



## Under Secretary for Science

Washington, DC 20585

April 18, 2011

The Honorable John Holdren  
Assistant to the President for Science and Technology  
and Director of the Office of Science and Technology Policy  
Washington, DC 20503

Dear Mr. Holdren:

Since science is the foundation of all of the Department of Energy's (DOE) activities, we are continuously committed to developing and maintaining a culture that fosters scientific integrity to ensure the credibility and quality of the Department's scientific and technical research, reports, and decisions. This culture permeates all organizational units of the Department. It is apparent in the day-to-day practices of DOE leadership and career employees, and is codified in the Department's policies, directives, and manuals. We welcome the opportunity to review and revise as necessary our policies to confirm our dedication to scientific integrity.

We have convened a working group with representatives across the Department to catalog our current policies related to scientific integrity. A summary of our current policies that are responsive to the issues identified in your December 17, 2010, memorandum is enclosed.

As we continue to review our policies, we will be informed by the best practices we have identified at other Federal agencies. For example, the National Institutes of Health Clear Communication initiative may provide guidance for how we can improve our ability to convey complex scientific information to various audiences.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven E. Koonin".

Steven E. Koonin  
Under Secretary for Science

Enclosure



**The Department of Energy's Response  
to the Office of Science & Technology Policy's  
December 17, 2010 Scientific Integrity Memorandum**

*I. Foundations of Scientific Integrity in Government.*

*Scientific and technological information is often a significant contributor to the development of sound policies. Thus it is important that policymakers involve science and technology experts where appropriate and that the scientific and technological information and processes relied upon in policymaking be of the highest integrity. Successful application of science in public policy depends on the integrity of the scientific process both to ensure the validity of the information itself and to engender public trust in Government. For this reason, agencies should develop policies that:*

- 1. Ensure a culture of scientific integrity. Scientific progress depends upon honest investigation, open discussion, refined understanding, and a firm commitment to evidence. Science, and public trust in science, thrives in an environment that shields scientific data and analyses from inappropriate political influence; political officials should not suppress or alter scientific or technological findings.*

**Response:** The Department ensures scientific integrity in federally funded or supported research through enforcement of its policy on research misconduct, codified at 10 C.F.R. 600 (Department of Energy Financial Assistance Rules) and 733 (Department of Energy Allegations of Research Misconduct), and the government-wide Federal Policy on Research Misconduct. These regulations prescribe the policy and procedures to be applied by DOE to allegations of scientific research misconduct conducted under a DOE contract or financial assistance agreement. Since DOE has federal employees performing research only at the National Energy Technology Laboratory and New Brunswick Laboratory, most DOE-funded research is performed through contracts or financial assistance agreements. In general, the recipient is responsible for maintaining the integrity of research and the conduct of inquiries, investigations, and adjudications of allegations of scientific misconduct. Where appropriate or necessary, the Department may act in lieu of the recipient. In particular, the National Laboratories each have their own plans for responding to allegations of scientific research misconduct.

- 2. Strengthen the actual and perceived credibility of Government research. Of particular importance are:*
  - a. ensuring that selection of candidates for scientific positions in the executive branch is based primarily on their scientific and technological knowledge, credentials, experience, and integrity;*

**Response:** The Department has a number of mechanisms to ensure that candidates for scientific positions have the appropriate qualifications. First, DOE Order 321.1, Employment of Experts and Consultants (Nov 6, 2006) details the requirements for employing experts and consultants. Second, a recent memorandum on hiring reform, issued by the Chief Human Capital Officer, instructs offices to develop standard position descriptions for hiring new employees. Some offices, such as the Office of Science, have developed

standard position descriptions and crediting plans for hiring GS and SES-level program managers, team leads, division directors, and associate directors. These documents ensure that all employees, and specifically science managers, are held to the same high scientific standard. In addition, this same memo outlines a plan to train and hold accountable hiring managers for recruiting high-quality candidates.

