

#### UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

OFFICE OF THE INSPECTOR GENERAL

May 22, 2014

MEMORANDUM TO: Mark A. Satorius Executive Director for Operations

FROM: Stephen D. Dingbaum /**RA**/ Assistant Inspector General for Audits

SUBJECT: AUDIT OF NRC'S OVERSIGHT OF RECIPROCITY LICENSEES (OIG-14-A-16)

The Office of the Inspector General (OIG) conducted an audit of the U.S. Nuclear Regulatory Commission's (NRC) oversight of reciprocity licensees. The objective of the audit was to determine whether NRC provides adequate oversight of Agreement State licensees operating in NRC jurisdiction under reciprocity.

Overall, NRC provides adequate oversight to Agreement State licensees performing regulated activities in NRC jurisdiction. Therefore, OIG makes no recommendations.

### BACKGROUND

### **Reciprocity Defined**

Reciprocity is NRC recognition of certain Agreement State<sup>1</sup> licenses for work performed in areas of NRC jurisdiction. Areas of NRC jurisdiction include non-Agreement States, areas of exclusive Federal jurisdiction, and offshore waters. The term reciprocity is also

<sup>&</sup>lt;sup>1</sup> An Agreement State is any State with which NRC has entered into an agreement under subsection 274b of the Atomic Energy Act of 1954, as amended, that gives the State the authority to license and inspect byproduct, source, and noncritical quantities of special nuclear materials used or possessed within its borders.

used in Agreement States to identify Agreement State recognition of an NRC license and licenses from other Agreement States for work performed in their jurisdiction.

Reciprocity authorizes Agreement State licensees to work in NRC jurisdiction for short periods of time without having to obtain a specific license. Thus, NRC regulations provide that any person who holds a specific license from an Agreement State is granted a general license<sup>2</sup> to conduct the same activity in NRC jurisdiction. Being granted a general license by NRC is recognition of the Agreement State license and is referred to as reciprocity recognition.

Some types of activities conducted under reciprocity include radiography, portable gauge use, medical procedures, well-logging, leak-testing, and calibration.

## NRC Offices Responsible for Reciprocity

The NRC regional offices – in particular, Regions I, III, and  $IV^3$  – are primarily responsible for the implementation of reciprocity. Regional offices have the responsibility to review documents submitted by Agreement State licensees to ensure the proposed activities are in accordance with NRC regulations. The regional offices also schedule, conduct, and track inspections to achieve the overall objectives of the inspection program. The following table presents the number of Agreement State licensees authorized to work in NRC jurisdiction.

	Calendar Year 2013	Calendar Year 2012	Calendar Year 2011
Total Reciprocity Licensees	214	242	213
Region I	77	89	87
Region III	27	34	24
Region IV	110	119	102

Table 1: Reciprocity Licensees by NRC Region

Source: NRC data found in the Reciprocity Tracking System in Web-based Licensing

<sup>&</sup>lt;sup>2</sup> A general license is authorized by a regulation that sets forth the terms of the license. The reciprocity general license is defined in 10 CFR 150.20. In contrast, specific licenses are issued to named individuals who have filed an acceptable application to use certain types or quantities of radioactive materials.

<sup>&</sup>lt;sup>3</sup> In October 2003, all radioactive materials licensing and inspection functions in Region II were transferred to Region I.

Further, the Office of Federal and State Materials and Environmental Management Programs (FSME) assists the regions' implementation of reciprocity. Specifically, FSME has the responsibility to maintain the Reciprocity Tracking System, which the regions use to track reciprocity activities. FSME is also responsible for maintaining guidance documents regarding reciprocity.

# **OBJECTIVE**

The audit objective was to determine whether NRC provides adequate oversight of Agreement State licensees operating in NRC jurisdiction under reciprocity.

# **RESULTS**

OIG determined that NRC provides adequate oversight to Agreement State licensees performing regulated activities in NRC jurisdiction. Therefore, OIG makes no recommendations.

OIG identified and reviewed the following aspects of NRC oversight of Agreement State licensees operating in NRC jurisdiction under reciprocity:

- Verification of information submitted.
- Communication with licensees and communication among NRC regions responsible for oversight.
- Inspections.
- Enforcement of NRC regulations.

