

RER

RARE ELEMENT RESOURCES

OTCQB: REEMF

Corporate Presentation

March 2025

Bear Lodge, Wyoming Critical Rare Earth Project

*Mine to high-purity separated
Nd/Pr oxide*

*Creating the Cornerstone of a
North American Rare Earth
Supply Chain*

Disclaimer



This presentation contains forward-looking statements and forward-looking information (collectively, the “forward-looking statements”) within the meaning of securities legislation in the United States and Canada. Except for statements of historical fact, certain information contained herein constitutes forward-looking statements. Forward-looking statements are usually identified by our use of certain terminology, including "will", "believes", "may", "expects", "should", "seeks", "anticipates", "plans", "has potential to", or "intends" (including negative or grammatical variations thereof) or by discussions of strategy or intentions. Such forward-looking statements include statements regarding our vision and strategic near-term and longer term objectives, the likelihood of the continuation of the financial award from the U.S. Department of Energy or grant from the Wyoming Energy Authority/State of Wyoming, the planned demonstration plant timing, cost and expected outcomes, plans to advance toward full-scale production, current and future demand and supply affecting the rare earth element markets, and other aspects of our business and our prospects as well as those of industry participants.

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Executive Summary: Nd/Pr oxide for Rare Earth Magnets



- \$170M+ invested in Bear Lodge Project (world-class deposit + REE separation technology for high-purity Nd/Pr oxide)
- Constructed 500+ tpy, ~\$66M demonstration plant in WY expected to produce 9-12 tonnes separated Nd/Pr oxide for REE magnets
 - Operational shakedown underway
 - Innovative & proprietary processing / separation tech & controls system proven at pilot scale
- REE mineral deposit: world-class resource, can provide 20-30% of US demand for Nd/Pr oxide
- Leverage tech & economic results from demo plant to construct commercial facility to supply a domestic supply of REEs

