

**U.S. NUCLEAR REGULATORY COMMISSION  
AGENCY E-GOVERNMENT ACT IMPLEMENTATION UPDATE**

**October 14, 2010**

The U.S. Nuclear Regulatory Commission (NRC) is pleased to submit its fiscal year (FY) 2010 E-Government report to the Office of Management and Budget (OMB). The report reflects the guidance provided in Mr. Vivek Kundra's September 21, 2010, memorandum to Chief Information Officers, "FY 2010 E-Government Act Reporting Instructions."

The NRC's report highlights accomplishments in the two topic areas requested in Mr. Kundra's guidance: (1) innovation and transparency and (2) compliance with goals and provisions of the E-Government Act.

#### Section 1: Innovation and Transparency

The NRC has a longstanding practice of conducting its regulatory responsibilities in an open and transparent manner to keep the public informed of the agency's regulatory, licensing, and oversight activities. Through the use of information technology (IT), the NRC is furthering its goal to maintain an open and transparent regulatory environment.

As requested, the top three E-Government IT accomplishments for FY 2010 related to Open Government and innovation are described below:

- (1) the NRC's flagship initiative
- (2) publication of high-value datasets
- (3) near-term focus on transparency and Open Government

#### 1. The NRC's Flagship Initiative

In response to OMB's, December 8, 2009 Open Government Directive, the NRC defined its flagship initiative, Enhancing Stakeholder Engagement, with the goal of expanding the agency's stakeholder community and engaging a broader public audience.

The NRC has embraced a long-term commitment to ensuring openness in Government. Recognizing the need to continually expand and improve its Open Government efforts in support of the agency's public mission, the NRC has embarked on new and innovative ways to engage members of the public as stakeholders in its regulatory processes. The NRC's flagship initiative will focus on how the agency will further the goal of Open Government using the Internet as an innovative medium to foster public engagement and implement incremental improvements as part of a continuous improvement cycle. Features to be included and evaluated for this flagship initiative include subscription-based services, expanded use of Web event and virtual meeting technologies, expanded use of Web conferencing technologies, adoption of crowd sourcing technology, evaluating potential use of new Web-friendly technologies such as Web and mobile widgets and "mashups," and exploring the use of social networking and collaboration technologies. Key elements of the flagship initiative include the following:

- *Implement new subscription-based services* to allow stakeholders to keep abreast of the most current news and information based on topics of interest. Stakeholders will be able

to select their preferred method for receiving NRC updates via notification services such as e-mail, Really Simple Syndication (RSS) feeds, and enhanced list service capabilities.

- *Enhance outreach and stakeholder involvement* in public meetings by continuing to expand the use of Web event and virtual meeting technologies such as Web streaming and Web conferencing. The NRC will streamline the publication of public meeting notices and summaries and will explore ways to share stakeholder feedback on meetings via the NRC Web site or through other means. The agency will evaluate methods to increase citizen engagement before, during, and after public meetings. The NRC will continue to post information on upcoming meetings and provide access to meeting archives on the NRC Web site.
- *Foster greater collaboration within industry and government workgroups* by using Web conferencing technologies that enable work to occur regardless of the participant's physical location. The NRC will explore incorporating the use of other collaborative tools such as the OMB Max.gov portal or wikis that increase workgroup efficiency and improve results by enabling easy access to reference materials, online brainstorming, and development of collaborative work products. The agency will consider the use of targeted community portals when registered and secured access is required to participate in discussions and exchanges of nonpublic information.
- *Increase public engagement and cultivate creative ideas* to improve the NRC's Open Government efforts through crowd sourcing technology. The agency will consider forming a catalyst team to foster the solicitation of new ideas, moderate innovation processes, and collaborate with agency stakeholders to further evaluate and develop promising concepts.
- *Enable NRC stakeholders to easily incorporate NRC information and tool resources* into their own Web sites or onto their mobile devices through the use of new Web-friendly technologies such as Web and mobile widgets and "mashups." A mashup is a Web site or Web application that seamlessly combines content from more than one source into an integrated user experience. Widgets are Web tools such as news feeds that can be incorporated directly into an individual's own Web site or onto a mobile device. These technologies provide an innovative way to engage public stakeholders by allowing them to personalize how they want to receive, use, and process information.
- *Enhance relationships between the NRC and stakeholders* by promoting a sense of common community through social networking technologies. The NRC will explore the use of social networking and collaboration technologies available through apps.gov, such as YouTube, Facebook, Twitter, and blogging, to foster engagement through interactive online dialogues and information exchanges. These media would be used to meet specific transparency, participation, and collaboration objectives such as collaborating on special topics of interest to foster information exchange.

