Maryland House Committee on Environment and Transportation

Carol Lane, Senior Vice President, Government Relations, X-energy
In Support of HB 970
February 24, 2026

Chair Korman, Vice Chair Guyton, and Members of the Committee:

Thank you for the opportunity to testify in support of House Bill 970. My name is Carol Lane, Senior Vice President for Government Relations at X-energy. X-energy is an advanced nuclear reactor company headquartered in Rockville, Maryland. Since 2019, we have grown from approximately 50 employees to nearly 1,000, with most operations based here in Maryland, including Operations Training Simulator in Frederick and our Helium Test Facility supporting advanced reactor development.

X-energy is developing a high-temperature gas-cooled small modular reactor (SMR) designed for both electricity and industrial heat applications. Our technology offers several important attributes:

- **Inherently safe fuel**: Our TRISO fuel is meltdown-resistant and recognized by the U.S. Department of Energy as among the most robust nuclear fuels developed.
- **Non-water cooling**: Our reactor uses inert helium gas rather than water in the reactor core.
- **Compact emergency planning zone**: Approximately one-quarter mile, enabling siting near industrial facilities and data centers.
- **Dual output capability**: We produce both reliable electricity and high-quality steam for manufacturing and industrial processes.

Our first commercial plant will be deployed at a Dow chemical facility in Texas under the Department of Energy's Advanced Reactor Demonstration Program. In 2024, we signed an agreement with Amazon to support development of more than five gigawatts of new power through 2039. In 2025, we partnered with Centrica in the United Kingdom for initial deployment followed by additional multi-gigawatt commitments. Commercial deployment begins in the early 2030s.

While federal policy has been instrumental in advancing first-of-a-kind projects, state-level market signals increasingly determine where projects ultimately locate and scale. HB 970 takes a thoughtful and pragmatic step by modernizing Maryland's Renewable Energy Portfolio Standard into a Clean Energy Portfolio Standard and recognizing nuclear energy within that framework.

Today, nuclear energy provides more than 70 percent of Maryland's carbon-free electricity. At the same time, Maryland faces increasing demand growth, tightening reserve margins within PJM, and the potential to attract energy-intensive industries such as advanced manufacturing and data centers.

Expanding the definition to clean energy acknowledges that a durable, affordable, and reliable clean energy system requires firm, dispatchable, carbon-free generation alongside wind and solar.

Importantly, placement within the portfolio structure influences investment decisions.
Tier 2 recognition appropriately acknowledges nuclear energy's clean attributes and supports system

reliability. However, Tier 1 treatment — particularly for new advanced nuclear generation — could create a stronger long-term market signal and could serve as a meaningful accelerator for deployment.

Tier 1 eligibility would:

- Provide higher-value clean energy credits
- Improve project bankability and financing certainty
- Signal Maryland's intent to attract next-generation clean energy investment
- Support new-build projects rather than solely recognizing existing assets

As Maryland evaluates its long-term energy strategy, the distinction between Tier 1 and Tier 2 is ultimately about how strongly the state wishes to incentivize new 24/7 firm generation.

HB 970 represents an important first step in modernizing Maryland's framework. It recognizes nuclear energy's role in reliability, economic growth, and decarbonization. As a Maryland-based company, X-energy stands ready to partner with the state in delivering new clean energy capacity, high-quality jobs, and long-term economic investment.

Thank you for your consideration.