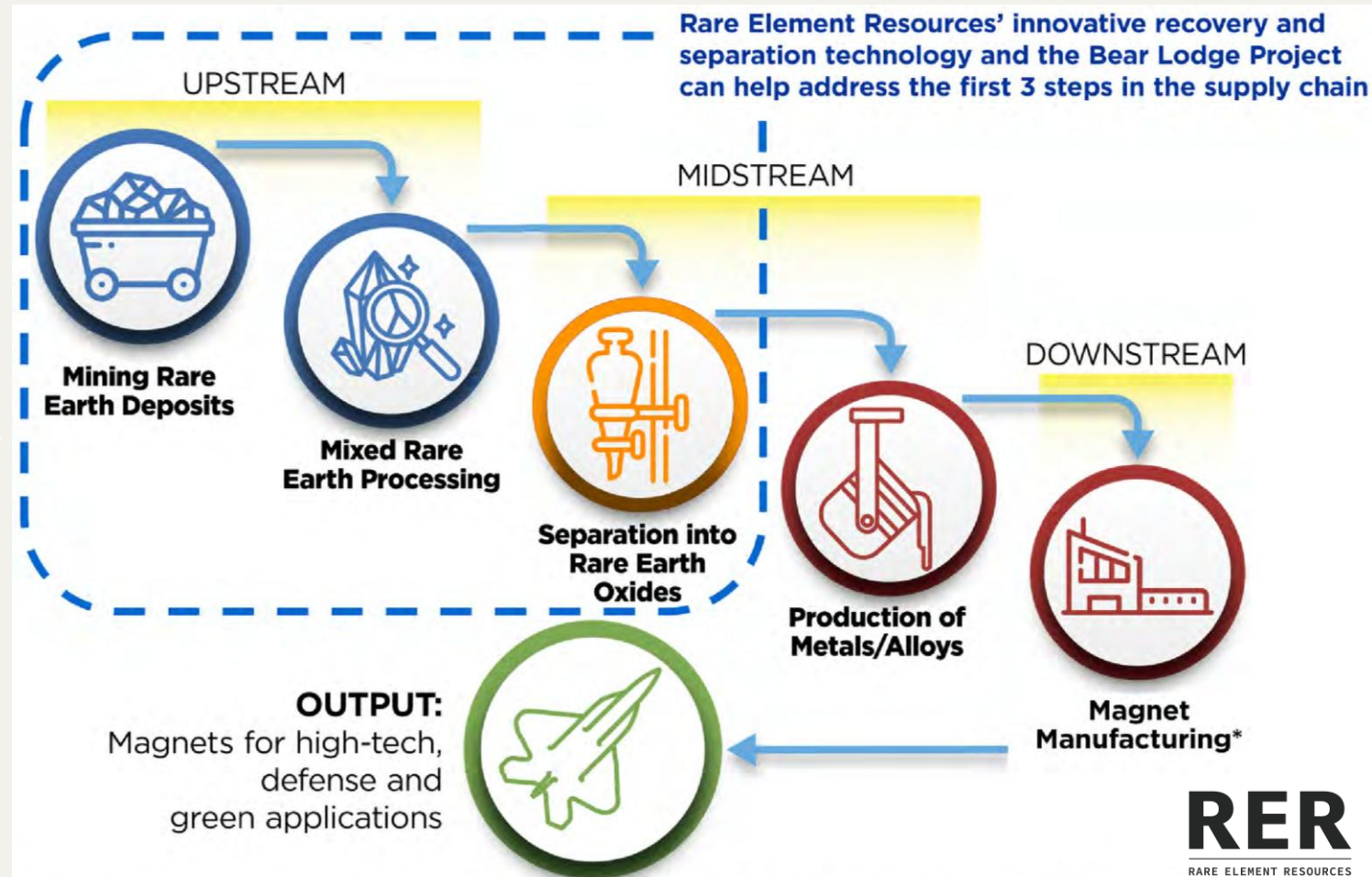
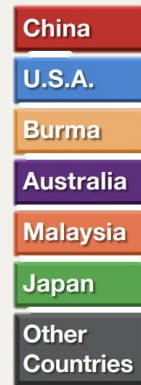
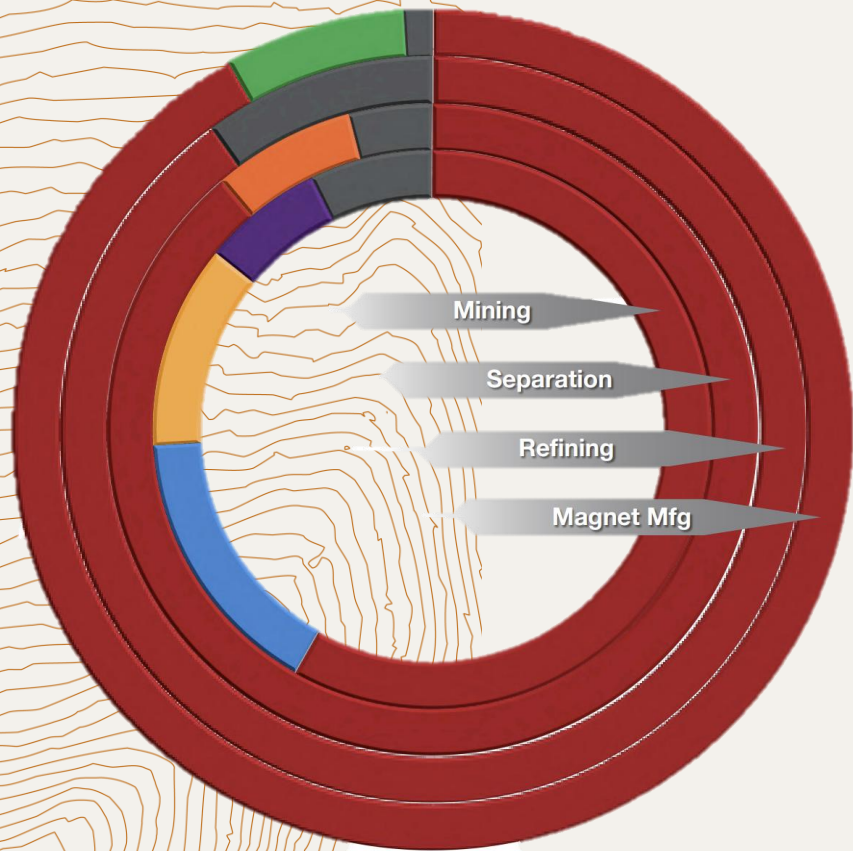
Company Profile

