



# ENFORCEMENT PROGRAM ANNUAL REPORT

Calendar Year 2013

U.S. Nuclear Regulatory Commission  
Office of Enforcement  
Washington, DC 20555

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## Executive Summary

The U.S. Nuclear Regulatory Commission (NRC) effectively implemented the agency's Enforcement Policy and Program in Calendar Year (CY) 2013. NRC headquarters and regional offices continued to focus on appropriate and consistent enforcement of the agency's regulations.

### *Escalated Enforcement Action Data*

The Enforcement Policy defines an escalated enforcement action as a notice of violation (NOV) with a severity level (SL) of III or greater (SL I, II, and III NOVs); NOVs associated with an inspection finding that the Significance Determination Process (SDP) evaluates as having low to moderate (white) or greater safety significance; civil penalties; NOVs to individuals; Orders to modify, suspend, or revoke NRC licenses or the authority to engage in NRC-licensed activities; and Orders issued to impose civil penalties. During CY 2013, the NRC issued 75 escalated enforcement actions under traditional enforcement and the Reactor Oversight Process (ROP). These actions were comprised of 11 actions involving civil penalties totaling \$212,400, 10 enforcement orders, and 54 escalated NOVs without a proposed civil penalty.

The total number of escalated enforcement actions decreased in CY 2013 by 34 percent when compared with CY 2012. This 1-year trend was largely the result of (1) an overall decrease in the number of escalated actions issued to nuclear materials user licensees, and (2) a decrease in the number of notices of violation without a civil penalty issued to operating power reactors. Over the past 5 years, the number of escalated enforcement actions issued by the agency has also shown a declining trend, primarily the result of a steady decrease in escalated actions issued to nuclear materials user and fuel facility licensees. Section I of the Annual Report provides additional information on these trends.

### *Noteworthy Program Accomplishments*

The Commission approved a revision to the Enforcement Policy that became effective on January 28, 2013, and a new interim Policy on July 9, 2013. In addition, the Office of Enforcement (OE) issued three new Enforcement Guidance Memoranda to assist the staff in dispositioning specific enforcement actions. OE also assessed Region II's implementation of the agency's enforcement program, with an emphasis on new construction enforcement. The agency continued the successful use of the Alternative Dispute Resolution (ADR) Program and expanded the program, via a pilot, to include certain cases with proposed civil penalties. The agency met the congressional timeliness goals for issuing enforcement actions in CY 2013.

### *Significant Cases*

In CY 2013, the agency processed a number of significant cases that required extensive coordination and cooperation with internal stakeholders. These significant cases included: (1) a confirmatory order issued to Chicago Bridge and Iron (formerly Shaw Nuclear Services), (2) two notices of violation associated with a yellow significance determination process finding issued to Watts Bar, Unit 1, and Monticello Nuclear Generating Plant, and (3) a confirmatory order and two orders to former licensed operators prohibiting involvement in NRC-licensed activities at Dresden Nuclear Power Station.

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# I. Program Overview

## A. Mission and Authority

The U.S. Nuclear Regulatory Commission (NRC) regulates the civilian uses of nuclear materials in the United States to protect public health and safety, the environment, and the common defense and security. The agency accomplishes this mission through: licensing of nuclear facilities and the possession, use, and disposal of nuclear materials; the development and implementation of requirements governing licensed activities; and inspection and enforcement activities to ensure compliance with these requirements.



Figure 1 – How the NRC Regulates

The NRC conducts various types of inspections and investigations designed to ensure that the activities it licenses are conducted in strict compliance with the Commission’s regulations, the terms of the licenses, and other requirements.

The sources of the NRC’s enforcement authority are the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and the Energy Policy Act of 2005. These statutes give the NRC broad authority. The Energy Policy Act of 2005 expanded the definition of byproduct material, placing additional byproduct material under the NRC’s jurisdiction including both naturally occurring and accelerator-produced radioactive materials (NARM). The agency implements its enforcement authority through Title 10, “Energy,” of the *Code of Federal Regulations* (10 CFR) Part 2, “Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders,” Subpart B, “Procedures for Imposing Requirements by Order, or for Modification, Suspension, or Revocation of a License, or for Imposing Civil Penalties.” The Administrative Dispute Resolution Act of 1996 provides the statutory framework for the Federal Government to use alternative dispute resolution (ADR).

The NRC Enforcement Policy establishes the general principles governing the NRC’s Enforcement Program and specifies a process for implementing the agency’s enforcement authority in response to violations of NRC requirements. This statement of policy is predicated on the NRC’s view that compliance with NRC requirements serves a key role in ensuring safety, maintaining security, and protecting the environment. The Enforcement Policy applies to all NRC licensees, to various categories of nonlicensees, and to individual employees of licensed and nonlicensed firms involved in NRC-regulated activities.

