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Chg 1 (AdminChg): 01-30-2025

SUBJECT: DOE SCIENTIFIC INTEGRITY POLICY

1. PURPOSE AND SCOPE.

Science and technology lie at the heart of the Department of Energy's (DOE's) mission. Through its far-reaching support of research at the 17 DOE National Laboratories, user facilities, field sites such as Nuclear Security Enterprise (NSE) sites, and at hundreds of universities, other research institutions, and industry across the country, DOE is a major contributor to the Nation's overall research, development, demonstration, and deployment (RDD&D) effort.¹ Given the importance to the nation of DOE's research portfolio and the breadth of responsibility DOE bears for the Nation's continuing progress in science and technology, DOE is obliged to uphold the highest standards in the sponsorship, management, and conduct of RDD&D. Among these standards is the core value of scientific integrity.

The purpose of this Policy is to provide instruction and guidance aimed at enhancing and promoting the culture of scientific integrity at DOE. The intent of this Policy is to ensure the integrity of all aspects of scientific activities, including but not limited to proposing, conducting, reviewing, managing, and using the results of scientific work. Through its application, the Policy is meant to strengthen the actual and perceived credibility of the Federal Government and all Federal Government sponsored research by protecting the scientific process; using science to support the decision-making process; ensuring accountability; protecting the professional development of researchers; ensuring that advice by Federal Advisory Committees (FAC) remains reliable and objective; ensuring the free flow of scientific and technical information² consistent with privacy and classification standards and applicable laws, regulations, and DOE Orders and Policies; and establishing principles for conveying scientific and technological information among scientists, engineers, and the public.

In the spirit of appropriate conduct of research and the protection of scientific processes, DOE requires that covered personnel comply with agency policies and procedures for planning and conducting scientific activities and show appropriate diligence toward protecting and conserving Federal research resources, such as

¹ In this Policy, the term "National Laboratory" has the meaning defined in the [Energy Policy Act of 2005](#) [Sec. 2(3); [42 U.S.C. § 15801\(3\)](#)].

² Scientific and Technical information is defined in Attachment 2 of DOE O 241.1B, Chg 1, *Scientific and Technical Information Management*, updated 4-26-2016.

equipment and other property, and records of data and results that are entrusted to them. In accord with [the 2022 National Science and Technology Council Report of the Scientific Integrity Fast Track Action Committee \(SI-FTAC Report\), Protecting the Integrity of Government Science](#), DOE is firmly committed to maintaining a culture of scientific integrity. The SI-FTAC Report summarizes foundational Executive branch actions on scientific integrity, including the [2009 Presidential Memorandum on Scientific Integrity](#), the [2010 Office of Science and Technology Policy \(OSTP\) Memorandum on Scientific Integrity](#), and the [2021 Presidential Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking](#).

This Policy supersedes DOE P 411.2A, *DOE Scientific Integrity Policy*, dated 1-4-2017, which established a DOE scientific integrity policy in response to a DOE Secretarial Memorandum from March 23, 2012, and the 2010 OSTP Memorandum.

2. APPLICABILITY AND SCOPE.

All covered personnel, as defined in Section 12 of this Policy, that manage, design, conduct, evaluate, communicate, or use science to support policy and decision making are subject to this Policy.

3. DISSEMINATION AND TRAINING.

To instill and enhance a culture of scientific integrity, DOE will post this Policy prominently and publicly on its digital platforms, including on a dedicated agency website. DOE will educate all covered personnel on their rights and responsibilities related to scientific integrity. DOE will provide covered personnel with scientific integrity information and/or mandatory training to make covered personnel aware of their rights and responsibilities under this scientific integrity policy within a reasonable timeframe of their date of hire. DOE will also determine the content and cadence of follow-on scientific integrity training, which will be ongoing and occur with regularity.

To ensure accountability, DOE will provide clear guidance to all covered personnel on their rights and responsibilities with respect to this Policy.