- b. *ensuring that data and research used to support policy decisions undergo independent peer review by qualified experts, where feasible and appropriate, and consistent with law;*

**Response:** The Department has several methods to ensure that data and research used to support policy decisions undergo peer review. In general, DOE has guidelines for the transparency and reproducibility of ‘influential information.’ In the context of scientific, financial, or statistical information, influential information means information that 1) is subject to embargo until the date of its dissemination by DOE because of potential market effects; 2) is the basis for a DOE action that may result in an annual effect on the economy of \$100 million or more; or 3) is designated by DOE as influential. This applies to two of the many ways DOE influences policy: directly through appliance efficiency standards, and indirectly as a provider of information to policy-makers through organizational elements such as the Energy Information Administration (EIA). For example, the Office of Energy Efficiency & Renewable Energy (EERE) has established guidelines for setting standards that include peer review and process transparency (see 10 C.F.R. 430, Energy Conservation Program for Consumer Products, subpart C, appendix A). In addition, the DOE General Counsel has developed guidance for rulemaking, including maintaining transparency of ex parte communications. The EIA also has independently established data quality standards.

In addition, many offices have independently established peer review guides, and there is a DOE-wide merit review guide for financial assistance.

- c. *setting clear standards governing conflicts of interest;*

**Response:** All Federal employees are subject to the provisions of 18 U.S.C. § 201-209 and the Standards of Conduct for Employees of the Executive Branch found in 5 C.F.R. Part 2635. In general, employees are encouraged to consult the Office of General Counsel (GC) with any questions regarding conflict of interest issues. GC strives to deliver frequent, consistent, and targeted advice in a timely manner, including new employee training, annual training, and management training by individual program office. Employees in positions possessing significant authority and discretion are required to complete public or confidential financial disclosure forms. Individual conflict of interest advice, based upon the contents of the financial disclosure report, is provided to each filer.

The Department also has clear guidelines regarding conflict of interest in circumstances involving peer review and the work of federal advisory

committees. A significant number of members of the federal advisory committees serve as experts and are required to complete confidential financial disclosure reports that are also reviewed by GC ethics counsel. Non-federal individuals involved in peer review must agree that they will not participate in areas where they have financial conflicts of interest. Most members of federal advisory committees are categorized as special Government employees, and as such are subject to the conflict of interest laws applicable to regular federal employees.

*d. adopting appropriate whistleblower protections.*

**Response:** The Department describes one form of whistleblower protections in Order 221.1A, Reporting Fraud, Waste and Abuse to the Inspector General (Apr 19, 2008). Similarly, in 10 C.F.R. 600 (Department of Energy Financial Assistance Rules), there is a description of protections for those who in good faith raise allegations of research misconduct. In addition, the Department has an “Employee Concerns Program” that provides procedures for federal (DOE Order 442.1A) or contractor (10 C.F.R. Part 708) employees to report fraud, waste, mismanagement and abuse of authority. This Program protects whistleblowers who are contractors from retaliation by their employers. The program was further supported by former Secretary Bodman in a Departmental memo. Furthermore, DOE employees are encouraged to raise issues related to environment, safety, and health without fear of reprisal in DOE Policy 442.1, Differing Professional Opinions on Technical Issues Related to Environment, Safety, and Health (Oct 16, 2006).

*3. Facilitate the free flow of scientific and technological information, consistent with privacy and classification standards. Open communication among scientists and engineers, and between these experts and the public, accelerates scientific and technological advancement, strengthens the economy, educates the Nation, and enhances democracy. Consistent with the Administration's Open Government Initiative, agencies should expand and promote access to scientific and technological information by making it available online in open formats. Where appropriate, this should include data and models underlying regulatory proposals and policy decisions.*

**Response:** The Department has several methods for disseminating scientific and technical information (STI). The DOE directive O 241.1B, Scientific and Technical Information Management (Dec 13, 2010) defines STI and establishes requirements and responsibilities to ensure that DOE STI is appropriately identified, disseminated, preserved, and accessible to policy makers, the scientific community, and the public. Furthermore, the Department’s directive P 141.2, Public Participation and Community Relations (May 2, 2003) outlines mechanisms to promote significant stakeholder communication and engagement in the DOE decision-making process. In addition, the Department’s draft Strategic Plan reinforces our commitment to the dissemination of STI, and outlines a plan to promote the free flow of STI from both our basic and applied research activities.

