

Ur-Energy Provides Operational Update and Progress Report on R&D Activities

written by Raj Shah | April 21, 2022

April 21, 2022 ([Source](#)) – Ur-Energy Inc. (NYSE American:URG)(TSX:URE) (the “Company” or “Ur-Energy”) is pleased to share the following operational update regarding the ongoing drilling and construction program at Lost Creek and to report progress on research and development (“R&D”) activities.

Lost Creek Mine Unit 2 Advance Preparations Update

Well installation in Lost Creek’s Header House (HH) 2-4 is expected to be complete this month. Crews are also performing post-well-installation activities within the HH2-4 production area including well mechanical integrity tests, completion zone development and backfilling/leveling of drill pits required during well installation. This phase is expected to be complete in mid-May 2022. Following completion of the well work for HH2-4, delineation (definition) drilling will resume for HHs 2-6, 2-7 and 2-8. Delineation drilling for HH2-5 is already complete.

Surface component fabrication for HH 2-4 is in progress. The building and metering piping has been fabricated. All materials for HH 2-4 are onsite with the exception of downhole pumps, which are scheduled to arrive prior to completion of the associated infrastructure. Surface construction will entail trenching and installation of pipelines, flowlines and electrical wiring followed by installation of HH2-4 with all its internal data, monitoring and safety systems. Finally, the pumps and insulating wellhead covers will be installed prior to groundcover seeding of the production area. HH 2-4 is expected

to be ready for production in 2022 Q3.

With advance preparations and the likelihood of supply chain delays in mind, we are pre-ordering and purchasing well installation materials for additional header houses. Construction materials have been ordered through HH 2-5 and long-lead items have been ordered for HH 2-6.

Ur-Energy CEO, John Cash, said “Given recent geopolitical events as well as legislation proposed in Congress, uncertainty is increasing with respect to continued secure supplies of uranium. Although no contracts have been reached at this time, we are pursuing discussions with several domestic nuclear utilities concerning off-take sales arrangements. Particularly in light of the rapidly changing market, we are pleased to report the progress of our advance preparations at Lost Creek, which will accelerate our ability to quickly ramp-up. In addition to the wellfield drilling and construction begun in Q4, we have taken additional steps in Q1 to purchase materials for wellfield construction with a goal of having production-ready header houses when a ‘go’ decision is made. We will continue to monitor supply chain issues and developments in the uranium market to remain ahead of possible production demands.

“Wellfield construction and development is not the only ongoing work toward ramp-up. Staff are actively pursuing further innovations for Lost Creek and beyond. Ur-Energy prides itself in leading the industry on technical and permitting matters such as water treatment, engineering design of ion exchange vessels, well abandonment methods, and aquifer exemptions. By its nature, R&D is difficult and the results are never certain, but the Company believes we must continue to advance technology if we wish to become more cost competitive on a global scale, and we are advancing several such projects. To date, costs of the R&D efforts have not been significant. We are pleased to provide an

update on two of the more advanced and promising R&D projects.”

Progress Report on R&D Activities

Casing and Well Installation Technology

During 2021 Q4, as plans were being made to initiate the ongoing drilling programs, it became apparent that well casing is in short supply as are drilling contractors, many of whom left the uranium industry and/or have become more costly due to high demand from a variety of industries. To address both issues in order to advance our MU2 drilling programs in a timely and cost-effective manner, a review of alternate casing materials and well installation technologies was undertaken. Through the review, Company staff identified a material that is, in nearly all technical respects including internal and external pressure ratings, equivalent or superior to the PVC well casing used historically in the in-situ industry. We have identified suppliers able to provide the material with acceptable lead times and at a cost significantly lower than current PVC casing costs.

Well installation methods were required to be engineered to utilize the new casing material. Additionally, a Non-Significant Permit Amendment describing those changes was submitted and is currently being reviewed by the Wyoming Department of Environmental Quality – Land Quality Division. Due to the material’s properties, it may be used for injection wells but not for production wells at an in-situ facility. Injection wells generally represent approximately 65% of the wells throughout wellfields designed with traditional “five-spot” recovery patterns. In addition to its relatively low cost, the proposed method, if proven out, is expected to reduce drill rig time on injection wells by about 70% and reduce environmental impacts. The Company expects the cost savings from reduced drill rig time to be partially offset by the need for additional in-house

labor.