4. DEFINITION OF SCIENTIFIC INTEGRITY.

DOE adopts the following definition of scientific integrity created by the 2022 Scientific Integrity Framework Interagency Working Group of the National Science and Technology Council and the 2021 SI-FTAC Definitions Working Group:

Scientific integrity is the adherence to professional practices, ethical behavior, and the principles of honesty, objectivity, and transparency when conducting, managing, using the results of, and communicating about science and scientific activities. Inclusivity and protection from inappropriate influence are hallmarks of scientific integrity.

The term *scientific integrity* encompasses a range of topics that includes media

communication, the use of advisory committees, and professional development of scientists and engineers. For the purposes of this policy, science includes: fundamental research; applied research and development; technology development, demonstration, and deployment; and any other activities that generate and/or utilize scientific and technical information.

5. POLICY.

The cornerstone of the scientific integrity policy at DOE is that all scientists, engineers, or others conducting or using science supported by DOE are free and encouraged to share their scientific findings and views, including differing scientific opinions and interpretations, consistent with privacy and classification standards and applicable laws, regulations, and DOE Policies and Orders. Covered personnel are also free to share their personal views and opinions on scientific or technical related policy matters, provided they do not attribute these views to the U.S. Government.

A strong culture of scientific integrity begins with ensuring a professional environment that is safe, equitable, inclusive, and accessible to the entire scientific workforce. The responsible and ethical conduct of research and other scientific activities requires these same traits and must be free from harassment and discrimination. Covered personnel engaged in scientific activities must be able to conduct their work free from reprisal or concern for reprisal.

6. FREEDOM OF EXPRESSION.

- a. Consistent with Section 3 below, covered personnel are free and encouraged to discuss their scientific work and research openly, whether in a scientific or public forum or with the media, and to publish their findings. Covered personnel are free to discuss their personal opinions on policies related to science and technology, provided these views are not represented as those of the U.S. Government or DOE.
- b. DOE supports and encourages the free flow of scientific information within the scientific community and between scientists and the public, consistent with restrictions on the dissemination of classified and other protected information, as described in Section 3 below.
- c. Covered personnel who are substantively engaged in the science informing agency policy decisions are welcome to express their opinions if they disagree with the scientific data, interpretations, or conclusions that are to be relied upon for that decision, as described in Section 6 below.

7. PUBLIC COMMUNICATION.

- a. Covered DOE personnel are responsible for notifying their management and appropriate DOE communications and public affairs offices on interactions with the news media. Under no circumstance may anyone, including a public affairs officer, ask or direct any researcher to alter the record of scientific

findings or conclusions.

- b. Covered personnel will not suppress, unduly delay, or alter scientific or technological findings and will not intimidate, coerce, or inappropriately influence any other covered personnel or others in order to alter or censor scientific or technological findings or conclusions, for reasons including but not limited to political purposes.
- c. Covered personnel are responsible for ensuring that responses to Congressional inquiries, testimony, and other requests that include scientific information accurately represent the most current understanding of the science.
- d. Covered personnel have the right to the correction of errors in scientific and technical information that significantly relies on their research, identifies them as an author or contributor, or purports to represent their scientific opinion in the event that such errors were released by the DOE, including in digital media outlets. Covered personnel also have the right to review, prior to publication or release, any institutional public communication (e.g., DOE or laboratory report, press release) that substantially relies on their research or is released under their name.
- e. Covered personnel are responsible for representing their unique contributions to scientific work transparently, fairly, and accurately, and seek appropriate technical peer review.
- f. DOE recognizes the right of covered personnel to express their personal scientific and technical views and related policy positions via digital media and permits covered personnel to use digital media to share information that may benefit the public's knowledge and awareness of scientific and technical information. Covered personnel will be free from reprisal for their views consistent with the following:
 - (1) Public communications by all federal staff concerning scientific and technological matters shall comply with the Standards of Ethical Conduct for Employees of the Executive Branch ([5 CFR Part 2635](#)) and other applicable laws, regulations, and DOE regulations, Orders, and policies.
 - (2) Researchers supported by DOE Financial Assistance, including sub-awards, are encouraged to openly discuss their scientific work and research that is supported by a DOE financial assistance award, whether in scientific or public fora or with the media, in accordance with their institution's policies, and to publish their findings.
- g. Recipients, sub-recipients, and their respective institutions are welcome to voluntarily coordinate with DOE on public communication/publicization of

scientific publications and/or results when appropriate, but have no responsibility to do so, unless required by individual assistance agreements.