To support these Open Government activities, the NRC seeks and uses partners who can contribute expertise and best practices in usability and user-centered Web design; current Web technologies and social media; and Federal standards, policies, and principles for information quality, security, privacy, and management control. Phases of this initiative that were not previously planned will be pursued using NRC's Planning, Budgeting, and Performance Management process.

## 2. Publication of High-Value Datasets

The Open Government Directive defines high-value information as “information that can be used to increase agency accountability and responsiveness; improve public knowledge of the agency and its operations; further the core mission of the agency; create economic opportunity or respond to need and demand as identified through public consultation.”

In response to OMB’s request that agencies identify and publish their high-value datasets in open format, the NRC formed a working group to collaborate on developing an inventory of its high-value information based on several sources, including the most popular information at the agency’s public Web site, data most frequently requested under the Freedom of Information Act (FOIA), the agency’s systems inventory, and its records schedules. The working group selected an initial group of high-value datasets based on the five OMB criteria provided in its Open Government Directive.

The NRC’s Open Government Plan, dated April 7, 2010, identified 16 datasets for publication in FY 2010; through the end of FY 2010, the NRC has published 23 datasets. To provide guidance to its offices, the NRC developed a submission process for Open Government high-value datasets. Because of the nature of the NRC’s mission and the potential use of some types of agency information for malevolent purposes, information security screening of all datasets is of high importance. This includes applying administration guidance to screen for potential risks from combining NRC information with information published by other Federal agencies. In some cases, security concerns may limit the publication of agency information.

To foster the public’s use of NRC high-value datasets to increase public knowledge and promote transparency, the NRC publicized the availability of its datasets at its annual Regulatory Information Conference on March 9–11, 2010, and will do so at other conferences and public meetings as appropriate, as well as through the NRC’s Open Government Web page (<http://www.nrc.gov/public-involve/open.html>). Additionally, stakeholders can receive notification whenever the agency adds a new dataset by subscribing to the updates section on the NRC’s Open Government Web page (select “Subscribe to Updates” at the top right). This will result in an e-mail notification whenever the NRC adds a new dataset or makes other changes to its Open Government Web page.

## 3. Near-Term Focus on Transparency and Open Government

As noted under the discussion of the NRC’s flagship initiative, the NRC has embraced a long-term commitment to ensuring openness in Government, recognizing the need to continually expand and improve its Open Government efforts in support of the agency’s public mission. While the flagship initiative defined in FY 2010 lays the foundation for further progress, in FY 2010 the NRC made effective use of IT through a number of important initiatives.

To set the tone for Open Government at the NRC, on March 24, 2010, the agency began publishing a list of Chairman Gregory B. Jaczko’s meetings and other events that may be of interest to the public. This list includes meetings and events that the Chairman has participated in with various external stakeholders. The NRC took the following other actions in FY 2010 to improve its transparency and openness:

- *Launch of Open Government Web Page:* On February 4, 2010, the NRC launched its Open Government Web site, including links to the NRC’s high-value datasets; quick access to key information resources; information on the NRC’s longstanding Open

Government philosophy; pages on transparency, participation, and collaboration; and an online brainstorming tool through which the public can provide its ideas about how the NRC can improve transparency, participation, and collaboration.

