America’s Rare Earth Industry Cannot Be Rebuilt on a Production Schedule

written by Jack Lifton | July 28, 2026

“A company can announce when a plant will open, but only years of operating experience will determine when it becomes a reliable industrial producer. America will rebuild its rare earth industry by restoring the knowledge, discipline and customer confidence that were lost over decades—not by announcing production dates.” — Jack Lifton, Co-Chair, Critical Minerals Institute (CMI)

One of the most common announcements made by rare earth companies is the declaration of a target date for production. Sometimes the promised milestone is a separation facility. Sometimes it is a metal plant, an alloy facility, or a permanent magnet factory. The dates are often precise. The confidence is unmistakable. The implication is that industrial capability can be scheduled much like the construction of a building. History suggests otherwise.

The United States did not lose its rare earth production and processing industry overnight. It took decades to de-industrialize. It took decades for processing plants to close, for metallurgical expertise to retire, for machine tools to disappear, for supplier networks to dissolve, for OEMs to qualify offshore suppliers, and for an entire generation of engineers and technicians to learn their trade elsewhere.

That history is not merely interesting. It is predictive. The length of time required to dismantle an industrial ecosystem is the best guide to the time required to rebuild it. Investors should therefore treat announced production dates with caution. A company can decide when it intends to commission a plant. It cannot decide when it will become an experienced industrial producer. The distinction is critical.

Building a separation plant is an engineering project. Becoming a reliable producer of separated rare earth oxides is an industrial journey. Producing rare earth metal is a manufacturing achievement. Producing the same metal every day, within specification, at competitive cost, for years without interruption is what customers actually purchase. A permanent magnet manufacturer does not buy announcements. It buys consistency. This is where many investment presentations become disconnected from industrial reality.

America’s de-industrialization was not simply the loss of factories. It was the loss of accumulated experience. Thousands of engineers, operators, maintenance specialists, analytical chemists, purchasing professionals, logistics experts, and production managers disappeared from the industry through retirement, career changes, or relocation. Supplier relationships vanished. Equipment manufacturers shifted their attention elsewhere. Universities stopped producing specialists because industry no longer employed them.

Industrial capability is an ecosystem. An ecosystem cannot be recreated merely by raising capital. Indeed, money is often the least difficult part of the process. The difficult part is rebuilding industrial memory.

Industrial knowledge resides in people. It resides in habits developed over decades. It resides in lessons learned from equipment failures, impurities that unexpectedly accumulate, solvent extraction stages that become unstable, furnaces that behave differently than their designers predicted, and customers who reject shipments because one impurity exceeds specification by a few parts per million.

None of these lessons appears in a feasibility study. They appear only after years of operating experience. China did not become the world’s dominant rare earth processor because it discovered extraordinary deposits. It became dominant because it spent decades solving thousands of practical industrial problems that others either ignored or abandoned. During those years, it accumulated experience that today represents an enormous competitive advantage.

Experience compounds. Industrial capability compounds. Neither can be accelerated simply because governments decide they are strategically important. This is why investors should be skeptical whenever they hear that a company intends to begin production in eighteen or twenty-four months. The plant may indeed begin operating on schedule. The commissioning schedule may even be met.

That does not mean the company has become a qualified industrial supplier. Qualification is not self-declared. It is granted by customers. OEMs qualify suppliers only after demonstrating consistent quality, reliable delivery, stable production, responsive technical support, and commercial dependability over extended periods. Qualification often consumes far more time than construction.

This reality explains why rebuilding America’s rare earth industry is fundamentally different from building a new mine. Mines produce ore. Industries produce qualified products. The two should never be confused. Perhaps the greatest misunderstanding surrounding today’s rare earth revival is the belief that industrialization follows investment. In reality, investment merely creates the opportunity for industrialization.

Industrial capability must still be earned. The United States is attempting to recover capabilities that disappeared gradually over thirty or forty years. It should surprise no one that rebuilding them will also require measured, patient effort. Some segments may advance more quickly than others because knowledge still exists, equipment has improved, and international partnerships can shorten the learning curve. But no amount of optimistic scheduling can repeal the laws of industrial development.

Time remains an essential raw material. This should not discourage investors. Quite the opposite. It should encourage them to ask better questions. Rather than asking, “When will production begin?” they should ask, “How will this company acquire the operating experience necessary to become a trusted supplier?” Who has run facilities like this before? Where will the experienced operators come from? How long will customer qualification require? What industrial partners have already demonstrated confidence in the technology? How many years of reliable production are likely to be required before the company becomes commercially indispensable?

These questions are far more valuable than any published target date.

There is one final lesson worth remembering. The rare earth business is not a mining business that happens to involve chemistry. It is a specialty chemical, metallurgical, and advanced manufacturing business that happens to begin with mining. The value is added after the ore leaves the ground. The winners will therefore be determined not by who reaches “first production” on paper, but by who first develops enduring industrial capability.

America did not lose that capability in a single news release.

It will not recover it in one either.

Reindustrialization is measured not in press releases, but in decades of accumulated competence. Investors who understand that distinction will be far better equipped to distinguish genuine industrial progress from promotional milestones. In the end, industries are not rebuilt by announcing production dates. They are rebuilt by patiently restoring the capability to earn the confidence of customers, one qualified product at a time. And as always, the value is not created at the mine—it is created where the material is transformed into something an OEM is willing to buy.