

**MEMORANDUM OF UNDERSTANDING BETWEEN THE
U.S. NUCLEAR REGULATORY COMMISSION, AND THE U.S. DEPARTMENT OF ENERGY,
INCLUDING THE U.S. DEPARTMENT OF ENERGY'S NATIONAL NUCLEAR SECURITY
ADMINISTRATION, ON THE RADIATION PROTECTION COMPUTER CODE ANALYSIS
AND MAINTENANCE PROGRAM**

I. Purpose and Background

1. This memorandum of understanding (MOU) is between the U.S. Nuclear Regulatory Commission (NRC), the U.S. Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), a semi-autonomous organization within DOE. For purposes of this MOU, DOE and NNSA are collectively referred to as "DOE." This MOU describes the roles, responsibilities, and processes related to the implementation of the Radiation Protection Computer Code Analysis and Maintenance Program (RAMP). RAMP provides the nuclear energy and radiation protection community with access to the distribution, development, and use of radiation protection computer codes while ensuring sustainability of code development.
2. This MOU is specific to the portion of RAMP in which the NRC and DOE jointly conduct cooperative research and DOE sponsors DOE National Laboratories in the development and management of RESidual RADioactivity (RESRAD) and Turbo FRMAC computer codes.

II. Authority for the Memorandum of Understanding

1. NRC is authorized to enter into this MOU pursuant to Section 205(c) of the Energy Reorganization Act of 1974 (Pub.L. 93-438, as amended; 42 U.S.C. 5845(c)).
2. DOE is authorized to enter into this MOU pursuant to Section 646 of the Department of Energy Organization Act (Pub. L. 95-91, as amended; 42 U.S.C. 7256).
3. Title 44 CFR § 351.24(f) designates DOE as the lead agency for coordinating the development and issuance of guidance for the implementation of the Federal Radiological Monitoring and Assessment Plan. DOE leads the Federal Radiological Monitoring and Assessment Center (FRMAC), which includes development of plans and tools to conduct this mission.

III. Roles and Responsibilities

1. The NRC is the lead agency for implementing RAMP and is responsible for working with prospective domestic and international members to assist them in understanding and navigating the RAMP program. In addition, the NRC shares information with DOE pursuant to RAMP Agreements.
2. DOE is the lead agency for management of the RESRAD family of codes and the Turbo FRMAC dose assessment code and sponsors continued development and maintenance of the codes. In addition, DOE shares information to assist the NRC with the incorporation of the RESRAD and Turbo FRMAC codes into RAMP.

IV. Process

1. Both agencies agree to identify Federal employees as points of contact with the responsibility of implementing the provisions of this MOU.
2. The NRC and DOE points of contacts, in collaboration with both laboratory and respective NRC/DOE HQ management, will mutually determine and approve the computer codes for inclusion in the RAMP Program.
3. The NRC provides the overall infrastructure for RAMP. This includes activities and costs associated with modifying potential RAMP computer codes to meet RAMP objectives. In collaboration with DOE and consistent with NRC Management Directive 11.7 "NRC Procedures for Placement and Monitoring of Work with Federal Agencies and U.S. Department of Energy Laboratories" and DOE Order 481.1E, *Strategic Partnership Projects [Formerly Known as Work for Others (Non-Department of Energy Funded Work)]*, the parties may enter into contractual agreements to support code maintenance and development. Contracts between the NRC and DOE would identify tasks that provide development discussions and suggested updates on the computer codes. The tasks may also include participation by DOE code subject matter experts in two or more User Meetings/Workshops per year and answering code development questions from the RAMP@nrc.gov list serve and forum. The NRC will maintain a RAMP Web site that will be linked to the computer code Web sites. The intent of this MOU is to ensure alignment and transparency in code distribution practices.
4. DOE HQ agrees to be responsible for facilitating DOE National Laboratory support to the RAMP Program to include, but not be limited to, ensuring NRC agreements directly with DOE or NRC contracts with DOE Lab contractors are appropriately aligned to support the requirements of the RAMP Program while maintaining DOE mission requirements. This may include updates to the processes and Web sites of the DOE computer code developers to align with the RAMP Program. For example, DOE agrees to share computer code user databases to align tracking of customer/user requests and establish appropriate links between the respective DOE and NRC Web sites for the sharing and distribution of codes in the RAMP Program. In addition, DOE will continue to provide support to DOE Laboratories, promote and conduct training to meet DOE requirements, but the training will be modified to promote the RAMP Program and promote RAMP User Meetings and Workshops.
5. The NRC agrees that it will not charge users for individual computer codes. The computer codes will be a part of the suite of RAMP codes incorporated into the fee structure of the RAMP Program. DOE codes covered by (or encompassed by) this MOU will continue to be free to domestic and international users. Any changes to fee structure by NRC will be coordinated with DOE before they are finalized. See <https://ramp.nrc-gateway.gov/content/code-registration-page> for the current fee structure.
6. Pursuant to 42 U.S.C. § 5852(c), the NRC has authority to retain funds "received by the Commission for the cooperative nuclear research program". Notwithstanding this authority, the NRC agrees to provide free access to the RAMP codes to DOE contractors for their work in support of DOE. However, these contractors will not be entitled to the full benefits of the RAMP program, such as attending the users