8. CLASSIFIED AND OTHER PROTECTED INFORMATION.

- a. DOE is responsible for the generation, use, and archiving of scientific and technical information classified or controlled under the Atomic Energy Act (information concerning the design, manufacture, or utilization of nuclear weapons; the production of special nuclear material; or the use of special nuclear material in the production of energy) and Unclassified Controlled Nuclear Information or information classified as National Security Information under Executive Order 13526. Documents in a classified subject area that are intended for public release must be reviewed for classification and approved for dissemination prior to public release.³
- b. DOE may also encourage the controlled dissemination of some forms of information to ensure scientific and technical progress⁴ and the advancement of technology transition, transfer, and commercialization⁵, in particular for those scientific and technical discoveries that may have important implications for national security and economic competitiveness.⁶
- c. If classified information appears in the open literature, the DOE “No Comment” policy applies. Covered personnel may not use classification to suppress scientific results unless the results are comprised of information that meet the criteria for it being classified or controlled unclassified. All classified

³ DOE policy limits dissemination and ensures the protection of DOE-funded scientific and technical information. See DOE O 241.1B; [DOE Public Access Plan](#); see also DOE O 475.2B, *Identifying Classified Information*, dated October 3, 2014. Additionally, DOE limits disclosure of other forms of Controlled Unclassified Information. See DOE O 471.7, *Controlled Unclassified Information*, dated March 2, 2022.

⁴ See e.g., DOE O 241.1B, *Scientific and Technical Information Management*, updated April 26, 2016. [The Atomic Energy Act of 1954](#) establishes a program for the dissemination of unclassified scientific and technical information and for the control, dissemination, and declassification of Restricted Data, as defined in chapter 2, section 11.y of the Act, subject to appropriate safeguards, so as to encourage scientific and industrial progress. 42 U.S.C. §§ 2013, 2051, and 2161.

⁵ Protected Data that is generated under a DOE award or a Laboratory partnering mechanism, such as a cooperative research and development agreement (CRADA), may be protected from public release for a period of time, in some cases to enable commercialization. See e.g., [2 CFR Part 910, Subpart D, Appendix A, Clause 4\(g\)](#); 15 U.S.C. § 3710a(c)(7).

⁶ For instance, see [DOE Determination of Exceptional Circumstances under the Bayh-Dole Act to Further Promote Domestic Manufacture of DOE Science and Energy Technologies](#).

information must be protected until it is officially declassified.⁷

- d. The dissemination of scientific and technical information may additionally be restricted by laws, regulations, and DOE directives⁸, policies, and guidance governing classified, privacy, proprietary, and other protected or sensitive information.

9. WHISTLEBLOWER PROTECTIONS.

As part of its commitment to ensuring the actual and perceived credibility of Government research, the DOE is fully committed to protections including the [Whistleblower Protection Act of 1989](#), the expanded protections for federal employees signing non-disclosure agreements afforded by the [Whistleblower Protection Enhancement Act of 2012](#) (WPEA), [Presidential Policy Directive \(PPD\)-19](#), *Protecting Whistleblowers with Access to Classified Information*, October 10, 2012, and the [Notification and Federal Employee Antidiscrimination and Retaliation Act of 2002](#). Whistleblowers can also access DOE OIG resources, including an online submission form, at <https://www.energy.gov/ig/ig-hotline>.

10. SCIENTIFIC INTEGRITY OFFICIAL(S) AND CHIEF SCIENCE OFFICER.

DOE will establish a system to ensure Policy implementation across the Department. As described in DOE O 411.2, *Scientific Integrity*, the Secretary of Energy will designate one or more senior career employees as the agency's Scientific Integrity Official(s) (SIOs) to serve as ombudsperson(s) for matters related to scientific integrity and to oversee implementation and iterative improvement of scientific integrity policies and processes across DOE, as described by the January 27, 2021 [Presidential Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking](#). The DOE SIO(s) will coordinate with appropriate Department offices as necessary.