- *Enhanced Facility Information Finder.* In the spirit of Open Government, the NRC has revamped its Web site for each operating nuclear power plant to make it easier for site visitors to find plant information more quickly. The agency has consolidated additional information for each plant in a single location through the Facility Info and the Nuclear Reactors links on the home page. This improvement makes the information more transparent and eliminates the need for members of the public to search the Web site to find certain plant information. Each plant page now identifies the names and contact information for key personnel should a user have a question or need assistance in understanding plant data posted on the Web site.

In addition to providing basic information about the plant's location, owner, operator, reactor type, plant safety assessments, inspections, and daily plant status, the Web site provides plant diagrams and identifies relevant NRC press releases, key correspondence, fact sheets, briefings, past and planned meetings, and links to related information and resources, including the Agencywide Documents Access and Management System (ADAMS) for direct online connection to additional plant documents. Another useful feature is a link on each page where users can subscribe to e-mail notices for reactor correspondence. The expanded Web site gives site visitors a more comprehensive view of nuclear plant oversight as well as some practical information focused on the areas of interest to citizens.

- *Improved Web-Based Document Search Capability:* As part of the NRC's work to modernize its electronic document management system, the agency has begun significant improvements to search capabilities, with the planned introduction of a Google search capability by year-end 2010.
- *Introduction of Citizen Engagement Tools:* In FY 2010, the NRC established a working group to develop guidelines for NRC use of social media sites to expand communication to the public and stakeholders. The NRC also completed a pilot evaluation of a citizen engagement tool used to solicit stakeholder input in support of the development of the NRC's Open Government Plan. As a follow-on activity, the NRC has begun to evaluate social media Internet technologies, such as blogs and discussion forums, with plans to launch an NRC blog in early 2011.

## Section 2: Compliance with Goals and Provisions of the Act

This section responds to the specific provisions given in the E-Government Act.

### A. Your agency's Information Resources Management Strategic Plan and Enterprise Architecture (EA) Plan:

The NRC's IT Roadmap, most recently revised in March 2010, is the EA transition strategy for the agency. The agency is in the process of updating this document to better reflect the current and planned modernization initiatives as well as other relevant OMB E-Government priorities. The NRC expects to complete the new revision of the IT Roadmap by the end of December 2010.

The NRC's IT/Information Management (IM) Strategic Plan represents the foundation for directing and assessing the performance and results of the NRC's IT/IM program over a 5-year period. The IT/IM Strategic Plan for FYs 2008–2013 is available on the agency's public Web site at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1614/v4/sr1614v4.pdf>. The NRC is updating this document and expects to complete the revision by the end of March 2011. The agency is coordinating the IT Roadmap and the IT/IM Strategic Plan to reflect the same themes aimed at meeting agency objectives.

B. For each E-Government initiative, provide final determinations, priorities, and schedules. Also include your agency's information dissemination product catalogs, directories, inventories, and any other management tools used to improve the dissemination of and access to your agency's information by the public:

- Get Copies of Documents (<http://www.nrc.gov/reading-rm/copies-docs.html>)
- FOIA Guide (<http://www.nrc.gov/reading-rm/foia/foia-request.html>)
- NUREG/BR-0010, Revision 4, "Citizen's Guide to U.S. Nuclear Regulatory Commission Information," issued August 2003 (<http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0010/index.html>)
- Government Information Locator Service (<http://www.nrc.gov/reading-rm/doc-collections/gils/index.html>)
- Privacy Act Systems of Records (<http://www.nrc.gov/reading-rm/foia/privacy-systems.html>)
- Privacy Impact Assessments (<http://www.nrc.gov/about-nrc/plans/privacy-impcat-assess.html>)
- Public Meeting Schedule (<http://www.nrc.gov/public-involve/public-meetings/index.cfm>)