4. *Establish principles for conveying scientific and technological information to the public. The accurate presentation of scientific and technological information is critical to informed decision making by the public and policymakers. Agencies should communicate scientific and technological findings by including a clear explication of underlying assumptions; accurate contextualization of uncertainties; and a description of the probabilities associated with both optimistic and pessimistic projections, including best-case and worst-case scenarios where appropriate.*

**Response:** The Department's information quality guidelines, described in Section I.2.b, outline standards for conveying scientific and technological information to the public. The Department's commitment to accurately, completely, and objectively conveying scientific and technological information to the public is reaffirmed in the draft Strategic Plan, in both the "improving transparency" and "leading the national conversation on energy" sections. In addition, EIA has a number of methods to explain energy in a variety of ways to different sectors of the public (e.g., EnergyKids). EERE has a communications guidebook and provides training for developing web content and other communications.

## II. *Public Communications*

*Agencies should develop public communications policies that promote and maximize, to the extent practicable, openness and transparency with the media and the American people while ensuring full compliance with limits on disclosure of classified information. Such policies should ensure that:*

1. *In response to media interview requests about the scientific and technological dimensions of their work, agencies will offer articulate and knowledgeable spokespersons who can, in an objective and nonpartisan fashion, describe and explain these dimensions to the media and the American people.*

**Response:** The Department's Public Affairs office works with points of contact in the relevant organizational elements to identify articulate and knowledgeable individuals for all interactions with the media. Some Department offices have written protocols for interactions between federal employees and the media. For example, the Office of Science Management System includes a Communications and Public Affairs protocol.

2. *Federal scientists may speak to the media and the public about scientific and technological matters based on their official work, with appropriate coordination with their immediate supervisor and their public affairs office. In no circumstance may public affairs officers ask or direct Federal scientists to alter scientific findings.*

**Response:** The Department has few federal employees directly engaged in scientific research; most research funded by the Department is performed by employees of the management & operations contractors for our national laboratories or extramural grant recipients (e.g., at universities or in the private sector). The public communications of such research scientists is handled by the public affairs offices of their institutions. Some Department offices have written protocols for interactions between federal employees and the media.

3. *Mechanisms are in place to resolve disputes that arise from decisions to proceed or not to proceed with proposed interviews or other public information-related activities.*

**Response:** The Department's Office of Public Affairs has designated press officers to work with each program office on proposed interviews and other public information activities to ensure that the Department is being fully transparent and providing accurate, timely information. If a dispute arises about whether to proceed with a particular activity or interview, there are multiple opportunities to appeal and reconsider the matter, first through the press officers' immediate supervisor (the DOE Press Secretary) and then to Director of Public Affairs. Program staff can also engage program managers or Assistant Secretaries in these discussions if needed.

### III. *Use of Federal Advisory Committees :*

*Agencies should develop policies, in coordination with the General Services Administration and consistent with the Administration's guidance on lobbyists serving on Federal advisory committees (FACs), for convening FACs tasked with giving scientific advice, consistent with the following:*

**Response:** The Department's Federal Advisory Committee Act (FACA) manual (DOE Manual 515.1-1, Advisory Committee Management Program, Oct 22, 2007) addresses many of these items.

1. *The recruitment process for new FAC members should be as transparent as practicable. Departments and agencies should, when practicable and appropriate, announce FAC member vacancies widely, including notification in the Federal Register with an invitation for the public to recommend individuals for consideration and for self-nominations to be submitted.*

**Response:** The heads of Departmental elements who propose the establishment, reestablishment, or renewal of an advisory committee will recommend its members unless the committee's charter prescribes otherwise (DOE Manual 515.1-1, paragraph IV.4.a). Efforts used by heads of Departmental elements to recruit members include, but are not limited to, announcing such vacancies on the committee website, various media outlets, or the Federal Register, and accepting nominations from the public for committee membership.

2. *Professional biographical information (including current and past professional affiliations) for appointed committee members should be made widely available to the public (e.g., via a website) subject to Privacy Act and other statutory or regulatory considerations. Such information should clearly illustrate the individuals' qualifications for serving on the committee.*

**Response:** The Department posts or links to biographical information on most of its advisory committee websites. In addition, biographical information is part of the proposal package for appointment of members. Should this information not be posted on a FAC's website, it would be made available to the public upon request, subject to the provisions of the Freedom of Information Act.

- 3. The selection of members to serve on a scientific or technical FAC should be based on expertise, knowledge, and contribution to the relevant subject area. Additional factors that may be considered are availability of the member to serve, diversity among members of the FAC, and the ability to work effectively on advisory committees. Committee membership should be fairly balanced in terms of points of view represented with respect to the functions to be performed by the FAC.*

**Response:** In compliance with section 5(b)(2) of FACA and DOE Manual 515.1-1, subchapter IV.3, the Department requires that all FAC members represent a broad set of viewpoints, and be qualified for the positions. Further, the DOE FACA manual also reiterates this requirement and requires that all membership packages contain a matrix/table presenting each member's attributes (e.g., geographic location; residential, industrial or commercial consumer, etc.) to demonstrate that balance criteria have been met.

