

**POLICY ISSUE
(Information)**

April 6, 2011

SECY-11-0050

FOR: The Commissioners

FROM: Scott W. Moore, Acting Director
Office of Federal and State Materials
and Environmental Management Programs

SUBJECT: PROGRESS REPORT REGARDING ENCOURAGING STATES AND
LICENSEES TO COMPLETE NATIONAL SOURCE TRACKING
SYSTEM CREDENTIALING AND TO USE THE SYSTEM
ELECTRONICALLY

PURPOSE:

To provide the Commission a progress report as requested in the Staff Requirements Memorandum (SRM) dated October 13, 2010, for SECY-10-0112, "Report Regarding Encouraging States and Licensees to Complete National Source Tracking System Credentialing and to use the System Electronically." This paper provides a progress report on outreach efforts to promote credentialing and electronic use of the National Source Tracking System (NSTS). This paper does not address any new commitments or resource implications.

BACKGROUND:

Staff briefed the Commission on April 23, 2009, on the accomplishments, challenges, and vision for the future integration of source management and protection into the U.S. Nuclear Regulatory Commission (NRC), Agreement State, and licensee radioactive source security programs. A major focus of the discussion included the status and future vision of the NSTS. Also, representatives from the Organization of Agreement States and a manufacturer and distributor briefed the Commission on their experiences using the NSTS, including difficulties in the credentialing and certification process.

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In an SRM dated May 20, 2009, entitled "Briefing on Radioactive Source Security, 2:00 P.M., Thursday, April 23, 2009, Commissioners' Conference Room, One White Flint North, Rockville, Maryland (Open To Public Attendance)" (SRM-M090423), the Commission directed the staff to look into ways to encourage States and licensees to complete their credentialing for NSTS and to use the system electronically, including re-examining the need to establish a regulatory requirement and provide recommendations.

In SECY-10-0112, dated August 25, 2010, staff discussed the outreach efforts to increase electronic input to NSTS by licensees and Agreement States. The paper also presented options for establishing regulatory requirements to accomplish increased electronic input to NSTS.

The Commission approved the staff recommendation to continue with current requirements, and continue efforts and developments to promote credentialing for online access to NSTS, to investigate other viable authentication means, and streamline electronic input methods into NSTS. The Commission directed, in part, that the staff continue its outreach methods and provide a progress report in 6 months.

DISCUSSION:

SECY-10-0112 contained several issues and topics concerning user use of NSTS. The following information summarizes outreach efforts and actions taken by staff from lessons learned to encourage States and licensees to complete NSTS credentialing and to use the system electronically.

Continued and Planned Outreach with Licensees and Agreement States

In preparation for mailing out the inventory and instructions for the 2011 Annual Inventory Reconciliation, staff attempted to contact all licensees via email or telephone to update the individual licensees' point of contact and addresses. Staff reached out to licensees with large inventories of sources prior to the reconciliation to facilitate any outstanding issues and to make the reconciliation process go smoothly for those licensees. Staff also contacted a large number of licensees prior to and during the reconciliation to resolve issues escalated to the NRC by the NSTS Help Desk. These escalations include such issues as incorrect information submitted on a Form 748 transaction report and questions about corrections made to their inventory for the annual reconciliation.

Staff continues to have bi-monthly conference calls with Agreement State NSTS points of contact to discuss issues and NSTS updates. The NSTS website and blog are utilized by staff to provide up-to-date information to stakeholders. Staff has made several presentations to groups of licensees, including a presentation at a radioactive material licensee conference sponsored by the State of Illinois in December 2010, and another conference sponsored by a professional society of the industrial radiography industry in February 2011.

NSTS Version 2 is planned for deployment in May 2011 and will include additional ease-of-use functions that will be beneficial to licensees and Agreement States. Webinar training to

licensees and Agreement States are planned after deployment. Staff will also update the NSTS website to provide additional resources and guidance on the new features of NSTS Version 2.

Staff has also contracted with a marketing firm to gain insights on how to increase the usage of the online NSTS. The first phase of the contract involved conducting interviews with various stakeholders. In November and December 2010, the marketing firm conducted interviews with 50 participants (43 licensees, 5 Agreement State contacts, 2 Federal officials) to gain insights on how to increase usage of the online NSTS. Each interview was unique and specific to the person being interviewed. From those interviews, the marketing firm identified several advantages of online NSTS as compared to other methods to access NSTS. The marketing firm developed a marketing plan for NRC to leverage the advantages and improve upon increasing overall usage of the online system. The marketing plan to implement some of the recommendations was provided to the NRC in March 2011. Staff will determine which recommendations to implement based on budget and schedule. Staff considers the marketing plan to be an additional tool to help implement the Commission's direction in SRM-SECY-10-0112 to continue outreach efforts to increase usage of the online NSTS.

Improved Use of Online System

The current numbers of online and electronic transactions as compared to previous transaction statistics provide an indicator of the staff's progress in outreach efforts. The following table shows statistics for all licensees, industrial radiographers, and Agreement States in August 2010 as compared to March 2011.

	August 2010	March 2011
Licensees in NSTS	1400	1430
Licensees with online access to NSTS	580	672
Percentage of licensees with online access	41%	47%
Percentage of industrial radiography licensees with online access	55%	58%
Agreement States with online access	97%	100%

An enclosure contains additional statistics of online transactions, electronic transactions, and all other transactions.