The Secretary of Energy will also designate a Chief Science Officer (CSO) for DOE. The SIO(s) will report to the CSO, who will serve as principal advisor to the Secretary of Energy on scientific issues.

⁷ The DOE's "No Comment" Policy is explained in [10 CFR 1045.65](#); Bulletin GEN-16, Revision 2, "No Comment" Policy on Classified Information in the Open Literature dated September 23, 2014.

⁸ DOE orders include, but are not limited to [DOE O 205.1B](#), [DOE O 241.1B](#), [DOE O 470.4B](#), [DOE O 471.1B](#), [DOE O 471.3](#), [DOE O 481.1C](#), [DOE O 482.1](#), [DOE O 483.1-1](#)

11. REPORTING ALLEGATIONS OF SCIENTIFIC INTEGRITY VIOLATIONS AND DIFFERING SCIENTIFIC OPINIONS. The DOE SIO(s) will coordinate a process to draft procedures for the reporting, evaluation, and resolution of allegations of compromised scientific integrity in a timely, objective, and thorough manner. These procedures will provide clear guidance on how covered personnel can formally and confidentially report concerns and allegations of Scientific Integrity Policy violations and provide information on reporting to the Office of the Inspector General.

- a. The SIO(s) will, with input from other scientific officials, develop a transparent and timely mechanism for covered individuals who are substantively engaged in the science informing agency policy decisions to express differing scientific opinions.

12. REPORTING ON THE STATUS OF SCIENTIFIC INTEGRITY.

- a. The SIO(s) will coordinate the generation and dissemination, consistent with any requirements related to national security and privacy, as well as any other applicable law, of an annual report to DOE leadership on the status of scientific integrity within the Department, to include the numbers of investigations and appeals involving alleged deviations from the Policy, consistent with the January 27, 2021 [Presidential Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking](#).
- b. The report will be made publicly available on the DOE website.

13. FEDERAL ADVISORY COMMITTEES.

Federal Advisory Committees (FACs) are an important tool within DOE for ensuring the credibility, quality, and transparency of agency science. DOE is committed to ensuring the integrity of its policy on the use of scientific and technical FACs, subject to the requirements of the [Federal Advisory Committee Act](#), Title 5 United States Code, Appendix 2, implementing regulations, and consistent with guidance from the General Services Administration and any other active guidance from the Executive Office of the President. The establishment and use of FACs by DOE programs⁹ follows procedures established by the Federal Advisory Committee Act and is in accordance with the guidelines established in the Office of Science and Technology Policy [Memorandum on Scientific Integrity](#).

⁹ As detailed in DOE M 515.1-1, *Advisory Committee Management Program*. The Manual provides detailed DOE requirements, responsibilities, processes, and procedures for the establishment, operation, and management of advisory committees.

14. SELECTION, RETENTION, AND PROFESSIONAL DEVELOPMENT OF SCIENTISTS AND ENGINEERS.

- a. DOE will select and retain candidates for scientific and technical positions based on the candidate's scientific and technical knowledge, credentials, experience, and integrity, and hold them and their supervisors to the highest standards of professional and scientific ethics.
- b. DOE is committed to promoting and facilitating, as permitted by law, the professional development of its federal scientists and engineers, of scientists and engineers at DOE National Laboratories and field sites including NSE sites, and at all institutions receiving DOE financial assistance.
- c. Recognizing that attendance at scientific and technical conferences is an integral part of professional development, either as a speaker or as a participant, conference attendance for federal and contractor staff is encouraged within the limits of DOE guidance on conference attendance.

