UNITED STATES NUCLEAR INDUSTRY COUNCIL
1317 F Street NW, Washington, DC 20004
Tel: 202.332.8155 www.usnic.org

26 February 2020

Mr. Eliot Dye
Contract Specialist
U.S. Department of Energy
Washington, DC 20585

Subject: U.S. Nuclear Industry Council Response to Advanced Reactor Demonstration Program

The U.S. Nuclear Industry Council (USNIC) appreciates the opportunity to comment on the Department of Energy (DOE) Request for Information (RFI) / Notice of Interest (NOI) on the Advanced Reactor Demonstration program. This document provides comments to assist the DOE in developing the appropriate program and contract solicitation language to encourage advanced nuclear reactors.

USNIC is the leading U.S. business advocate for the promotion of nuclear advancement and the American supply chain globally. USNIC represents over 80 companies engaged in nuclear innovation and supply chain development, including technology developers, manufacturers, construction engineers, key utility movers, and service providers. USNIC encompasses multiple working groups and task forces, including an Advanced Nuclear Developers Group. Key USNIC strategic priorities include:

- Launching the next wave of U.S. nuclear energy plants;
- Revitalizing the U.S. supply-chain infrastructure and competing in the global market;
- Resolving key building block issues such as a sustainable fuel cycle.

USNIC encourages DOE to move quickly on the Advanced Reactor Demonstration program. Some USNIC member companies have indicated their intent to respond to the RFI individually, and are anticipating development of proposals. As an organization, USNIC endorses DOE proceeding expeditiously with issuance of the planned Funding Opportunity Announcement (FOA), and working with industrial developers.

As DOE moves forward with the program, DOE should have clear end goals of what DOE hopes to accomplish at the end of five to seven years to move the country and key developers forward to achieve commercial viability for Advanced Nuclear Reactors. The success path for the two demonstration projects and the technology risk reduction projects should be articulated, in context of other DOE and NRC nuclear programs underway. To ensure that DOE selects two awardees for the demonstration projects that can meet the aggressive timeline, it is important that

industry understands what DOE requires as a complete application, that DOE expeditiously reviews applications, and then quickly makes awards.

We understand companies will be allowed to submit applications for just the Demonstration projects, just the Risk Reduction projects, or both the Demonstration and the Risk Reduction projects concurrently. That is appropriate, and when possible, DOE should reduce the duplication of paperwork when an organization applies for both the Demonstration and the Risk Reduction projects.

Close cooperation of DOE with NRC will be required to address critical issues that must be addressed to receive a NRC license. DOE assistance may be needed in other areas such as addressing the supply availability of advanced fuels such as High Assay Low Enriched Uranium (HALEU).

One of the benefits of this project is developing a robust supply chain, which USNIC supports as an essential part of preparing for a viable advanced nuclear industry.

Because a goal of this project is to demonstrate reactors for commercial use, diverse reactor designs and sizes should be selected, if possible, to support different aspects of the electricity and industrial energy markets.

DOE should be flexible in its cost sharing arrangements to allow teams to secure the necessary funding, especially with the uncertainty associated with out-year federal funding. DOE should consider allowing applicants to address the financial security requirements by staging their financial assurances over the course of the project based on reaching milestones-- so there might be a higher government funding share at the beginning of the project and a higher non-federal funding share toward the end of the project.

Milestones are needed to assure the project is on the right course which includes up-front understanding of the project by applicant/DOE/NRC, path to obtaining a license, construction of the reactor and balance of plant, and on time and on budget project completion.

Companies are in various stages of development and have different technical risk challenges. DOE should present clear criteria on how they will pick two to five Risk Reduction awards among an array of different risk reduction needs.

The Honorable Jeffrey S. Merrifield
Partner, Pillsbury Winthrop Shaw Pittman LLP
Chairman, NIC Advanced Reactor Task Force
Commissioner, US Nuclear Regulatory Commission (1998-2007)

The Honorable Bud Albright
President & CEO, U.S. Nuclear Industry Council &
U.S. Under Secretary of Energy (2006-2008)

RFI/NOI title and reference number
Information Request on the Advanced Reactor Demonstration Program
DE-FOA RFI-0002271

DOE Contact
Eliot Dye
DOE Contracting Officer
dyeej@id.doe.gov

Name, phone number, and e-mail address for the principal point of contact:
Cyril Draffin
Senior Fellow, Advanced Nuclear
US Nuclear Industry Council
cyril.draffin@usnic.org
301-233-4643

Institution or organization affiliation, postal address, e-mail address, and phone number
US Nuclear Industry Council
Suite 300
1317 F Street, NW
Washington, DC 20004
202-332-8155

Specify your organization's role and/or interest is in Demonstration and Risk Reduction projects
USNIC is the leading U.S. business advocate for the promotion of nuclear advancement and the American supply chain globally. USNIC represents over 80 companies engaged in nuclear innovation and supply chain development, including technology developers, manufacturers, construction engineers, key utility movers, and service providers.