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Enforcement actions serve as a deterrent, emphasize the importance of compliance with regulatory requirements, and encourage prompt identification and prompt, comprehensive correction of violations. In addition, because violations occur in a variety of activities and have varying levels of significance, the NRC Enforcement Policy contains graduated sanctions.

Enforcement sanctions include the use of notices of violation, civil penalties, and orders to modify, suspend, or revoke a license. The NRC staff may exercise discretion in determining the appropriate enforcement sanctions to be taken. Most violations are identified through inspections and investigations and are normally assigned a severity level (SL) ranging from SL IV for those of more than minor concern to SL I for the most significant.

The Reactor Oversight Process (ROP) supplements the enforcement process for operating nuclear reactors. A similar process has been implemented to assess findings at new reactor construction sites. Under the ROP, violations are not normally assigned a SL but instead are assessed through the ROP and usually referred to as "findings." Under this program, the NRC determines the risk significance of inspection findings using the significance determination process (SDP), which assigns the colors of green, white, yellow, or red with increasing risk significance. Findings under the ROP may also include licensee failures to meet self-imposed standards. As such, an ROP finding may or may not involve a violation of a regulatory requirement. Findings assigned a greater-than-Green color are considered escalated enforcement actions. While the ROP can process most violations at operating power reactors, it cannot address aspects of some violations; such violations require the NRC to follow the traditional enforcement process.

Under the ROP, violations that result in actual safety or security consequences, affect the ability of the NRC to perform its regulatory oversight function, and involve willfulness are processed with the traditional Enforcement Policy. In addition, while ROP findings are not normally subject to civil penalties, the NRC does consider civil penalties for any violation that involves actual consequences. SL IV violations and violations associated with green ROP findings are normally dispositioned as noncited violations (NCVs). Inspection reports or inspection records document NCVs and briefly describe the corrective action that the licensee has taken or plans to take, if they are known at the time the NCV is documented. Additional information about the ROP is available at <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>.

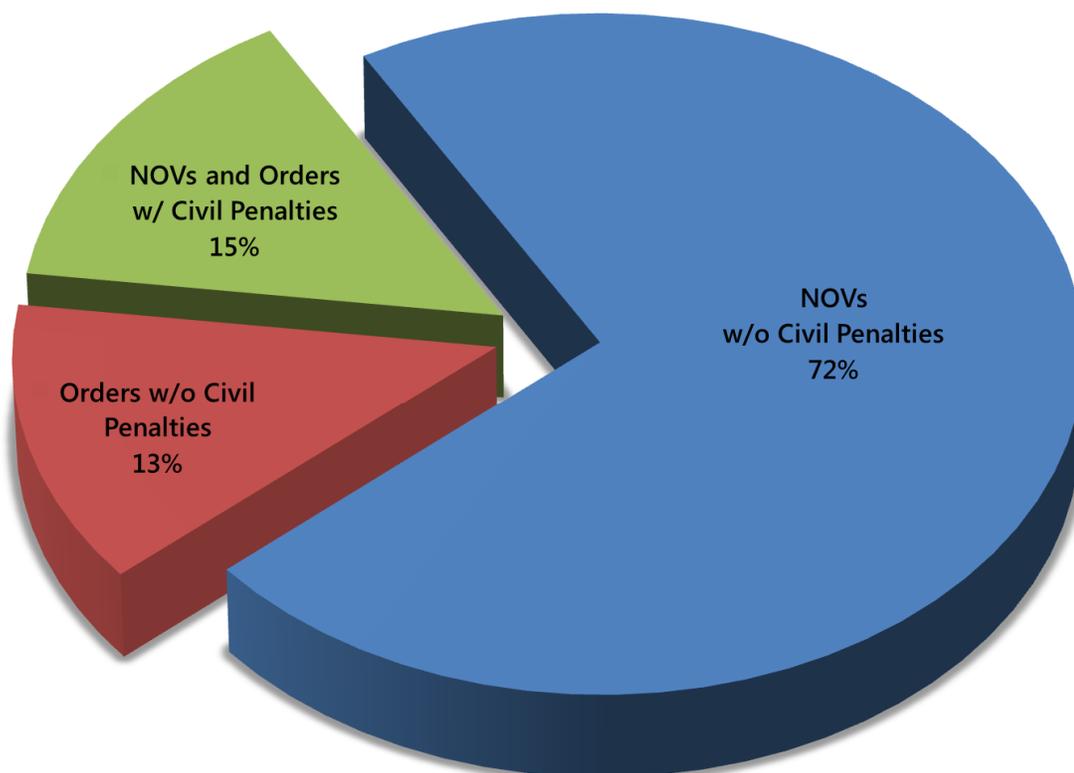
OE develops policies and programs for the enforcement of NRC requirements. In addition, OE oversees NRC enforcement activities, giving programmatic and implementation guidance to regional and headquarters offices that conduct or are involved in enforcement activities, and strives to ensure consistency between regional and program office implementation of the agency's enforcement program, particularly for more significant cases.