Scientists and engineers are encouraged to publish research findings, consistent with Section 3, in appropriately peer-reviewed, professional, or scholarly journals, as described in Section 12; to present findings at professional meetings, subject to notification of their supervisor; to pursue patenting, copyrights, and licensing strategies that may control or restrict the dissemination of scientific and technical discoveries, as appropriate, for the advancement of technology transition, transfer, and commercialization; may become editors or editorial board members of professional or scholarly journals and may fully participate in professional or scholarly societies, committees, task forces and other specialized bodies of professional societies; and to accept honors and awards for their research accomplishments, subject to compliance with all applicable conflict of interest statutes, as well as the Standards of Ethical Conduct for Executive Branch Employees, and any other applicable ethics requirements.¹⁰

15. RESEARCH MISCONDUCT.

DOE prohibits research misconduct and the use of improper, unsafe, and/or inappropriate methods or processes in conducting research; it also prohibits lack of adherence to practices that ensure the quality of research and other scientific activities.

DOE regulations governing procedures for the handling of research misconduct allegations concerning research supported by DOE contracts and agreements are specified in [10 CFR Part 733](#). DOE regulations governing procedures for the handling of research misconduct allegations concerning research supported by DOE financial

¹⁰ DOE federal scientists and engineers publishing scientific and technical information shall follow the requirements laid out in DOE O 241.1B, *Scientific and Technical Information Management*.

assistance agreements are specified in [2 CFR 910.132 – Research Misconduct](#). Additional guidance on the roles and responsibilities for program managers, contracting officers, and financial assistance recipients, as well as the governing federal statutes and policies, are given in the DOE Scientific Integrity Order and available on the DOE website. DOE staff, contractors, and grantees are also encouraged to report any research misconduct allegations to the Office of Inspector General.¹¹

16. RELATED POLICIES.

- a. The DOE SIO(s) are responsible for having an awareness of policies and programs that intersect with the development of the culture of scientific integrity within the agency. The DOE SIO(s) are to maintain awareness of scientific integrity policies at other Federal science agencies.
- b. Violations of related and supporting policies could result in a loss of scientific integrity and the SIO(s) are responsible for coordinating with Department counterparts on these matters.

17. DEFINITIONS.

- a. Covered Personnel.
 - (1) All federal staff, including the heads of departmental and field elements; political appointees; those working at the DOE under the Intergovernmental Personnel Act; federal staff working at the National Nuclear Security Administration; Special Government Employees; and any other personnel that are involved with scientific information, including program managers;
 - (2) Federal research scientists and engineers directly employed by the Department primarily, but not exclusively, at the National Energy Technology Laboratory;
 - (3) All personnel at facilities operated by non-federal entities under management and operating (M&O) contracts and subcontracts, including 16 of the DOE National Laboratories and the NSE sites. Such personnel are employees of the M&O contractors (generally private firms, universities, nonprofits, or partnerships thereof) who manage and operate these laboratories and sites under contract to DOE;
 - (4) Other contractors at DOE laboratories, field sites, or headquarters who

¹¹ Through the Inspector General Hotline, currently: <https://www.energy.gov/ig/ig-hotline>

support the personnel listed in paragraphs (1) through (3); and

- (5) Researchers supported under a DOE financial assistance agreement (e.g., grants or cooperative agreements) and associated sub-awards, as well as individuals who serve as peer reviewers for DOE.
- b. Federal Financial Assistance. For the purpose of this policy *Federal Financial Assistance* has the meaning as defined in 2 CFR 200.1.
- c. National Laboratory. One of the 17 research laboratories owned by the DOE and specified in Section 2 of the Energy Policy Act of 2005 (Pub. L. 109-58), as amended. Of the 17 laboratories, 16 are operated by private sector organizations under M&O contracts with the DOE. The remaining laboratory, the National Energy Technology Laboratory, is both owned and operated by the Department of Energy.
- d. Nuclear Security Enterprise (NSE). The NNSA organizations that manage NWD (nuclear weapon data) and/or design, manufacture, or test nuclear weapons or nuclear weapon components. This includes the sites run by the NNSA Production Office (NPO) contract DE-NA0001942 and other as defined in DOE O 452.4C.
- e. Digital Media. In general, on-demand mass communication distributed digitally, typically through the internet. Examples of digital media can include, but are not limited to, websites, blogs, wikis, online newspapers, video games, podcasts, and social media.
- f. Peer review. As defined by the National Academies of Sciences, Engineering, and Medicine peer review is an independent and external documented critical review by a person having technical expertise in the area. It involves an in-depth critique of assumptions, calculations, extrapolations, alternate interpretations, methodology, acceptance criteria employed, and conclusions drawn in the original work. OMB Final Information Quality Bulletin for Peer Review (70 FR 2664) establishes that important scientific information shall be peer reviewed by qualified specialists before it is disseminated by the Federal government. NNSA peer review may be conducted under formal technology readiness assessments (TRAs) per the NNSA policy letter NAP-29.
- g. Research Misconduct. The fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. Fabrication is making up data or results and recording or reporting them. Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record. Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit. Research misconduct does not include honest error or differences of opinion. 10 CFR 733.3 (see also, Federal Policy on Research Misconduct; Preamble for Research Misconduct Policy; 65 FR 7626).