C. Identify improved performance (e.g., outcome measures) by tracking performance measures supporting agency objectives and strategic goals:

- NRC Web site "Our Plans, Budget, and Performance":  
<http://www.nrc.gov/about-nrc/plans-performance.html>
- NRC Web site "Performance and Accountability Report—Fiscal Year 2009":  
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1542/v15/>

D. Your agency's FOIA handbook, the URL of your agency's primary FOIA Web site, and the URL where frequent requests for records are made available to the public:

- FOIA Guide (<http://www.nrc.gov/reading-rm/foia/foia-request.html>)
- Primary FOIA Web site (<http://www.nrc.gov/reading-rm/foia/foia-privacy.html>)

- Records Frequently Requested under FOIA (<http://www.nrc.gov/reading-rm/foia/records.html>)
- Recent FOIA Requests (<http://www.nrc.gov/reading-rm/foia/recent-request.html>)
- Index of Closed FOIA/Privacy Act Requests by Subject (<http://www.nrc.gov/reading-rm/foia/closed-request.html>)

E. A list of your agency's public Web sites disseminating research and development (R&D) information to the public, describing for each whether the Web site provides the public information about federally funded R&D activities and/or provides the results of Federal research:

The NRC's public Web site as a whole (<http://www.nrc.gov>) disseminates R&D information to the public, specifically through the following pages:

- NUREG-series contractor reports (<http://www.nrc.gov/reading-rm/doc-collections/nuregs/contract/index.html>)
- research activities (<http://www.nrc.gov/about-nrc/regulatory/research.html>)

The Web site provides information about Federally funded R&D as well as the results of Federal research.

F. An inventory describing formal agency agreements (e.g., contracts, memoranda of understanding) with external entities (e.g., partnerships with State and local governments, public libraries, industry and commercial search engines) complementing your agency's information dissemination program, briefly explaining how each agreement improves the access to and dissemination of Government information to the public:

The NRC has formal agency agreements with several external entities that complement the NRC's information dissemination program. The NRC uses the U.S. Government Printing Office's agreement in place to participate in the Federal Depository Library Program and its sales program. The NRC also is required to send to the Library of Congress File Center 15 copies of all its published NUREGs. The agency also supplies publications to the National Technical Information Service, which provides another point of public access for users.

The U.S. Department of the Interior/Federal Consulting Group provides an online customer satisfaction survey for users of the NRC public Web site. The NRC uses the results of this survey in planning for and prioritizing improvements to the site.

The agency also contracts with Online Video Service for Web streaming of all Commission meetings and some public meetings.

G. An inventory that describes your agency's National Archives and Records Administration (NARA)-approved records schedules(s) or the link to the publicly posted records schedules(s), and a brief explanation of your agency's progress to implement NARA Bulletin 2006-02. For the brief explanation please report the number of systems for

which a record schedule was submitted to NARA in FY 2010 and the number of systems still requiring records schedules.

NUREG-0910, Revision 4, "NRC Comprehensive Records Disposition Schedule," issued March 2005, describes records (in any format) that had a NARA-approved records retention schedule as of March 2005. This document as well as any new NRC records disposition schedules approved after the publication of NUREG-0910 are posted on the NRC public Web site at <http://www.nrc.gov/reading-rm/records-mgmt/disposition.html>. NRC Management Directive 3.53, "NRC Records and Document Management Program," dated March 15, 2007, available at, <http://adamswebsearch2.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML071160026> does not report on the actual transfer of electronic records but does include instructions on implementation requirements for format and media.

The NRC submitted two records retention schedules to NARA in FY 2010, covering electronic records for the Financial Accounting and Integrated Management Information System (FAIMIS) and paper and electronic records for the Office of the Inspector General (OIG). NARA approved the FAIMIS schedule in August 2010. Fifteen retention schedules for electronic record systems are pending approval at NARA; the OIG records schedule submitted in 2010 and 14 submitted in prior years. The NRC develops additional records schedules as needed based on information derived from a biannual data call and privacy impact assessments.

