

July 13, 2023

The Honorable Dr. Kathleen H. Hicks
Deputy Secretary of Defense
1300 Defense Pentagon
Washington, D.C., 20301

Dear Dr. Hicks:

We write today to express our overwhelming support for Project Pele. As you know, Project Pele is overseen by the Strategic Capabilities Office (SCO) within the Department of Defense (DOD), in close collaboration with the Department of Energy (DOE), the Nuclear Regulatory Commission (NRC), the National Aeronautics and Space Administration (NASA), the National Nuclear Security Administration (NNSA), and the U.S. Army Corps of Engineers (USACE).¹ DOD's SCO has been directed to design, build, and demonstrate a mobile nuclear microreactor (Pele Reactor) at Idaho National Laboratory (INL) by 2025.²

America's national security and energy security are on the line—since energy can start, define, and end a war. Project Pele is designed to provide assured energy to DOD's most critical assets, which will be vital in satisfying the U.S. Armed Forces' energy needs both domestically and abroad. As the largest user of energy within the U.S. Government and one of the largest energy users in the world, the DOD must be able to meet their ever-growing energy requirements.³ Currently, the U.S. Armed Forces depend heavily on natural gas and diesel to power their military operations (e.g. providing power to military bases, military housing, military weapons technology, military vehicles, etc.). In fact, the DOD uses more than 10 million gallons of fuel each day, which is only expected to increase as the DOD continues to adopt future military technologies with high energy requirements.⁴ This naturally creates future logistical vulnerabilities associated with refueling, but these vulnerabilities are alleviated by Project Pele due to the Pele Reactor's ability to operate for years at a time without the need to refuel.⁵

Project Pele is therefore critical to maintaining and bolstering America's national security. We understand the importance of providing firm, reliable, clean, and dense baseload energy to power U.S. military bases and other distributed military operations, and we also understand the importance of increasing energy effectiveness while reducing external fuel-related logistical challenges. Therefore,

¹ DOD to Build Project Pele Mobile Microreactor and Perform Demonstration at Idaho National Laboratory, U.S. DEPARTMENT OF DEFENSE, <https://www.defense.gov/News/Releases/Release/Article/2998460/dod-to-build-project-pele-mobile-microreactor-and-perform-demonstration-at-idah/>.

² *Id.*

³ See generally *Project Pele: Mobile Nuclear Reactor*, U.S. DEPARTMENT OF DEFENSE RESEARCH AND ENGINEERING, https://www.cto.mil/pele_eis/.

⁴ See *supra* note 1.

⁵ See AARON HORWOOD ET AL., *The Greatest Risk in Mobile Nuclear Power? Failing to Take Advantage of the Decisive Edge It Offers the US Military*, MODERN WAR INSTITUTE AT WEST POINT (NOV. 23, 2022), <https://mwi.usma.edu/the-greatest-risk-in-mobile-nuclear-power-failing-to-take-advantage-of-the-decisive-edge-it-offers-the-us-military/>.

the nuclear-powered Pele Reactor must be part of our country's overarching national security discussion.

In the same regard, intermittent sources of energy simply won't be able satisfy DOD's future energy-related needs. For example, the Defense Science Board (DSB) previously identified energy as a critical enabler of future military operations, and found that the intermittent character of many alternative energy sources can't keep pace with the growth of DOD's energy needs.⁶ Ultimately, intermittent energy sources—such as wind and solar—do not have the inherent potential of providing reliable, baseload energy to power current and future military operations.

In comparison, the Pele Reactor will provide reliable and resilient power, while minimizing risk of nuclear proliferation, environmental damage, and harm to nearby personnel or populations.⁷ The Pele Reactor will also utilize TRIStructural-ISotropic (TRISO) fuel—an innovative and safe nuclear fuel derived from high assay low enriched uranium (HALEU)—that DOE describes as “the most robust nuclear fuel on Earth.”⁸ Along with safety considerations associated with the Pele Reactor, it's worth noting that the reactor will automatically shut down if certain circumstances present themselves—thereby making it impossible for the Pele Reactor to “meltdown.”

Finally, successful completion of Project Pele will serve as a pathway for mobile microreactor deployment in the future. From deploying microreactors to respond to the impacts of a natural disaster, to commercially selling microreactors throughout the United States and the rest of the world, demonstrating the Pele Reactor will assist with establishing a robust and sustainable advanced nuclear supply chain. Successful demonstration will also reduce market risks associated with deploying advanced nuclear technology.

Moving forward, Congress will continue to work with the DOD and other regulatory agencies to ensure that a Pele Reactor can be constructed and deployed appropriately—whether it's by truck, rail, aircraft, or maritime vessel. It's also exciting that Project Pele has received strong bipartisan support in the past, and intriguing that bicameral members from both sides of the political aisle support the successful completion of Project Pele.

Our country has grown accustomed to an operationally sufficient energy supply in times of peace, but we must prepare for the logistical energy challenges arising from the battles of tomorrow. Successfully demonstrating the Pele Reactor will result in a positive ripple effect throughout our nation, and most importantly will give the U.S. Armed Forces, American citizens, and our allies around the world

⁶ See *Task Force on Energy Systems for Forward/Remote Operating Bases*, DEPARTMENT OF DEFENSE: DEFENSE SCIENCE BOARD REPORT (AUG. 1, 2016), https://dsb.cto.mil/reports/2010s/Energy_Systems_for_Forward_Remote_Operating_Bases.pdf.

⁷ See *supra* note 3.

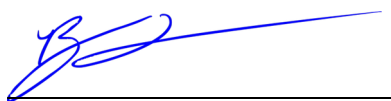
⁸ *TRISO Particles: The Most Robust Nuclear Fuel on Earth*, DEPARTMENT OF ENERGY OFFICE OF NUCLEAR ENERGY (JUL. 9, 2019), <https://www.energy.gov/ne/articles/triso-particles-most-robust-nuclear-fuel-earth>.

confidence that portable nuclear microreactor technology is feasible and deployable.

Nonetheless, America's national security and energy security are on the line, and we strongly support Project Pele and the Pele Reactor as an energy solution to assist the United States and our allies in future military circumstances. Therefore, we request that you provide us with an update on Project Pele's timeline, and we ask that DOD provide insights on its plan to implement this technology once successfully demonstrated at INL.

Thank you for your attention to this important matter and we will continue to track the progress of Project Pele.

Sincerely,



Byron Donalds
Member of Congress



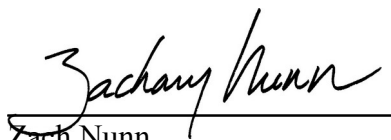
Troy E. Nehls
Member of Congress



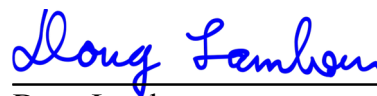
Paul A. Gosar, D.D.S.
Member of Congress



Anna Paulina Luna
Member of Congress




Zach Nunn
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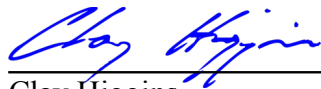
Doug Lamborn
Member of Congress



Rich McCormick, MD, MBA
Member of Congress



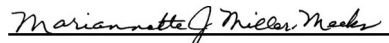
Harriet M. Hageman
Member of Congress



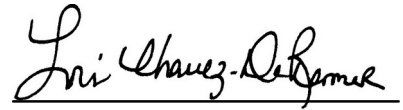
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