American Rare Earths Signs MOU with Novex to Advance U.S. Oxide-to-Metal Production

written by Raj Shah | August 17, 2026
HIGHLIGHTS

- MoU signed with Novex, LLC, a U.S. rare earth metallization specialist that operates an advanced technology development center in Bellingham, Washington and has spent years developing oxide-to-metal technologies under programs funded by the U.S. Department of Energy and U.S. Department of War
- Follows the Company's oxide-to-metal technology review, which found several workable metallization routes and identified high-temperature molten salt electrolysis as the cleanest of them, subject to validation
- Novex will receive NdPr oxide from the Company's demonstration plant and convert it to rare earth metal, the immediate precursor to permanent magnet manufacture
- The parties will collaborate on the design of a rare earth metal production facility to be built by the Company
- Objective is a fully domestic U.S. mine-to-magnet supply chain with entirely U.S. feedstock and processing
- Definitive long-term agreement targeted within 12 months

August 17, 2026 (Source) – American Rare Earths Limited (**ASX: ARR | OTCQX: ARRNF | ADR: AMRRY**) is pleased to announce that it has signed a Memorandum of Understanding ("MoU") with Novex, LLC ("Novex"), a United States rare earth metallurgy and metallization company. The MoU covers the conversion of

separated rare earth oxides from the Halleck Creek Project in Wyoming into the metals required to make permanent magnets.

ARR signed the MoU through its wholly owned subsidiary, Wyoming Rare (USA) Inc. (“WRI”). The MoU sets a framework for a long-term commercial relationship spanning process optimization, metallization of demonstration plant output, and the joint design of a domestic rare earth metal production facility.

POSITIONING INTO THE U.S. MIDSTREAM

Converting separated oxide to metal is the chokepoint of the mine to magnet supply chain. Magnet makers cannot generally process oxide. They need metal and alloy, and China controls most of the world’s supply. In April 2025 China imposed export licensing on samarium, gadolinium, terbium, dysprosium and yttrium, the elements used in defense grade and high temperature magnets.

From 1 January 2027, U.S. defense contractors will be barred from delivering magnets containing rare earth elements mined, refined or separated in China. Domestic metallization capability has become a national security requirement as much as a commercial opportunity.

TECHNOLOGY REVIEW POINTS TO MOLTEN SALT ELECTROLYSIS

The MoU follows the Company’s review of how it might participate in the midstream segment of the mine-to-magnet rare earth supply chain, specifically the step from separated oxide to metal and then to precursors for magnet production.

That review screened a range of metallization technologies. It found more than one workable route, including fluoride conversion followed by calciothermic reduction, lanthanothermic reduction for volatile metals such as samarium, and high-

temperature molten salt electrolysis. Molten salt electrolysis came out as the cleanest option. It reduces dependence on anhydrous hydrogen fluoride, and unlike lanthanothermic reduction it does not consume a saleable rare earth metal as the reductant. The review recommended molten salt electrolysis advance as the primary development candidate, keeping lanthanothermic reduction in reserve for volatile target metals.

Novex has been developing metal making techniques and processes aimed at this same problem and brings an operating technology development center and a track record of federally funded development work to the Company's program.

WHAT THE MOU COVERS

The parties intend to explore, evaluate and develop the following areas of cooperation:

- **Process optimization.** Novex will support ARR in improving recovery, purity and product qualification for neodymium-praseodymium (NdPr), terbium (Tb), dysprosium (Dy), samarium (Sm) and yttrium (Y) from Halleck Creek ore.
- **Metallization of NdPr oxide from the demonstration plant.** Novex will receive NdPr oxide produced by the Company's demonstration plant and convert it to a metal product suitable as a magnet precursor. Specifications, purity, quantities and delivery timelines will be set jointly.
- **A domestic metal production facility.** The parties will work together on the design and development of a metal production facility to be built by the Company, covering process design, technology selection, engineering scope, throughput and product mix, siting and permitting, and capital and operating costs.
- **A fully domestic mine-to-magnet chain.** The parties will look at options for a U.S. supply chain with entirely U.S.

feedstock and processing, running from Halleck Creek in Wyoming through Novex's metal production to permanent magnet applications.

- **Heavy rare earth oxide samples.** The parties will review options for ARR to produce and supply Sm, Dy and Tb bearing samples for metallurgical testing and qualification.
- **U.S. supply chain development.** The parties will assess how their respective development plans align, and how best to engage with federal and state programs supporting domestic critical minerals and magnet supply chains.

The parties will use reasonable commercial efforts to establish the structure and commercial terms of a definitive long-term collaboration and supply agreement within twelve months, supported by regular progress reviews and technical working group sessions.

