



Opening Statement of Chairman Randy Weber

Energy Subcommittee Hearing

Powering the Nuclear Renaissance: Accelerating U.S. Leadership in Advanced Nuclear Reactors

Wednesday, September 2, 2026

Welcome to today's Energy Subcommittee hearing, "Powering the Nuclear Renaissance: Accelerating U.S. Leadership in Advanced Nuclear Reactors."

We are in the "Golden Era of Nuclear Power," thanks in large part to the Administration's leadership. The United States is the world's largest producer of nuclear power, accounting for more than 30 percent of the world's nuclear electricity generation.

Decades of research at the Department of Energy (DOE) national laboratories, combined with renewed interest in more cost-effective, flexible, and fuel-efficient designs, have positioned advanced nuclear energy technologies to transform how we produce and manage power. These technologies could open the door to new applications, from providing reliable, around-the-clock electricity to meet the growing needs of data centers to supplying electricity and industrial heat for energy-intensive sectors such as manufacturing, chemical production, and mining.

Idaho National Laboratory and Oak Ridge National Laboratory, represented by one of our witnesses today, play a critical role in advancing nuclear innovation. From developing and testing new reactor technologies and fuels to providing the research and infrastructure needed to move these technologies toward deployment, their work provides an essential foundation for America's next generation of nuclear energy.

In the last 15 months since President Trump signed four executive orders on nuclear energy, we have seen a historic shift in the nation's approach to expanding nuclear power capacity. President Trump and DOE have moved quickly and decisively to usher in an American nuclear renaissance.

That leadership has produced tangible results. Last spring, the Trump Administration set an ambitious goal of achieving criticality for at least three advanced reactor concepts outside a national laboratory by July 4, 2026. With support from DOE through the Reactor Pilot Program and the Nuclear Energy Launch Pad, that goal was not only met, but exceeded, with four advanced reactor projects successfully demonstrating zero-power fueled criticality by America's 250th birthday.

Today, we are joined by representatives from three of the companies that achieved these milestones: Antares Nuclear, Valar Atomics, and Aalo Atomics. These demonstrations represent

significant progress in testing advanced nuclear technologies and moving advanced nuclear reactors closer to commercial deployment.

Despite this remarkable progress, significant gaps remain, particularly in securing the nuclear fuel supply needed to support advanced reactors. Many advanced reactors will require High-Assay Low-Enriched Uranium (HALEU), which is not yet available at the scale needed for widespread deployment. Expanding domestic enrichment and fuel fabrication capacity will be vital to supporting future demonstrations and commercialization.

Additionally, the Nuclear Regulatory Commission (NRC) must modernize its regulatory framework to keep pace with advanced nuclear technologies. Outdated processes, lengthy licensing timelines, and unnecessary regulatory burdens can slow innovation and drive up costs. We must ensure the NRC has a modern, risk-informed framework that enables the safe and timely deployment of advanced reactors.

Nuclear energy plays a vital role in America's energy security and long-term energy independence. By providing a reliable and secure source of baseload power, nuclear energy can help meet our nation's growing energy demands.

We should build on this momentum and continue to foster an environment where American nuclear innovation can move from demonstration to deployment. I look forward to hearing from our witnesses about the lessons learned from these demonstrations and what more we can do to advance safe, commercially viable reactors that strengthen our energy security and technological leadership.

Thank you for your participation and your contributions to this great nation. I yield back the balance of my time.