RARE ELEMENT RESOURCES

- Founded in 1999. Vision to develop a domestic source of critical minerals
 - Focused on the Bear Lodge Rare Earth deposit in Wyoming
 - RER is a public company. Majority shareholder is a General Atomics affiliate. (OTCQB: REEMF): ~\$460M market cap (4/25/25)
- RER providing ~2/3 of funding for the demonstration project with matching funds provided by U.S. Dept. of Energy (DOE) & Wyoming Energy Authority (WEA)
- 7 full-time employees, 7-20 full-time contractors at demonstration plant
- Experienced Management Team:
 - Chief Executive Officer:** Ken Mushinski. 30+ years executive in corporate development and program management with General Atomics, in the resource sector. Production experience from permitting to decommissioning, regulatory affairs, and financial planning.

Rare Earth Element (REE) Supply Chain

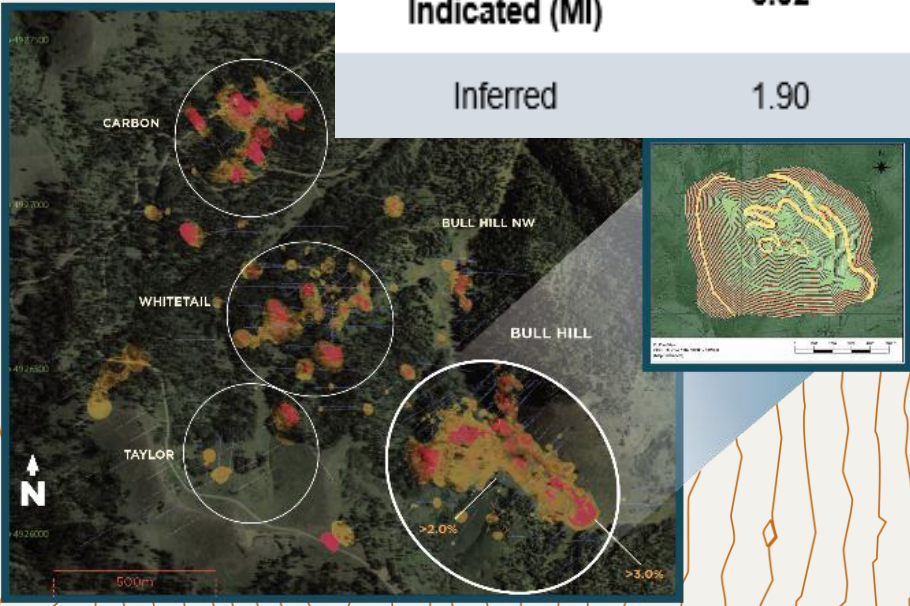
- REEs are critical minerals used in renewable energy, EVs, tech, & defense applications.
- Supply is dominated by China.
 - RER has potential to supply 20-30% of US demand for magnet NdPr oxide.



Bear Lodge Project: Mineralized Material

- The Bear Lodge deposit (WY) is a USGS-recognized world-class mineral deposit with some of the highest rare earth concentration in the country. 100% owned by RER
- Maximizing value of magnetic materials: Neodymium & Praseodymium (NdPr) oxide
- NdPr production could meet 30% of US demand
- Bear Lodge resource also holds heavy REEs: Dy, Tb, & Ho

Measured and Indicated Resource @ 2.18% Cutoff Grade				
Bull Hill	Metric Tonnes	%TREO	Contained TREO Metric Tonnes	Recovered NdPr Metric Tonnes
	(millions)		(1000's)	(1000's)
Measured	2.04	4.53	92.4	18.4
Indicated	3.98	3.85	153.1	31.3
Measured & Indicated (MI)	6.02	4.08	245.5	49.7
Inferred	1.90	3.61	68.5	14.4



Bear Lodge Deposit: Rich in Key Magnet Materials

- World-class & most advanced resource
- Over 500 holes drilled – 285,000 ft of core evaluated
- High-grade Nd/Pr oxide deposit
- High-grade zone will boost returns in early years
- Additional targets identified for potential expansion

