

**ADDENDUM NO. 2 TO THE  
MEMORANDUM OF UNDERSTANDING**

**BETWEEN U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY  
COMMISSION ON NUCLEAR ENERGY INNOVATION**

**I. Purpose and Scope**

The purpose of the Department of Energy (DOE)/Nuclear Regulatory Commission (NRC) Memorandum of Understanding (MOU) on Nuclear Energy Innovation is to coordinate DOE and NRC technical readiness and sharing of technical expertise and knowledge on advanced nuclear reactor technologies and nuclear energy innovation, including reactor concepts demonstrations, through the National Reactor Innovation Center (NRIC).

To ensure the proper sharing of technical expertise and information between DOE and NRC, this Second Addendum to the MOU addresses the technical coordination of DOE and NRC regarding research, development, and demonstration (RD&D) projects undertaken by NRIC. The DOE and NRC's cooperation on NRIC activities will balance the need to assure the NRC's independence to avoid compromising its regulatory role and the respective responsibilities of each agency to cost-effectively develop the technical bases for the safe and secure operation and regulation of advanced nuclear energy facilities.

This Addendum does not alter the authorities or independence of the NRC and DOE or their abilities to fulfill their responsibilities.

**II. Authority**

NRIC is a DOE program authorized under the Nuclear Energy Innovation Capabilities Act (NEICA) of 2017 (Public Law 115-248) and designed to enable the testing and demonstration of reactor concepts to be proposed and funded, in whole or in part, by the private sector.

**III. Roles and Responsibilities Of Each Party**

**DOE**

As the funding agency responsible for the NRIC program, DOE will provide oversight and direction to the NRIC program in accordance with NEICA, funding authorization, and the Office of Nuclear Energy's (NE) mission and objectives.

The following are the anticipated DOE Roles and Responsibilities for NRIC activities:

- Identify a single DOE Point of Contact (POC) (the DOE-NE NRIC Federal Program Manager) to coordinate DOE-NRC NRIC interactions;
- Coordinate receipt and review of program status reports;
- Provide technical information to NRC from DOE subject matter experts having appropriate experience and expertise;
- Provide NRC technical staff with access and the opportunity to observe and learn about technologies developed through DOE's operation of the NRIC;
- Coordinate sharing of post-project information and data within DOE and NRC and with the public; and
- Attend, as necessary, coordination meetings between DOE and NRC associated with the planning, execution, and reporting of NRIC activities.

## **NRC**

The NRC, consistent with its role as an independent safety and security regulator, is responsible for providing accurate, current information on the NRC's regulations and licensing processes in connection with NRIC's planning and execution of RD&D activities. NRIC's RD&D activities include developing, testing, and demonstrating the full spectrum of technologies comprising advanced nuclear reactors, from individual structures, systems, and components to fully integrated reactor facilities.

The NRC will provide information regarding its regulation of advanced nuclear reactor technologies including, but not limited to: reactor design, siting, construction, fuel selection, and operation. Consistent with Section IV of the MOU, NRC's role as an independent safety and security regulator, and within the bounds of NRC's statutory mandate and available, budgeted resources, the NRC will share technical and regulatory expertise with respect to safety analysis and current information on the NRC's regulatory processes and practices. The NRC will neither make recommendations regarding specific commercial reactor design concepts nor participate in any concept selection process.

The following are the anticipated NRC Roles and Responsibilities for the NRIC activities:

- Identify a single Point of Contact (Technical Assistant, NRC-Office of Nuclear Regulatory Research) within the NRC to work with the DOE POC to coordinate DOE-NRC NRIC interactions;
- Share technical information on safety analysis from NRC subject matter experts having appropriate experience and expertise;
- Provide expertise and information to DOE and laboratory or facility personnel on interpretation and application of NRC regulations, standards, and guidance;
- Provide DOE and NRIC personnel with information on NRC's regulations and guidance as they pertain to NRC's licensing processes, included but not limited to, environmental reviews, reactor design, siting, construction, fuel selection, and operations; and

- Attend, as necessary, coordination meetings between DOE and NRC associated with the planning, execution, and reporting of NRIC activities.

#### **IV. Coordination**

The DOE/NRC NRIC technical coordination will be administered by a joint DOE/NRC NRIC Coordination Group (Coordination Group), composed of the DOE's Deputy Assistant Secretary for Reactor Fleet and Advanced Reactor Deployment (DOE-NE-5), the NRC's Director of the Office of Nuclear Regulatory Research (NRC-RES), and the NRC's Director of the Office of Nuclear Reactor Regulation (NRC-NRR) or their designees as needed. The Director of NRIC will be an ex-officio member of the Coordination Group.

The Coordination Group will advise DOE for the purposes of ensuring that the NRIC program of work is beneficial to the DOE and NRC's missions. In addition, the Coordination Group will ensure: (1) DOE and NRC share technical expertise and knowledge on testing and demonstration of advanced nuclear reactor concepts; and (2) DOE and NRC achieve and maintain transparency on NRIC activities including access to NRIC facilities and capabilities, and the opportunity to observe and learn about the technologies developed through NRIC.

The Coordination Group will facilitate the sharing of information between DOE and NRC technical experts, as appropriate, to support timely RD&D activities and effective evaluation of applications for regulatory approvals for advanced nuclear reactors.

#### **V. Intergovernmental Personnel Act (IPA)**

The Intergovernmental Personnel Act (IPA), 5 U.S.C. § 3371- 3376, allows for the temporary transfer and assignment of employees between Federal agencies and certain non-Federal organizations, including certain Federally Funded Research and Development Centers (FFRDCs), when an assignment is of mutual benefit to the Federal agency and the non-Federal organization and serves a sound public purpose.

DOE and NRC may utilize IPA mobility assignments to achieve the objectives of the DOE/NRC MOU on Nuclear Energy Innovation and to:

- strengthen the respective capabilities of DOE and NRC to carry out their respective missions;
- assist the transfer of knowledge of new innovative nuclear technologies and their potential uses, including commercialization of the technologies;
- assist the transfer of knowledge of new and existing regulatory policies, including commercialization and application of the technologies; and
- provide program and developmental experience which will enhance an assignee's performance in his or her regular job.

Any IPA assignments in support or furtherance of this MOU shall comply with applicable law and regulations, including requirements for cost-sharing arrangements.

**VI. Funding Authorization**

This Addendum is neither a fiscal nor a funds obligation document and does not authorize expenditure or reimbursement of appropriated funds. To the extent activities discussed in this addendum would require resources beyond the NRC's existing appropriated authorities, the parties may agree to enter into Implementing Interagency Agreements (IAAs), supplemental to the MOU and this Addendum, that address such activities.

**VII. Organizational Conflicts of Interest**

DOE and NRC are mindful of the organizational conflict of interest requirements and obligations of the respective agencies under those requirements including Section 170A of the Atomic Energy Act of 1954, as amended. DOE and NRC will work together to resolve any organizational conflicts that may arise.

DOE Authorizing Official:  
Alice Caponiti, Deputy Assistant Secretary for Reactor Fleet and Advanced Reactor Deployment



02/10/2021

Date: \_\_\_\_\_

\_\_\_\_\_  
Office of Reactor Fleet and Advanced Reactor Deployment

NRC Authorizing Officials:  
Raymond Furstenau, Director of the Office of Nuclear Regulatory Research

Date: \_\_\_\_\_

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Office of Nuclear Regulatory Research  
Andrea Veil, Acting Director of the Office of Nuclear Reactor Regulation

Date: \_\_\_\_\_

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Office of Nuclear Reactor Regulation