- H. Describe how your agency has implemented use of electronic signatures for appropriately secure electronic transactions with Government and established a framework to allow efficient interoperability.

The NRC launched an electronic signature program in 1999 to support electronic submittals under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities." The electronic signatures were an enhancement to the NRC's existing electronic communications program and in response to the Government Paperwork Elimination Act of 1998 that required agencies to accept electronic signatures by 2003. For its electronic signature program, the NRC implemented Public Key Infrastructure (PKI) digital signatures using X.509 standards-based digital certificates. The NRC selected an outsourced PKI hosting and management service from VeriSign, Inc., to supply the digital certificates. In 2004, the General Services Administration adopted this model of PKI service delivery to Federal agencies for its PKI Shared Service Provider program that was mandated by OMB for all agencies implementing PKI, in its December 20, 2005 Memorandum M-05-05, "Electronic Signatures: How to Mitigate the Risk of Commercial Managed Services".

For its electronic signature program, the NRC elected to fund the PKI service and provide the digital certificates free of charge to approved participants in the regulatory process. Persons who desired to submit forms and documents electronically used their digital certificate to authenticate to the NRC Electronic Information Exchange (EIE) system and to digitally sign their electronic submittal form. To accomplish this PKI digital signature in 1999, the NRC used a proprietary forms application from IBM, also provided to participants without charge. The digital signature added data integrity to each electronic submittal, allowing NRC staff and administrative judges to have full confidence that submitted content was not modified during transit or processing. Both the EIE and the original PKI service, although modified and expanded, are still in regular use at the

NRC today. As of August 2010, 707 external individuals have active NRC digital certificates that use this digital signature process.

In pursuit of efficient interoperability between Federal agencies, the NRC has engaged in ongoing dialogue with the Government Printing Office and the Office of the Federal Register to participate in the program for electronic submission of notices for publication. The *Federal Register* program accepts electronic submissions that are digitally signed using the RSA PKCS #7 format only. To date, the NRC has not had the capability to produce digital signatures that meet this *Federal Register* specification and so has been unable to participate in a valuable program. We continue to search for a way to comply with the *Federal Register* requirements. The recent release of a PKCS #7 signature application developed by the Federal Identity, Credential, and Access Management project offers some promise.

- I. Describe how your agency has enhanced public participation in Government by electronic means for development and issuance of regulations (e.g., regulations.gov):

The NRC fully participates in the Federal e-Rulemaking Initiative at <http://www.regulations.gov>. The NRC has created docket on this Web site for all documents it has published in the *Federal Register* since December 2007. The NRC has migrated data from its legacy system to Regulations.gov to provide access to more than 10 years of NRC rulemaking dockets, including all public submissions. The NRC also posts to Regulations.gov all stakeholder comments on guidance and other nonrulemaking documents requesting comment that are published in the *Federal Register*, as well as supplemental background information and supporting documents for high-interest agency actions.

To increase public awareness of new NRC rulemaking actions, the NRC provides a listserv on its Web site that alerts subscribers when a new NRC rulemaking docket has been opened on Regulations.gov.

- J. Describe how your agency has linked performance goals to key stakeholders, private sector, other agencies, and internal operations in delivering information and services through use of IT.

The NRC is highlighting the National Source Tracking System (NSTS) to illustrate how the NRC has linked performance goals to key stakeholders, the private sector, other agencies, and internal operations in delivering information and services through the use of IT.

The NSTS tracks the transfer of responsibility of sealed sources of radioactive materials. This tracking spans the life cycle of the source from manufacture through shipment receipt, decay, and burial. It supports controlled authorizations and accountability for licensed suppliers and licensed recipients of sealed sources. The successful implementation of the NSTS satisfies the NRC's commitment to Congress to develop source tracking capabilities and satisfies the International Atomic Energy Agency's Code of Conduct's call for a national, central database of high-risk sources.