Improved Form 748 National Source Tracking Transaction Report

Staff has revised NRC Form 748 in order to better meet the needs of licensees. The form is now more intuitive and allows for enhanced electronic submission. The new form is segmented by transaction type so licensees can fill out a form specific to the transaction they must report. They also have the option of using a long form to report multiple types of transactions on one form. Previously, the licensee could input information and print the form, mail or fax the form to the NRC, or scan it and send it electronically. While licensees still have these options, the new form can be saved on the licensee's computer and emailed by clicking on the new "submit by email" button.

The revised forms allow the NSTS Help Desk to electronically extract the information from the email-sent NRC Form 748, eliminating the need for the NSTS Help Desk to transcribe

information from an image file into the NSTS database. This new NRC Form 748, which is being deployed in April 2011, will reduce the risk of data entry error and maintain higher data integrity, while reducing manual input, NSTS Help Desk assistance, and data reconciliation efforts and costs.

Reduced Complexity of the System

Staff has worked on reducing the complexity on the user end of the system. Staff has made improvements to the system, which include:

- Easier access to NRC staff for assistance with completing the credentialing process;
- Several revisions to streamline the credentialing application;
- Removal of unnecessary information (i.e., company name and company address);
- Streamlining of the employment verification process by shifting certain responsibilities to NRC sponsors;
- Relaxation of requirements for the tamper proof envelope;
- Improvement of communication with the NSTS Help Desk to allow for better user assistance;
- Deployment of a software update in February 2011 which now allows licensees with Windows 7 and Vista operating systems to download their certificates to access NSTS online;
- Deployment of enhancements to the system that were requested by licensees (i.e., group selection of sources for export transactions, bulk entry for manufacturing of new sources, alphabetizing of make and model drop down lists, auto-archiving of below threshold sources); and
- Deployment of a maintenance release in preparation for the 2011 Annual Inventory Reconciliation (i.e., addition of „Previous’ button on several screens, changes to layout of Annual Inventory Reconciliation report, better tracking of the overall progress of reconciliation).

Staff has been working on additional improvements to the system, which includes a new version of NSTS to be deployed in May 2011. NSTS Version 2 will have the capability to generate alerts, which will notify licensees when a transaction is required. The alert will notify a recipient when a source needs a receipt transaction. The alert will also notify the sender of a source if a transfer transaction was not submitted that corresponds to a receipt transaction that was submitted. This added functionality will reduce the need for staff to contact licensees when transactions are missing in the movement of a source, saving staff time and effort assets that can be applied elsewhere. The new version will also include query capability and the generation of reports (i.e., source history, licensee transfer history) more easily accessible to staff and agency users. This will be helpful in conducting licensee inspections.

Staff is in the process of re-evaluating the security level of NSTS. Staff is developing a paper to provide the Commission the advantages and disadvantages of changing the authentication assurance level of NSTS from a Level 4 to a Level 3, as requested in the SRM for SECY-10-0112. Also, staff will be transmitting the results of the reevaluated security categorization of the system, which takes into consideration all possible authentication assurance levels. Security categorization is important in providing a way to determine the criticality and sensitivity of the information being processed by or stored in an information system. The security level also sets the appropriate authentication assurance level for the system. The minimum authentication assurance level was found to be a Level 4 in 2006, which provides the highest confidence in validating the identity of a system user. The required credentialing and certificate collection processes for this Level 4 system were initial challenges to online usage and can continue to be for potential new users.

Lessons Learned from the 2010 Annual Inventory Reconciliation

The 2011 Annual Inventory Reconciliation went smoother and quicker because of the lessons learned from the 2010 reconciliation efforts. Inventories were generated during the last two weeks in December to spread out the workload and these reports were mailed to each licensee's Radiation Safety Officer by certified mail. The reports were accompanied by thorough instructions on how to complete the reconciliation either online or through the NSTS Help Desk. The packages also included forms for submitting corrections and for confirming the licensee's inventory. These forms were pre-populated with the licensee's information to eliminate errors in returned information.

The NSTS is dynamic and developing into a more user friendly system while providing a better output product. Staff will keep the Commission appropriately informed of progress during the currently established semiannual Commission Technical Assistants briefings on the expansion/implementation of the Web Based Licensing, and the data and system operations and performance analysis of the NSTS.

COORDINATION:

This action has been coordinated with staff in the Office of Information Services and the Computer Security Office. The Office of the General Counsel has reviewed this package and has no legal objection.

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Enclosure:

[NSTS Transaction Statistics Comparison](#)

National Source Tracking System Transaction Statistics Comparison

May 2010 Transactions	Number of Transactions	Percentage of Transactions
Online Transactions	1822	38%
Electronic Transactions	1968	42%
All Other Transactions	968	20%
Total NSTS Transactions	4758	100%

December 2010 Transactions	Number of Transactions	Percentage of Transactions
Online Transactions	1747	30%
Electronic Transactions	3758	66%
All Other Transactions	218	4%
Total NSTS Transactions	5723	100%

June 2010 Transactions	Number of Transactions	Percentage of Transactions
Online Transactions	2591	45%
Electronic Transactions	2405	42%
All Other Transactions	717	13%
Total NSTS Transactions	5713	100%

January 2011 Transactions	Number of Transactions	Percentage of Transactions
Online Transactions	2208	35%
Electronic Transactions	2457	39%
All Other Transactions	1675	26%
Total NSTS Transactions	6340	100%

July 2010 Transactions	Number of Transactions	Percentage of Transactions
Online Transactions	2787	47%
Electronic Transactions	1975	33%
All Other Transactions	1185	20%
Total NSTS Transactions	5947	100%

February 2011 Transactions	Number of Transactions	Percentage of Transactions
Online Transactions	927	24%
Electronic Transactions	2108	54%
All Other Transactions	860	22%
Total NSTS Transactions	3895	100%