meeting.

7. If the NRC makes significant changes to RAMP, the NRC and DOE will determine whether more in-depth meetings and presentations are needed to ensure that DOE understands the changes.
8. This agreement does not preclude DOE from supporting its own programmatic requirements that relate to code development, maintenance, and training.
9. NRC agrees to make requests for code changes received through RAMP available for review and approval by DOE to ensure consistency with the scope of the code in question and the availability of resources to implement such updates.

V. Commencement, Modification, and Termination

1. The NRC and DOE managers responsible for this MOU will review the implementation of this MOU beginning six (6) months after the effective date and as needed. Any significant changes to the implementation of this MOU will be mutually agreed upon and documented in a memorandum to the signatories of this agreement.
2. This MOU does not have an expiration date. However, the NRC and DOE shall review the MOU's implementation annually, and both parties shall review the terms of the MOU after three (3) years to determine if it continues to meet the needs of both agencies.
3. This MOU is effective upon the signature of both parties.
4. Any additions, deletions, or other changes to this MOU shall be by written modification agreed upon by the appropriate official for each party. Either party may initiate such modifications.
5. This MOU is neither a fiscal nor a funds obligation document. All activities pursuant to this MOU are subject to the availability of appropriated funds and each party's budget priorities. Nothing in this MOU authorizes or is intended to obligate either agency 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.
6. Either party may terminate its participation in this agreement upon 60 days prior written notice to the other party. After such notice, the parties shall meet at a mutually agreed-upon location and date to effect an orderly termination of any ongoing or planned activities under this MOU.
7. Nothing in this agreement shall be interpreted as limiting, superseding, or otherwise affecting either agency's normal operations or decisions in carrying out its statutory or regulatory duties. This agreement does not limit or restrict the parties from participating in similar activities or arrangements with other entities.
8. This agreement will be executed in full compliance with all applicable statutes and regulations including the Privacy Act of 1974, the Freedom of Information Act, and the Federal Records Act.

- 9. This MOU is strictly for NRC and DOE internal management purposes. This MOU is not legally enforceable and shall not be construed to create any legal obligation on the part of either the NRC or DOE. In addition, this MOU shall not be construed to provide a private right of action for or by any person or entity.

VI. 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.

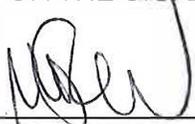
VII. Agreement

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

 Raymond V. Furstenau
 Director of Nuclear Regulatory Research
 United States Nuclear Regulatory Commission

Date

FOR THE U.S. DEPARTMENT OF ENERGY



 Michael J. Silverman
 Director, Office of Environmental
 Protection and ES&H Reporting
 Office of Environment, Health, Safety and Security
 United States Department of Energy

March 16, 2020

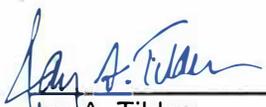
 Date



 Elizabeth A. Connell
 Office of the Associate Principal
 Deputy Assistant Secretary for
 Regulatory and Policy Affairs
 Environment Management
 United States Department of Energy

April 27, 2020

 Date



 Jay A. Tilden
 Deputy Under Secretary for
 Counterterrorism and Counterproliferation
 National Nuclear Security Administration
 United States Department of Energy

March 12, 2020

 Date