



Scott Walker  
Governor

1 WEST WILSON STREET  
P O BOX 2659  
MADISON WI 53701-2659

Linda Seemeyer  
Secretary

**State of Wisconsin**

Department of Health Services

608-267-4797  
FAX: 608-267-3695  
TTY: 888-701-1253  
dhs.wisconsin.gov

March 9, 2017

Cindy Bladey  
Office of Administration  
Mail Stop: OWFN-12-H08  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

RE: Docket ID NRC-2016-0276, comments on Category 3 source security and accountability

Dear Ms. Bladey,

The State of Wisconsin, Radioactive Materials Program has reviewed the information referenced above and submits the following comments:

General Questions Related to License Verification

1. *Should current methods for license verification of Category 3 sources be changed to align with 10 CFR 37.71?*

No. Wisconsin opposes requiring use of the verification methods in 10 CFR 37.71 for Category 3 sources.

2. *Would there be an increase in safety and/or security if the regulations were changed to allow license verification for Category 3 sources only through LVS or manual verification through the recipient's regulator?*

Requiring verification only in this way may increase safety and /or security of some transfer activities but would have no effect on others. For example, the risk of fraudulent documentation is greatest the first time a manufacturer or distributor transfers a source to licensee. License verification through LVS or manually through the recipient's regulator would directly address the risk of fraudulent documentation of a new licensee, increasing safety and/security in this case. Additionally, for regulators, a manual verification can be a benefit by notifying the regulator when the new licensee will receive radioactive material. Once a supplier-customer relationship is established, however, additional license verification would not reduce risk to the same degree. For these transfers there would be little to no increase in safety and/or security and there is considerable potential for the process to become an undue burden for licensees and regulators. Category 3 quantity sources for industrial radiography and HDR are routinely returned to manufacturers. License verification through LVS or manually does not increase safety or security for sources being shipped to the manufacturer.

3. *If NRC changed the regulations to limit license verification to LVS or through the recipient's regulator, should transfers to manufacturers and distributors be exempt?*  
Yes.
4. *Is there anything else we should consider when evaluating different methods of license verification for Category 3 sources?*  
Could the same positive effects on safety and security be achieved if manufacturers and distributors were required to verify only certain requests? The biggest risks are: new license or new use (fraudulently obtained or altered license), address changes or shipping to new locations (attempt to divert sources to another location), and large orders of total activities or at a rate greater than normal (altering using a license to get a CAT 1 or 2 quantity). The verification method should address the risks (LVS and manual verification do) but if possible not interfere with well vetted and routine transactions, i.e. some analog to TSA Pre check.

#### General Questions Related to NSTS

1. *Should Category 3 sources be included in NSTS?*  
No. The current regulations are adequate for protecting public health and safety for Category 3 sources. The stated health and security risks of Category 3 sources do not warrant additional security requirements.

In addition, requiring extra tracking and license verification for iridium-192 sources until they decay to 2.1 Ci may prompt licensees (medical and industrial radiography) to delay return shipment of old sources until the sources have decayed beneath Category 3 quantities. This *increases* security vulnerabilities by providing an incentive to keep unused sources onsite for a longer period of time.

Wisconsin also notes that HDR sources are always exchanged by the manufacturer. Licensees cannot acquire sources from other vendors and the manufacturer will not ship extra sources that would allow a licensee to aggregate to a Category 2 quantity. Tracking HDR sources in NSTS would provide no increase in safety or security.

2. *If Category 3 sources are included in NSTS, should NRC consider imposing the same reporting requirements currently required for Category 1 and 2 sources?*  
Yes. It would add needless confusion to have different reporting requirements for different source categories.
3. *Should the NRC consider alternatives to the current NSTS reporting requirements for Category 1 and 2 sources to increase the immediacy of information availability, such as requiring the source transfers to be reported prior to, or on the same day as, the source shipment date?*  
There is always going to be a lag between "ground truth" and what is in NSTS. Wisconsin recommends retaining the reporting requirements as they are currently.

4. *Would there be an increase in safety and/or security if the regulations were changed to include Category 3 sources in NSTS? If so, how much of an increase would there be?*  
No. Including Category 3 sources in NSTS would not increase safety or security. As mentioned in a previous question, may provide an incentive to *reduce* security by encouraging licensees to hold on to unused sources until they decay below the Category 3 threshold.
5. *Is there anything else we should consider as part of our evaluation of including Category 3 sources in NSTS?*  
No.

#### Specific Questions for Agreement States Related to License Verification

1. *Approximately how many licenses do you authorize for Category 1, 2 and 3 quantities of radioactive material?*  
As of September 2016, Wisconsin had 57 licenses authorized for Category 1, 2 or 3 quantities. Of these, 26 are authorized for Category 1 or 2 quantities and 31 are authorized for Category 3 only.
2. *If LVS or manual verification is required for Category 3 quantities, would you encourage the use of LVS or plan for additional burden?*  
We would encourage the use of LVS.
3. *Question about using WBL.*  
We already use WBL, and all of our Category 3 licenses are included in WBL.
4. *What would be the impact in time and resources to handle additional regulatory oversight for expanded use of LVS?*  
There will be an increased burden to respond to licensees who choose to pursue manual license verification.

#### Specific Question for Agreement States Related to NSTS

1. *What would be the additional regulatory burden for Agreement States to administer the annual inventory reconciliation for Category 1, 2 and 3 sources?*  
10 CFR 20.2207 does not specify how the annual inventory reconciliation must be conducted. Wisconsin has understood annual reconciliation as the *licensee's* responsibility, which Wisconsin then verifies during inspection. The annual reconciliation process does not have to include mailing a hard copy of the inventory. Wisconsin does not support printing and mailing a hard copy of security-related information to the licensees for this purpose. It is reasonable to expect licensees to seek access to NSTS online. If NSTS is expected to be a real time inventory system the process of annual inventory reconciliation is antiquated. The annual inventory reconciliation was most useful when the system was first adopted but currently provides little use in keeping the system accurate. NRC should evaluate whether the annual inventory reconciliation is still necessary at all, or whether review of this information during inspection is adequate.

Other Questions

1. *Should physical security requirements for Category 1 and 2 quantities of radioactive material be expanded to include Category 3 sources?*

No. In 2009, NRC's rationale for including Category 1 and 2 sources in NSTS was based on the potential health effects due to misuse of a source. Since then, no additional threat bases have been evaluated which concluded that Category 3 sources present a significant threat. In addition, Category 3 fixed gauge sources are often in large industrial environments in places that cannot easily be segregated from other areas. Defining a security zone and controlling access to these areas would be extremely difficult, if not impossible. Subjecting Category 3 sources to Part 37 security requirements without a credible threat basis is not warranted.

2. *Should NRC establish maximum quantities in general licensed devices?*

Yes. Generally licensed devices which are currently subject to registration should be specifically licensed.

Sincerely,



David Reindl  
Nuclear Engineer  
Radioactive Materials Program  
State of Wisconsin