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March 17, 2017

The Honorable John Barrasso  
Chairman  
United States Senate Committee on  
Environment and Public Works  
Washington, DC 20510

The Honorable Tom Carper  
Ranking Member  
United State Senate Committee on  
Environment and Public Works  
Washington, DC 20510

Dear Chairman Barrasso and Ranking Member Carper,

X Energy, LLC (X-energy) is a small advanced nuclear reactor company developing a meltdown proof and proliferation-resistant next generation nuclear reactor. We have pledged to create American jobs and help rebuild American leadership in nuclear energy innovation. X-energy has received one of the two DOE awards in January 2016 to progress the development of our advanced reactor; a high temperature gas-cooled reactor (HTGR). Licensing our HTGR within a reasonable schedule and within affordable cost is vital to our commercial success. We believe that moving forward with domestically developed advanced reactors now is crucial. The modernization of our energy infrastructure, for electricity production and for process heat, is critical to our nation's competitiveness.

The Nuclear Energy Innovation and Modernization Act is a significant step in the right direction and we appreciate your leadership in addressing issues affecting advanced nuclear reactor development. Of the many challenges to developing an advanced nuclear energy capability, we are most critically concerned about the affordability of upfront costs associated with licensing. We are particularly pleased that you have included Section 104, the Advanced Nuclear Energy Licensing Cost-share Grant program. If we, as a Nation, are going to achieve the multiple benefits of advanced reactors, we must identify what needs to be done to bring these designs to fruition by 2030. This provision is vital to achieve that deployment.

This is a compelling time to influence the future of energy solutions in this country and in fact, the world. Nuclear energy must be a part of this solution, and the development of the next generation non-light water reactors are essential to accomplishing this. China has just committed to 40 new nuclear power plants between 2016 and 2020, and they, along with Russia and several other countries, are moving forward with non-LWR technology. China has been operating a small 10Mwh HTGR reactor since 2003 and could begin operation of their commercial scale HTGR by 2018. Additionally, they have built a fuel manufacturing facility in Inner Mongolia. The United States has been the "gold standard" for licensing of nuclear reactors. If the United States is going to continue to lead, we must accelerate the development and licensing of the next generation non-light water nuclear reactors. Failure to do so will relinquish this critical leadership role to countries such as China, Korea and Japan.

There is an urgency to the modernization of the NRC's licensing process to accommodate non-light water advanced nuclear reactors. We are excited about this bill and strongly support its intent. We look forward to continuing to work with you to move it through Congress.

Please feel free to contact us to answer any questions, or if you would like any additional information.

Respectfully,

*Harlan Bowers*

Harlan Bowers  
President  
X Energy, LLC