned). Each new operational area is expected to be preconditioned over a period of two to three months prior to being introduced to the process plant uranium recovery circuit. MU-1 is now being preconditioned so that the wellfield will be ready for production operations the process plant becomes available. The first header house in the new MU-3 will be also be preconditioned in sequence prior to commencing uranium recovery operations in the plant.

In addition to preconditioning operations, the Lance team has been conducting laboratory and pilot scale testing on solutions produced from the wellfield to ensure operational familiarity with the new/additional process steps and to ensure the project will function at a high level from the commencement of production. Significantly, the advanced testing of the process operations has led to a greater confidence that the project can produce a high-quality finished product while minimising process losses.



Figure 7: Pilot scale equipment utilized for process optimization testing at Ross CPP



Figure 8: A sample of yellowcake produced from pilot scale process optimization testing at Lance

Production Guidance Update

Following completion of updated wellfield designs for MU-3, incorporating data from ongoing wellfield development drilling, the Company is expecting a slightly lower initial production ramp-up than the August 2023 Life of Mine (**LOM**) plan projection of 1.1M lbs in CY2025¹. The LOM plan was prepared in advance of full project development funding being secured. The Company has adopted a slightly more conservative approach to its CY2025 production forecast and now expects an approximate range of between 0.7M lbs and 0.9M lbs¹. The Company's current cash balance is expected to continue to support operating and capital expenditures until the generation of self-sustaining cash flows, which remain projected for Q3 2025.

¹ Refer to announcement released on 31 August 2023 titled "Lance Production to Restart in late 2024 under revised Ross and Kendrick Life of Mine Plan". The Company confirms that the material assumptions used in the estimation of production targets continue to apply and have not materially changed from this announcement.

- ENDS -

This release has been approved by Peninsula's Board of Directors

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About Peninsula Energy Limited

Peninsula Energy Limited (ASX:PEN) is one of the only ASX-listed uranium companies providing US production and direct market exposure. Its' 100% owned Lance Projects in Wyoming is due to re-commence production in December 2024 following a central processing plant capacity expansion construction project.

Lance is one of the largest, independent near-term uranium development projects in the US. With a track record of meeting delivery requirements since 2016, Peninsula has 10 years of sales contracts in place with major utilities in both the US and Europe. Once back in production, Lance will establish Peninsula as a fully independent end-to-end producer of yellowcake, well-placed to become a key supplier of uranium and play an important role in a clean energy future.

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