- 4. Except when prohibited by law, agencies should make all Conflict of Interest waivers granted to committee members publicly available.*

**Response:** While the Department is committed to minimizing conflict of interest, it recognizes that the most knowledgeable and appropriate members of an advisory committee frequently have experience, financial interests, and relationships that raise conflict of interest concerns. When the need for an individual's service outweighs the potential for conflict of interest created by an individual's financial interest, the official responsible for the individual's appointment can, in consultation with the Office of Government Ethics, provide a waiver of 18 U.S.C 208 (Bribery, Graft, and Conflict of Interest). In accordance with 18 U.S.C. 208(d)(1), as opposed to the Freedom of Information Act, these waivers are made available to the public. DOE, however, may withhold any information contained in the waiver that would be exempt from disclosure under the Freedom of Information Act. In addition, for many special FACs, such as the Blue Ribbon Commission on America's Nuclear Future and the National Commission on the BP Deepwater Horizon Oil Spill, these waivers have been made publicly available on the advisory committee websites.

- 5. Except when explicitly stated in a prior agreement between an agency and a FAC, all reports, recommendations, and products produced by FACs should be treated as solely the findings of such committees rather than of the U.S. Government, and thus are not subject to intra- or inter-agency revision.*

**Response:** Committee reports are not subject to Departmental revision. The Department acts in accordance with FACA Sec. 5(b)3 and 41 C.F.R. 102-3.105(g) ("The head of each agency that establishes or utilizes one or more advisory committees must: (...) (g) Develop procedures to assure that the advice or recommendations of advisory committees will not be inappropriately influenced by the appointing authority or by any special interest, but will instead be the result of the advisory committee's independent judgment").

#### *IV. Professional Development of Government Scientists and Engineers*

*Agencies should establish policies that promote and facilitate, as permitted by law, the professional development of Government scientists and engineers. Such policies should, consistent with Federal ethics rules, job responsibilities, and existing agency policies regarding political appointees. Peer-review committees convened solely for the purpose of reviewing research proposals to provide input on intra- or extramural funding decisions are not covered by this recommendation.*

- 1. Encourage publication of research findings in peer-reviewed, professional, or scholarly journals.*

**Response:** The Department encourages recipients of funding to disseminate research findings. Order 241.1B, Scientific and Technical Information Management (Dec 13, 2010) requires that science and technical information be emphasized as a key outcome and record of the work conducted. In addition, recipients are permitted to use documents published in peer-reviewed scientific journals in lieu of their progress reports to DOE in 10 C.F.R. 605.19, Department of Energy Continuation Funding and Reporting Requirements.

- 2. Encourage presentation of research findings at professional meetings.*

**Response:** Order 241.1B, described above, explicitly references conference papers and presentations.

- 3. Allow Government scientists and engineers to become editors or editorial board members of professional or scholarly journals.*

**Response:** DOE federal employees are subject to 5 C.F.R. 3301.103, Supplemental Standards of Ethical Conduct for Employees of the Department of Energy, Prior Approval for Outside Employment, with regard to outside activities. This regulation allows scientists to engage in outside activities in their personal capacity. However, they may not work on matters that will affect the financial interests of that organization unless authorized to do so by their supervisor or General Counsel. All employees are advised of these requirements in their orientation, and are encouraged to consult the Office of General Counsel when questions arise.

- 4. Allow full participation in professional or scholarly societies, committees, task forces and other specialized bodies of professional societies, including removing barriers for serving as officers or on governing boards of such societies.*

**Response:** See IV.3.

- 5. Allow Government scientists and engineers to receive honors and awards for their research and discoveries with the goal of minimizing, to the extent practicable, disparities in the potential for private-sector and public-sector scientists and engineers to accrue the professional benefits of such honors or awards.*

**Response:** DOE acts in accordance with 5 C.F.R. 2635.204(d), Standards of Ethical Conduct for Employees of the Executive Branch, in regards to federal employees accepting awards. Employees may accept both the award and any cash prizes associated an award given on a regular basis by an established group.