

Testimony of Carol Lane
Vice President for Government Relations
X-energy
Before the Senate Committee on Education, Energy, and Environment
February 20, 2025

Chairman Feldman and Vice Chair Kagan,

Thank you for the opportunity to testify. I'm Carol Lane, Vice President for Government Relations at X-energy, a Maryland-based advanced nuclear reactor company headquartered in Rockville. Founded in 2009, we employ about 450 people and expect to grow to 750-800 by year's end.

As a leading small modular reactor (SMR) developer, our technology offers key advantages:

- Our fuel – the core of our safety case is Meltdown-proof. The U.S Department of Energy has recognized it as the most robust on Earth
- Our reactors use no water in our reactor core—only inert helium gas.
- Our safety case results in a compact emergency planning zone (¼ mile), allowing siting near industrial hubs and data centers.
- Our reactor produces both electricity and high quality steam for industrial and heat applications

SMRs are approaching deployment in the early 2030s. Our first High-Temperature Gas-cooled Reactor (HTGR) will be built at a Dow Chemical facility in Texas, in partnership with the Department of Energy's Advance Reactor Demonstration Program. Additionally, we signed a partnership with Amazon to develop over 5 gigawatts of power - out through 2039.

While federal support has been crucial to reduce First of a Kind risks, state-level policies are now essential. This bill:

1. Recognizes nuclear energy's role, which currently generates 40% of Maryland's electricity and 82% of its clean energy.
2. Creates a nuclear procurement process, encouraging the Maryland PSC to consider new nuclear generation.
3. Updates Maryland's Renewable Energy Portfolio Standard to a Clean Energy Portfolio Standard, allowing SMRs and renewables to complement each other.

As a Maryland-based company, X-energy is committed to helping the state meet its clean energy goals.

Thank you, and I'm happy to answer any questions.