Bear Lodge Mineralized Material Projected Distribution by Weight

Rare Earth Elements	Distribution by Wt
Neodymium (Nd)*	17.9%
Praseodymium (Pr)*	4.9%
Dysprosium (Dy)*	0.5%
Terbium (Tb)*	0.1%
Samarium (Sm)	<u>3.0%</u>
Magnet Materials	26.4%
Europium (Eu)	0.7%
Yttrium (Y)	1.3%
Cerium (Ce)	43.0%
Lanthanum (La)	26.8%
Gadolinium (Gd)	1.6%
Other REEs***	0.2%
Total Rare Earth Oxides	100.0%

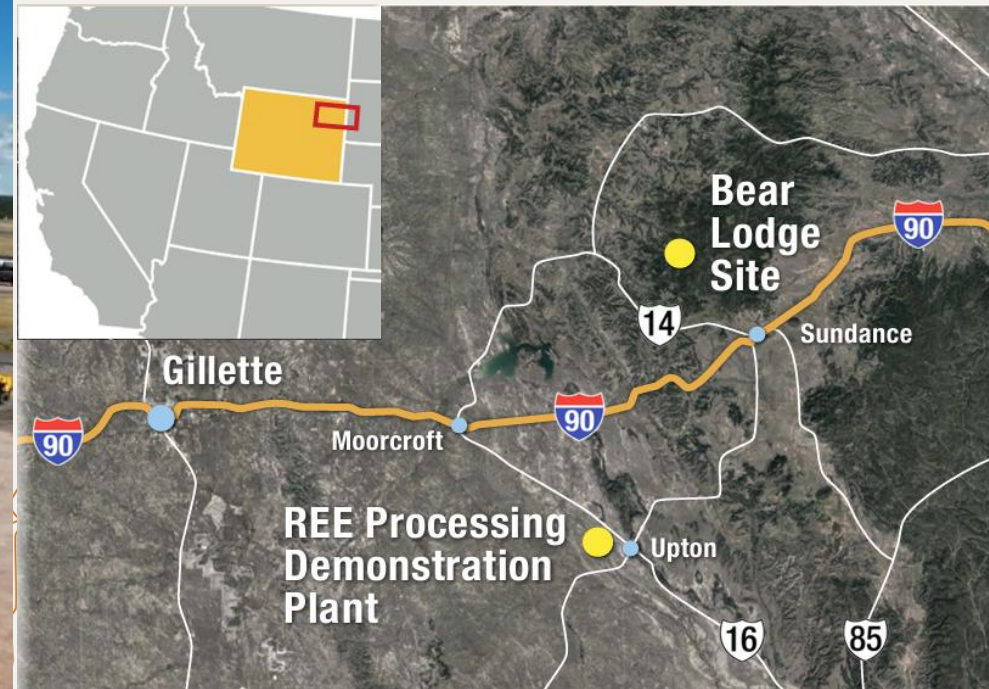
*Identified magnet materials per U.S. DOE, Critical Materials Assessment 2023, July 2023. Sm included because of its use in samarium/cobalt magnets.

**Allocation based on RER's historical technical report prepared and filed pursuant to National Instrument 43-101 - Standards for Disclosure of Mineral Properties ("NI 43-101") and other publicly available information regarding the Company, including the Company's technical report entitled, "Pre-Feasibility Study Report on the Reserves and Development of the Bull Hill Mine, Wyoming," filed on October 10, 2014, available on the Company's website and under its profile at www.sedar.com ("SEDAR"). The historical technical information must be updated and should not be deemed current or reliable.

***Other REEs include Holmium, Erbium, Thulium, Lutetium, Scandium and Ytterbium

Location: Bear Lodge & Demonstration Plant | Wyoming

- Deposit located in exceptional location in Northeastern WY with existing infrastructure, availability of highly skilled workforce and ongoing federal, local, and state support
- Processing/Separation Demonstration Plant in nearby Upton, WY