A WYOMING ANCHORED VALUE CHAIN

Halleck Creek is the largest known deposit of total contained rare earth oxides in the United States on a TREO basis[1]. Its JORC-compliant mineral resource of approximately 2.63 billion tonnes carries the potential to supply domestic magnet metals for several hundred years. The project sits entirely on Wyoming State land, which brings streamlined state permitting, and it has drawn strong federal and state support including a non-binding U.S. Export-Import Bank letter of interest for funding of up to US$456 million[2].

The Novex MoU builds on the oxide-to-metal work the Company commenced earlier this year[3] and its demonstrated capability to produce separated oxides from Halleck Creek ore[4]. The Company's Wyoming value chain will now extend from ore, through refining and separation, to the metals that feed magnet manufacture.

“This MoU is a critical step in advancing our stated intention of building the only fully U.S. domestic vertically integrated mine-to-magnet supply chain. Our technology review demonstrated that molten salt electrolysis is the cleanest path from oxide to metal, and Novex has been developing that capability in the United States for years while working with various areas of the United States Government and leading consulting companies. Putting our massive Wyoming resource alongside their technical capability is an important step in developing the cornerstone of U.S. domestic rare earth and magnet production, in Wyoming.”

– Mark Wall, Chief Executive Officer, American Rare Earths

“Novex has spent years developing one of the most technically challenging and strategically important capabilities in the rare-earth supply chain, which is converting separated and purified oxides into high-quality metals and alloys. Establishing this capability in the United States requires a secure domestic source of the right rare-earth feedstocks, and Halleck Creek provides that foundation. We look forward to metallizing American Rare Earths’ oxide products and working together to advance a U.S. rare-earth metal and alloy production facility.”

– Ilija (Eli) Mišković, Ph.D., Chief Executive Officer, Novex

This announcement has been authorized for release by the Board of American Rare Earths Limited.

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Stock Information
ASX: ARR
OTCQX: ARRNF
ADR: AMRRY

ABOUT AMERICAN RARE EARTHS LIMITED

American Rare Earths (**ASX: ARR | OTCQX: ARRNF | ADR: AMRRY**) is a critical minerals company at the forefront of reshaping the U.S. rare earths industry. Through its wholly owned subsidiary, Wyoming Rare (USA) Inc. ("WRI"), the company is advancing the Halleck Creek Project in Wyoming, a world-class rare earth deposit with the potential to secure America's critical mineral independence for generations. Located on Wyoming State land, the Cowboy State Mine within Halleck Creek offers cost-efficient open-pit mining methods and benefits from streamlined permitting processes in this mining-friendly state.

With plans for onsite mineral processing and separation facilities, Halleck Creek is strategically positioned to reduce U.S. reliance on imports, predominantly from China, while meeting the growing demand for rare earth elements essential to defense, advanced technologies, and economic security. As exploration progresses, the project's untapped potential on both State and Federal lands further reinforces its significance as a cornerstone of U.S. supply chain security. In addition to its resource potential, American Rare Earths is committed to environmentally responsible mining practices and continues to collaborate with U.S. Government-supported R&D programs to develop innovative extraction and processing technologies for rare earth elements. Further information is available at www.americanree.com.

ABOUT NOVEX LLC

Novex, LLC is a U.S.-based advanced materials company

specializing in critical-element and rare-earth metallurgy, with particular expertise in the metallization of purified rare-earth oxides into high-purity metals and alloys. Its capabilities span upstream separation and purification through oxide-to-metal process development, pilot-scale demonstration, and scale-up. Novex has a multi-year track record of advancing these technologies through projects funded by the U.S. Department of Energy and the U.S. Department of War, and operates an advanced technology development center in Bellingham, Washington. Metals produced by these technologies are the precursors to permanent magnet products critical to national security, defense, automotive, industrial automation and renewable energy applications, including neodymium-iron-boron (NdFeB) and samarium-cobalt (SmCo) magnets.

FORWARD LOOKING STATEMENT

This announcement contains forward-looking statements relating to the Company's plans, strategies, objectives and anticipated future activities, including the areas of cooperation contemplated by the MoU, the potential development of a domestic rare earth metal production facility, and the selection and performance of metallization technologies. These statements are based on current expectations and assumptions and are subject to risks, uncertainties and factors outside the Company's control, including the outcomes of technical studies and testwork, the ability of the parties to negotiate and execute definitive agreements, permitting processes, market conditions and operational factors. The MoU is non-binding other than in respect of confidentiality and governing law, and there is no assurance that a definitive agreement will be entered into or that the collaboration will proceed on the terms contemplated. Actual outcomes may differ materially from those expressed or implied. The Company does not undertake any obligation to update or revise any forward-looking statements to reflect events,

circumstances or information arising after the date of this announcement.

[1] ASX announcement dated 4 February 2025
[2] ASX announcement dated 24 September 2024
[3] ASX announcement dated 30 March 2026
[4] ASX announcement dated 16 December 2025