The NSTS helps the NRC do the following:



- Monitor the location, possession, and disposal of radioactive sources of concern throughout the country.
- Improve accountability and give better information to decisionmakers.
- Detect and act on tracking discrepancies.
- Conduct inspections and investigations.
- Communicate radioactive source information among Government agencies.
- Respond in the event of an emergency.
- Verify legitimate import, export, ownership, and use of radioactive sources.
- Further analyze hazards attributable to the possession and use of radioactive materials.

In January 2009, all users of Category 1 and Category 2 radioactive sources in the United States began reporting their source inventories and transactions, as required by 10 CFR Part 20, "Standards for Protection against Radiation," or equivalent Agreement State regulation. The regulations state that each licensee who manufactures, transfers, receives, disassembles, or disposes of a nationally tracked source must complete and submit a National Source Tracking Transaction Report.

- K. Describe how your agency has reduced errors through use of electronic submissions.

The NRC has enhanced its electronic submittal capability to facilitate the electronic transmission process. This has been highly effective in reducing errors through the use of electronic submissions.

NRC initiated its electronic submission capability to provide the means to receive and manage complex electronic document submittals in anticipation of major license applications for new nuclear power plants, license renewals for existing nuclear power plants, and the U.S. Department of Energy's high-level waste repository license application for Yucca Mountain.

The electronic submittal process is invaluable to managing the interaction among internal organizations and external organizations.

Electronic submission has been instrumental in allowing the NRC to achieve significant operating goals for the receipt, possession, and distribution of high volumes of complex documents. The electronic submittal capability ensures the optimum flow of documents into the NRC, efficient processing of documents according to NRC policy, and effective distribution of the information to NRC business units, thus enabling the agency to achieve its mission of protecting people and the environment in a more efficient manner.

- L. Briefly describe your agency efforts to comply with Section 508.

The NRC does have service provisions for people without access to the Internet. The NRC maintains a Public Document Room (PDR) where copies of NRC publicly available

records can be read. Copies can be ordered in person, through e-mail, or by telephone. The PDR has a toll-free telephone number (800-397-4209) and staff to assist members of the public who do not have Internet access. The PDR staff can also provide bibliographies based on subject searches of the public databases to give users an idea of the documents that are available. The PDR has a fee-based copy service. The PDR staff may also refer people to the nearest public library for further assistance since most public libraries now have Internet access.

The NRC has further enhanced the accessibility of its public Web site by offering site visitors the BrowseAloud assistive technology solution. This customizable software allows site visitors to listen to the contents of a Web page, highlighting the words and sentences as they are read aloud. Unlike other available screen readers, which are designed exclusively for the blind, BrowseAloud provides a range of options to accommodate the broader needs of print-disabled stakeholders who have visual impairments, learning disabilities (such as dyslexia), or literacy challenges (including English as a second language). BrowseAloud is available free of charge for NRC Web site visitors to download and use.

- M. Quantify the cost savings and cost avoidance achieved through implementation of IT programs.

The following illustrates cost savings and cost avoidance achieved through the NRC's implementation of IT programs:

- NSTS: Over the 5-year period ending in FY 2015, the projected cost avoidance and cost saving for the NSTS is \$47 million.
- ECM System: Through 2012, the ECM System will accomplish document processing turnaround service level commitments with estimated cost avoidance of \$2 million dollars in document processing contractor full-time equivalent staff.
- e-Travel: In FY 2009, the NRC successfully implemented the e-Travel system, a Presidential Priority Initiative under OMB's E-Government program. e-Travel provides a common, automated, and integrated approach to manage the travel function of the Federal Government's civilian agencies. Over the 4-year period ending in FY 2013, the NRC projects cost avoidance and cost savings through its use of e-Travel of \$1.6 million dollars.