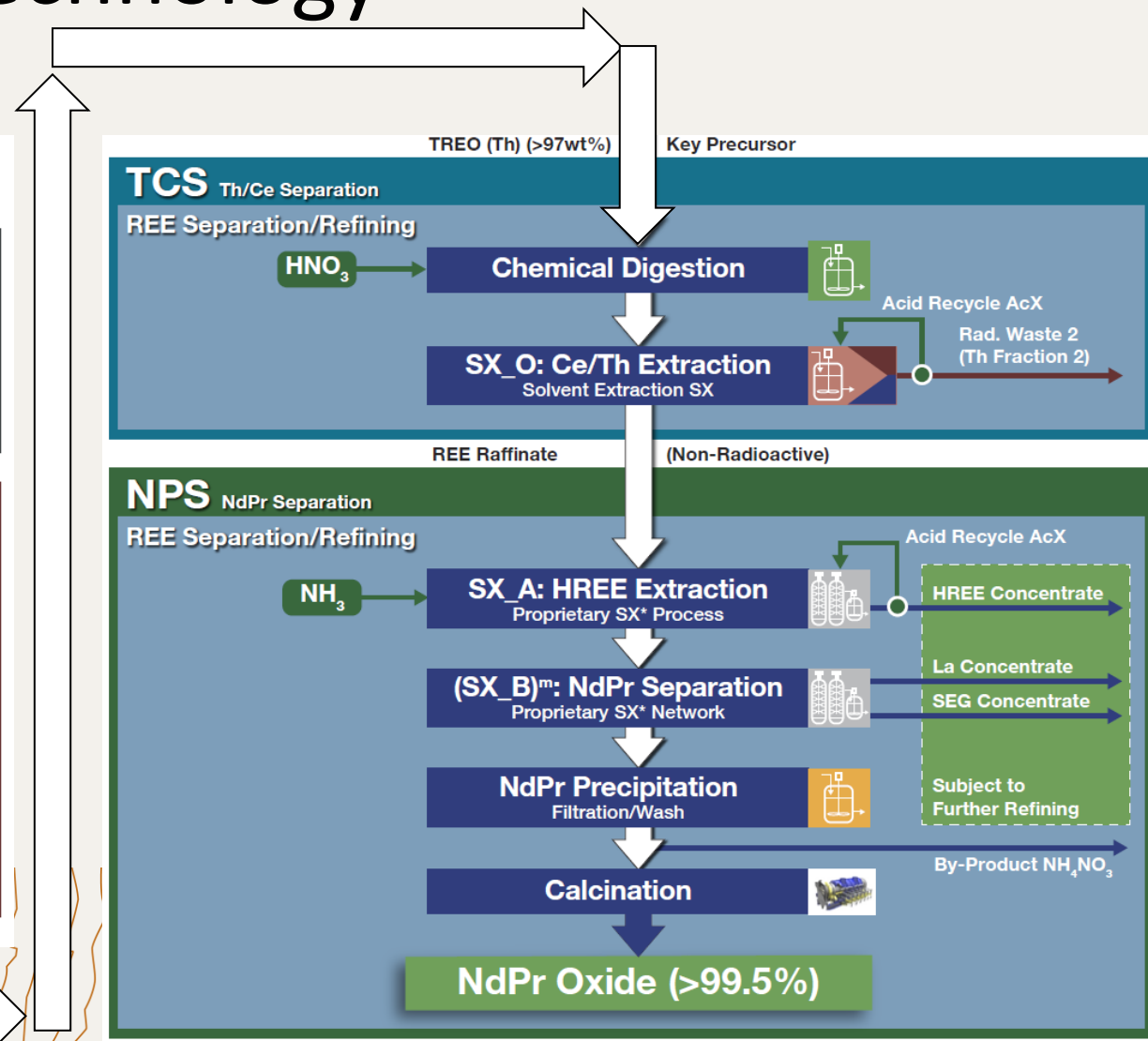
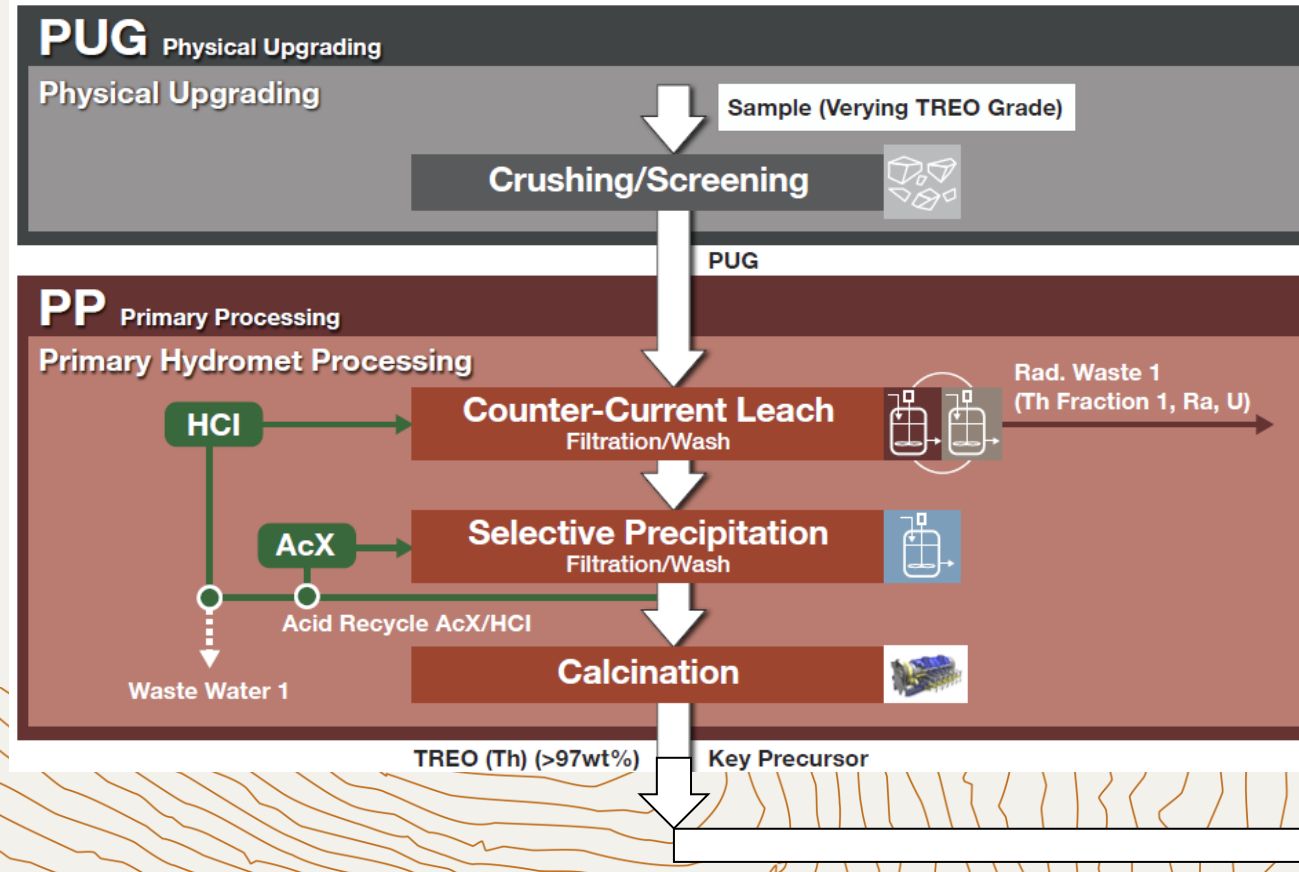
First-of-its-Kind: REE Demonstration Plant



- 12 skids & 11,000+ linear feet of piping
- 10,000+ electrical connections
- 500+ pumps, valves, and tanks
- Building expansion, scrubbers, centrifuge, compressors, boilers, generators, etc.
- Instrumented system allows monitoring and control utilizing proprietary separation technology & software

Patented & Proprietary REE Technology

REE Separation Process



RER's demonstration project is expected to produce separated high-purity Nd/Pr oxide and provide performance metrics for extrapolation to full-scale commercial operations



Demonstration Plant: Path to Commercialization

- Demonstration Plant estimated to yield up to 9-12 tonnes of NdPr oxide & up to 240 kg of Heavy REE concentrate
- Operations up to 12 months & NRC license valid through mid-2027
- Construction completed; undergoing final as-built review/optimization; operations commencement in 2025
- The results from the Demo Plant operation will yield the economic and technical data necessary for scale-up and commercialization
- Seeking follow-on projects / advancements to leverage & expand significant capabilities and investment in demonstration plant
- Prepare for full scale commercial facility design and evaluation and mine to separated rare earth oxide feasibility studies

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