18. REFERENCES.

- a. [1989 Whistleblower Protection Act](#) (Public Law No: 101-12).
- b. [Notification and Federal Employee Antidiscrimination and Retaliation Act of 2002](#) (Public Law 107-174).
- c. [Whistleblower Protection Enhancement Act of 2012 \(WPEA\)](#) (Public Law No. 112-199)
- a. [41 USC 4712](#), *Enhancement of contractor protection from reprisal for disclosure of certain information.*
- b. [Energy Policy Act of 2005](#), as amended 42 U.S.C. § 15801.
- c. [2 CFR Part 200](#), *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.*
- d. [2 CFR Part 910](#), *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.*
- e. [2 CFR 910.132](#), *Research Misconduct.*
- f. [5 CFR part 2635](#), *Standards of Ethical Conduct for Employees of the Executive Branch*
- g. [10 CFR Part 733](#), *Allegations of Research Misconduct.*
- h. [10 CFR part 1017](#), *Identification and Protection of Unclassified Controlled Nuclear Information*
- i. [10 CFR 1045.60](#), *Does an unauthorized public release of RD, FRD, or TFNI result in its declassification?*
- j. [10 CFR 1045.65](#), *What are the responsibilities of a person with access to RD, FRD, or TFNI, if they see information in the open literature that they think is RD, FRD, or TFNI?*
- k. [32 CFR 2001](#), *Classified National Security Information.*
- l. [32 CFR 2004](#), *National Industrial Security Program.*
- m. [65 FR 76260–76264](#) *Federal Policy on Research Misconduct; Preamble for Research Misconduct Policy.*
- n. [70 FR 2664](#) *OMB Final Information Quality Bulletin for Peer Review.* (Jan. 14, 2005).

- o. [Executive Order 13526, Classified National Security Information](#). 75 FR 705 (Jan. 5, 2010).
- p. [A Framework for Federal Scientific Integrity Policy and Practice](#) (SI-FTAC Guidance), January 2023.
- q. [National Science and Technology Council Report of the Scientific Integrity Fast Track Action Committee \(SI-FTAC Report\)](#), January 2022.
- r. [Memorandum for the Heads of Executive Departments and Agencies on Scientific Integrity](#), March 9, 2009.
- s. [Memorandum on Scientific Integrity](#) from the Office of Science and Technology Policy, December 17, 2010. from the Office of Science and Technology Policy, December 17, 2010.
- t. [Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking](#), January 27, 2021.
- u. The DOE “No Comment” Policy, [Classification Bulletin GEN-16, Revision 2, "No Comment" Policy on Classified Information in the Open Literature](#) current version.
- v. [DOE Public Access Plan](#)
- w. [DOE O 241.1, Scientific and Technical Information Management](#), current version.
- x. [DOE O 411.2, Scientific Integrity](#), current version.
- y. [DOE O 471.1, Identification and Protection of Unclassified Controlled Nuclear Information](#), current version.
- z. [DOE O 471.6, Information Security](#), current version.
- aa. [DOE O 475.2, Identifying Classified Information](#), current version.
- bb. [NNSA NAP-29, Technology Readiness Assessments](#), current version.

BY ORDER OF THE SECRETARY OF ENERGY:



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Deputy Secretary