Assuming the Land Quality Division grants approval of the material and the associated installation methods, the Company will test the concept by installing a small number of wells at Lost Creek. While the efficacy of the method will not be known until completion of the planned initial tests, the Company is sufficiently optimistic about the material and the installation methods it has engineered that, in February 2022, a provisional patent was filed with the U.S. Patent Office to protect the intellectual property. As additional information becomes available, the Company will continue to provide updates.

Water Recycling and Filtration

Ur-Energy has been an industry leader in water recycling through the successful engineering, permitting and implementation of its Class V system and continues to make strides on further improvements. Engineering of an advanced water treatment system that will allow an additional 90% reduction of disposed water (beyond gains already achieved with our Class V system) is entering advanced-stage analyses expected to be completed by 2022 Q4. The value of increasing the rate of recycling is that less wastewater requiring disposal will be generated. While our existing Lost Creek permit allows for the installation of two additional deep disposal wells, these wells are expensive to install. The objective of this R&D work is to treat a sufficient quantity of wastewater to minimize the number of additional deep disposal wells required at Lost Creek and, in turn, recycle the majority of that fluid as clean, Class V, injectate. As designed, the system will also provide enhanced water filtration of injection fluids which may allow for the removal of existing and future header house filtration systems. If the remaining design, engineering and economic studies are successful, we anticipate that these processes and technology will also be utilized at our Shirley Basin Project.

About Ur-Energy

Ur-Energy is a uranium mining company operating the Lost Creek *in-situ* recovery uranium facility in south-central Wyoming. We have produced, packaged, and shipped approximately 2.6 million pounds U_3O_8 from Lost Creek since the commencement of operations. Ur-Energy now has all major permits and authorizations to begin construction at Shirley Basin, the Company's second *in situ* recovery uranium facility in Wyoming and is in the process of obtaining remaining amendments to Lost Creek authorizations for expansion of Lost Creek. Ur-Energy is engaged in uranium mining, recovery and processing activities, including the acquisition, exploration, development, and operation of uranium mineral properties in the United States. The primary trading market for Ur-Energy's common shares is on the NYSE American under the symbol "URG." Ur-Energy's common shares also trade on the Toronto Stock Exchange under the symbol "URE." Ur-Energy's corporate office is located in Littleton, Colorado and its registered office is located in Ottawa, Ontario.

FOR FURTHER INFORMATION, PLEASE CONTACT

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Cautionary Note Regarding Forward-Looking Information

This release may contain "forward-looking statements" within the meaning of applicable securities laws regarding events or conditions that may occur in the future (e.g., the timing to determine future development and construction priorities, including the progression and completion of the recently-commenced development program at Lost Creek; continuing effects of supply-chain disruption and whether the Company will be able to anticipate and overcome such delays; the ability and timing to complete term sales agreements with utilities; the ability to

readily and cost-effectively ramp-up production operations when market and other conditions warrant; the viability of any of the ongoing R&D efforts described, including the timing and cost to implement and operate one or more of them) and are based on current expectations that, while considered reasonable by management at this time, inherently involve a number of significant business, economic and competitive risks, uncertainties and contingencies. Generally, forward-looking statements can be identified by the use of forward-looking terminology such as "plans," "expects," "does not expect," "is expected," "is likely," "estimates," "intends," "anticipates," "does not anticipate," or "believes," or variations of the foregoing, or statements that certain actions, events or results "may," "could," "might" or "will be taken," "occur," "be achieved" or "have the potential to." All statements, other than statements of historical fact, are considered to be forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements express or implied by the forward-looking statements. Factors that could cause actual results to differ materially from any forward-looking statements include, but are not limited to, capital and other costs varying significantly from estimates; failure to establish estimated resources and reserves; the grade and recovery of ore which is mined varying from estimates; production rates, methods and amounts varying from estimates; delays in obtaining or failures to obtain required governmental, environmental or other project approvals; inflation; changes in exchange rates; fluctuations in commodity prices; delays in development and other factors described in the public filings made by the Company at www.sedar.com and www.sec.gov. Readers should not place undue reliance on forward-looking statements. The forward-looking

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SOURCE: Ur-Energy Inc.