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

I. PURPOSE

This memorandum of understanding (MOU) between the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Department of Energy (DOE) (hereafter the "parties" or "party") describes the roles, responsibilities, and processes for their coordination pursuant to the Nuclear Energy Innovation Capabilities Act of 2017 (Public Law 115-248). The primary purpose of the MOU 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 through the National Reactor Innovation Center. The National Reactor Innovation Center is a DOE program under the Nuclear Energy Innovation Capabilities Act of 2017 designed to enable the testing and demonstration of reactor concepts to be proposed and funded, in whole or in part, by the private sector.

II. AUTHORITY

The DOE enters into this MOU under the authority of Section 646 of the Department of Energy Organization Act (Public Law 95-91, as amended; 42 U.S.C. 7256), and Section 958 of the Energy Policy Act of 2005, as amended by the Nuclear Energy Innovation Capabilities Act of 2017. The NRC enters into this MOU under the authority of Section 205 of the Energy Reorganization Act of 1974 (Public Law 93-438, as amended; 42 U.S.C. 5845), and Section 958 of the Energy Policy Act of 2005, as amended by the Nuclear Energy Innovation Capabilities Act of 2017.

III. ROLES AND RESPONSIBILITIES OF EACH PARTY

A. DOE

1. DOE is responsible for carrying out the National Reactor Innovation Center, a program aimed at enabling the testing and demonstration of reactor concepts to be proposed and funded, in whole or in part, by the private sector.

2. In carrying out the National Reactor Innovation Center program, DOE is responsible for, among other things, leveraging the technical expertise of relevant Federal agencies and the National Laboratories, as appropriate, in order to minimize the time required to enable construction and operation of privately funded experimental reactors at National Laboratories or other Department-owned sites.

3. As appropriate, DOE will assist prospective applicants for new or advanced nuclear technology in understanding and navigating the pertinent regulatory processes.

B. NRC

1. The NRC is responsible for licensing new or advanced nuclear technology subject to its jurisdiction, including demonstration nuclear reactors for the purpose of demonstrating the suitability for commercial application of the reactor.

2. The NRC, consistent with its role as an independent safety and security regulator, is responsible for providing DOE and the nuclear energy community with accurate, current information on the NRC's regulations and licensing processes.

IV. COOPERATIVE ACTIVITIES OF THE PARTIES

A. SHARING TECHNICAL EXPERTISE

DOE and NRC will share technical expertise and knowledge as appropriate with respect to, but not limited to the National Reactor Innovation Center, to include the following areas:

1. DOE's testing and demonstration of advanced nuclear reactor concepts to be proposed and funded, in whole or in part, by the private sector.

2. DOE's operation of an electronic system to store and share data and knowledge relevant to nuclear science and engineering with relevant Federal agencies (including the NRC) and the private sector, as appropriate.

3. DOE's development and testing of electric and nonelectric integration and energy conversion systems relevant to advanced nuclear reactors.

4. NRC's expertise with respect to safety analysis.

5. NRC technical staff will be provided access and the opportunity to observe and learn about technologies developed through DOE's operation of the National Reactor Innovation Center.

B. COORDINATED ACTIVITIES

In addition to the areas of technical expertise and knowledge to be shared pursuant to subsection A, above, DOE and NRC will undertake activities, including those identified below, regarding the technical expertise, computing, and facility capabilities related to DOE's role in research and development for advanced nuclear reactor technology and the NRC's role, as an independent regulator, in the review of applications for advanced reactors.

DOE and NRC will coordinate as appropriate to ensure the following activities are fulfilled.

1. DOE and the NRC share information, as appropriate, regarding ensuring:

    a. DOE has sufficient technical expertise to support the timely research, development, demonstration, and commercial application by the civilian nuclear industry of safe and innovative advanced nuclear reactor technology; and

b. NRC has sufficient technical expertise to support the evaluation of applications for licenses, permits, and design certifications and other requests for regulatory approval for advanced nuclear reactors.

2. DOE and the NRC share information, as appropriate, regarding the use of computers and software codes to calculate the behavior and performance of advanced nuclear reactors based on mathematical models of the physical behavior of advanced nuclear reactors.

3. DOE maintains and develops the facilities necessary to enable the timely research, development, demonstration, and commercial application by the civilian nuclear industry of safe and innovative reactor technology.

4. NRC has access to those DOE facilities described in paragraph IV.B.3, as needed and appropriate.

V. ORGANIZATIONAL IMPLEMENTATION

1. Office. This MOU will be implemented through DOE's Office of Reactor Fleet and Advanced Reactor Deployment on behalf of DOE and through NRC's Office of Nuclear Regulatory Research on behalf of NRC. These offices will coordinate the activities and sharing of technical expertise and knowledge covered by this MOU.

2. Contacts. The point of contact for coordination and implementation of this MOU for DOE will be the Deputy Assistant Secretary for Reactor Fleet and Advanced Reactor Deployment, and for NRC will be the Director of the Office of Nuclear Regulatory Research.

3. Implementing Interagency Agreements. DOE and NRC may, as needed and by mutual agreement, enter into Implementing Interagency Agreements (IAAs), supplemental to this MOU, that address project-specific items in accordance with this MOU. Such IAAs may be executed between DOE at the Deputy Assistant Secretary level and NRC at the Office Director level.

VI. FUNDING AND AUTHORIZATIONS

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

2. This MOU shall not under any circumstances restrict either of the parties from participating in any activity with other public or private agencies, organizations or individuals.

3. This MOU is neither a fiscal nor a funds obligation document. Nothing in this MOU provides authorization or is intended to obligate the parties to expend, exchange, or reimburse funds, services, or supplies, or transfer or receive anything of value, or enter into any contract, assistance agreement, interagency agreement or other financial obligation. Any activity under this MOU is subject to the availability of funds.

4. This MOU is strictly for internal management purposes for each of the parties. It is not legally enforceable and shall not be construed to create any legal obligation on the part of either party. This MOU shall not be construed to provide a private right or cause of action for or by any person or entity.

5. All activities pursuant to this MOU are subject to and will be carried out in compliance with all applicable laws, regulations and other legal requirements.

6. Each party is responsible for its own compliance with any applicable statutory or regulatory data protection, export control or security restriction regarding any information or materials resulting from this MOU. DOE and the NRC will coordinate their efforts, as appropriate, to fulfill these responsibilities.

VII. COMMENCEMENT, MODIFICATION, AND TERMINATION

This MOU is effective upon the signature of both parties. The duration of the MOU shall be indefinite. Either party, however, may terminate its participation in this MOU upon 30 days written notice to the other party, consistent with their responsibilities under applicable law. The DOE and NRC may, by mutual agreement, amend this MOU.

VIII. SEVERABILITY

If any provision of this MOU, or the application of any provision to any person or circumstances, is or becomes invalid, the remainder of this MOU and the application of such provisions to other persons or circumstances shall not be affected.

IX. AGREEMENT

Dan Brouillette
Deputy Secretary of Energy
U.S. Department of Energy

SEP 13 2019
Date

Kristine L. Svinicki
Chairman
U.S. Nuclear Regulatory Commission

7 OCTOBER 2019
Date

7 October 2019
Effective Date