## A. Reciprocity Recognitions Are Processed in Accordance With NRC Regulations

An Agreement State licensee planning to work in NRC jurisdiction must submit information prior to conducting work in NRC jurisdiction. At least 3 days prior to commencing work, the licensee must submit NRC Form 241, a copy of the valid Agreement State license, and a fee to the NRC Regional Administrator. NRC Form 241 requests information that must be completed by the Agreement State licensee, including activities to be conducted, dates scheduled to work, and number of work days. NRC regional staff review reciprocity recognitions in accordance with NRC regulations (10 CFR 150.20), Inspection Manual Chapter (IMC) 1220, and NUREG-1556, Volume 19. Additionally, regional staff sometimes take additional measures to verify the information submitted by the Agreement State licensee. For example, some regional staff contact the Agreement State when there are questions about a license. NUREG-1556, Volume 19, which is guidance for licensees and NRC staff, has been revised and provides more clarity regarding reciprocity oversight. IMC 1220 was issued in May 2003 and the agency could benefit from an update to IMC 1220 so that it parallels the updates in the NUREG.

## B. <u>NRC Communicates With Agreement State Licensees and Regional Offices</u> <u>Communicate With One Another</u>

Reciprocity oversight requires NRC to communicate with Agreement State licensees. IMC 1220 requires NRC regions to distribute regional procedures letters by January 1 to Agreement State licensees that filed for reciprocity in the previous year. The purpose is to annually provide Agreement State licensees, who filed for reciprocity in the previous calendar year, with procedures and applicable guidelines and regulations. Regions III and IV distribute the regional procedures letters as prescribed by IMC 1220. Region I does not distribute the regional procedures letters. Instead, Region I requests that Agreement State licensees apply for reciprocity prior to the time necessary for distribution of the regional procedures letters. NRC also provides the information on reciprocity through other means. For example, IMC 1220 and NUREG-1556, Volume 19, are available on NRC's public Web site. Additionally, NRC summarizes Agreement State licensee violations of its regulations in a newsletter. Because these sources that explain reciprocity procedures, and applicable guidelines and regulations, are publicly available, NRC should consider whether to continue requiring distribution of regional procedures letters when updating IMC 1220.

NRC guidance requires regional staff to communicate with one another regarding inspections. Regional staff enter licensee information in the Reciprocity Tracking System, which was recently integrated into Web-based Licensing.<sup>4</sup> Regional staff also distribute submitted copies of NRC Form 241 to the NRC regional office in the location where the Agreement State licensee intends to conduct work. The licensee information entered into the Reciprocity Tracking System includes licensee name, Agreement State, dates of work, and location of work. Regional offices communicate with one another if an applicant submits documentation to the incorrect region. The recent incorporation of

<sup>&</sup>lt;sup>4</sup> Web-based Licensing is a materials licensing system that supports NRC and Agreement States in managing the licensing information of businesses that use radioactive materials.

the Reciprocity Tracking System into Web-based Licensing improved communication among the regions. Another way for NRC to improve communication would be to enhance the functionality of the Reciprocity Tracking System in Web-based Licensing to allow inspectors in one region to know whether another region already conducted an inspection of a given licensee. NRC should consider whether improvements to Webbased Licensing could be made to assist regional staff by providing full access to information across regions.

## C. Regions Conduct Inspections To Ensure Safety and Security

The NRC regions conduct inspections to ensure the safety and security of activities conducted under reciprocity. IMC 1220 establishes a metric to guide planning reciprocity inspections and to assist with integrating reciprocity inspections into NRC's routine inspection program. The metric is based on a pool of eligible candidates. The pool is determined through a risk-informed process based on inspection frequency as laid out in IMC 2800.<sup>5</sup> NRC must inspect 20 percent of the Priority 1, 2, and 3 program codes each year. If NRC has inspected the reciprocity licensee in the last calendar year, and the licensee has not had escalated enforcement or a significant Nuclear Materials Events Database<sup>6</sup> event in the past 2 years, then the reciprocity licensee is not considered a candidate for inspection. The table below presents the number of Agreement State licensees authorized to conduct Priority 1, 2, and 3 activities in NRC jurisdiction and the number inspected by NRC.

All NRC Regions	Calendar Year 2013	Calendar Year 2012	Calendar Year 2011
Total Reciprocity Licensees	214	242	213
Priority 1, 2, 3 Licensees	75	83	76
Priority 1, 2, 3 Inspections	19	20	13

Table 2: Priority 1, 2,	and 3 Reciprocity Lice	ensees and Inspections Acro	ss NRC
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Source: NRC data found in Reciprocity Tracking in Web-based Licensing, and OIG Analysis of Inspection Reports

<sup>&</sup>lt;sup>5</sup> Frequency or Priority Codes are assigned to radioactive materials program activities. Priority code 1, 2, 3, or 5 indicates the interval between routine inspections, expressed in years. The priority represents the relative risk of radiation hazard. Priority Code 1 represents the greatest risk to the health and safety of workers, members of the public, and the environment, while Priority Code 5 represents the lowest risk.

<sup>&</sup>lt;sup>6</sup> The Nuclear Materials Events Database contains records of events involving nuclear material reported to NRC by NRC licensees, Agreement States, and non-licensees.

In the aggregate, the regions meet the inspection metric in IMC 1220, although there is variation among regions and from year to year. For example, sometimes a region might not meet the metric in a given calendar year. While the inspection metric is not always met each year by each region, an Agreement State licensee does not go uninspected. The Agreement State licensee is inspected as part of the State's routine inspection program. Additionally, Agreement State licensees engaged in the highest risk activities within NRC jurisdiction may be inspected in any year because these licensees must request reciprocity every calendar year.

The regions face several challenges in meeting the inspection metric. Agreement State licensees may work in remote locations, across a wide geographic area, or frequently change the days that they plan to do work. The regions have taken steps to address some of the challenges. One region approves proposed work days only 1 month at a time to reduce failed inspection attempts. Another region created a tool to assist in tracking changing work dates for inspection planning. Although the regions have developed methods to meet the metric, NRC should consider whether the 20-percent inspection requirement is appropriate when updating IMC 1220.

## D. NRC Takes Enforcement Against Agreement State Licensees

As a regulator, NRC should take enforcement against Agreement State licensees who (1) fail to request reciprocity as required by NRC regulations, and (2) violate those regulations while conducting work in NRC jurisdiction. Enforcement is issuing sanctions to licensees who violate NRC regulations and is a key component to NRC's oversight. NRC uses three primary enforcement sanctions:

- <u>Notice of Violation</u>. A Notice of Violation identifies a requirement and how it was violated and normally requires a written response.
- <u>Civil Penalties</u>. A civil penalty is a monetary fine.
- <u>Orders</u>. Orders modify, suspend, or revoke licenses or require specific actions by licensees or persons.

NRC issues enforcement sanctions against Agreement State licensees that fail to request reciprocity as required by NRC regulations. The failure to file for reciprocity prevents NRC from knowing that activities were being conducted within its jurisdiction and, therefore, from performing inspections to assure that licensed material was being used safely and in accordance with NRC requirements.

NRC also issues enforcement sanctions against Agreement State licensees that violate NRC regulations while conducting activities in NRC jurisdiction. If a violation occurs within NRC jurisdiction, NRC handles Agreement State licensees the same as an NRC licensee.

## AGENCY COMMENTS

An exit conference was held with the agency on May 7, 2014. Prior to this meeting, after reviewing a discussion draft, agency management provided comments that have been incorporated into this report, as appropriate. As a result, agency management stated their general agreement with the results in this report and opted not to provide formal comments for inclusion in this report.

## SCOPE AND METHODOLOGY

The audit focused on reviewing the oversight of Agreement State licensees operating in NRC jurisdiction under reciprocity. We conducted this performance audit at NRC headquarters (Rockville, MD) from December 2013 to March 2014. Internal controls related to the audit objective were reviewed and analyzed. Throughout the audit, auditors were aware of the possibility or existence of fraud, waste, or abuse in the program.

OIG reviewed NRC regulations, inspection procedures, and enforcement policies to identify criteria for this audit, including, but not limited to:

- 10 Code of Federal Regulations (10 CFR) 150.20, "Recognition of Agreement State Licenses."
- NUREG-1556, Volume 19, "Consolidated Guidance About Materials Licenses: Guidance for Agreement State Licensees About NRC Form 241, 'Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction, or Offshore Waters' and Guidance for NRC Licensees Proposing To Work In Agreement State Jurisdiction (Reciprocity)."
- IMC 1220, "Processing of NRC Form 241, 'Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction and Offshore Waters,' and Inspection of Agreement State Licensees Operating Under 10 CFR 150.20."
- IMC 2800, "Materials Inspection Program."

• NRC Enforcement Manual.

OIG also identified and reviewed inspection reports issued from 2011 through 2013 and enforcement actions issued from 2009 through 2013 related to Agreement State licensees conducting activities under reciprocity in NRC jurisdiction. These reports and actions were found on NRC's Agencywide Documents Access and Management System and the NRC public Web site.

OIG also identified and reviewed events related to reciprocity in the Nuclear Materials Events Database.

OIG interviewed NRC staff and management to gain an understanding of roles and responsibilities as they relate to how NRC oversees Agreement State licensees operating in NRC jurisdiction under reciprocity. Auditors interviewed staff from FSME, the Office of the General Counsel, and NRC Regions I, III, and IV. OIG auditors also accompanied NRC staff on a reciprocity inspection.

We conducted this performance audit in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. This audit was conducted by Sherri Miotla, Team Leader; Levar Cole, Audit Manager; Kevin Nietmann, Senior Technical Advisor; Kristen Lipuma, Senior Management Analyst; Amy Hardin, Auditor; and Taylor Butch, Management Analyst.