The NRC's enforcement Web site (<http://www.nrc.gov/about-nrc/regulatory/enforcement.html>) presents a variety of information, such as the Enforcement Policy; the Enforcement Manual; and current temporary enforcement guidance contained in enforcement guidance memoranda. This Web site also has information about escalated enforcement actions the NRC has issued to reactor and materials licensees, nonlicensees (vendors, contractors, and certificate holders), and individuals. In keeping with NRC practices and policies, details associated with most security-related actions and activities are not available on the NRC's public Web site.

## B. Assessment of Escalated Enforcement Actions

Escalated enforcement actions include the following:

- notices of violations (NOVs), including SL I, II, or III violations
- NOVs associated with red, yellow, or white SDP findings (for operating reactor facilities)
- civil penalty actions
- enforcement orders (including confirmatory orders (COs) that result from the ADR process)



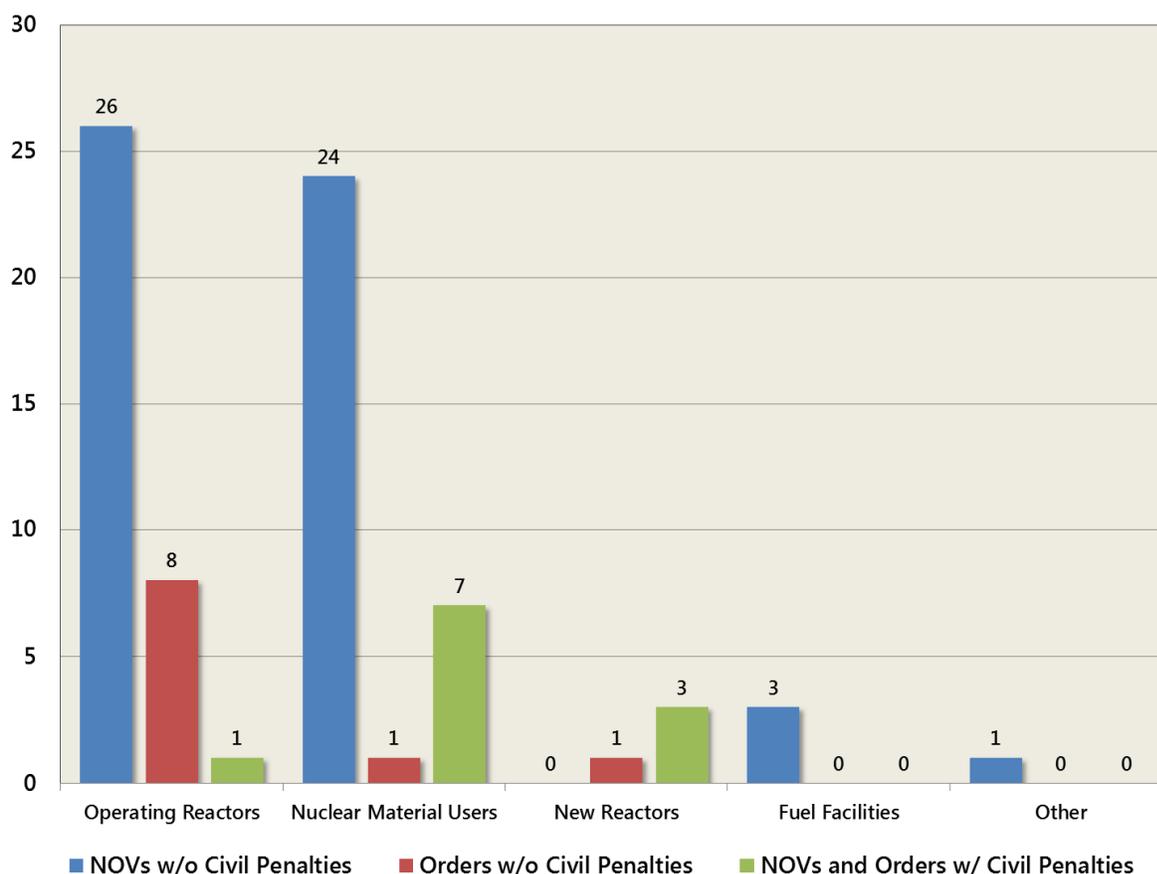
**Figure 2 – Escalated Enforcement by Type of Action (CY 2013)**

During CY 2013, the NRC issued a total of 75 escalated enforcement actions to all licensees, nonlicensees, and individuals. Figure 2 shows the distribution of these actions, by the category of the action, for CY 2013. The most common type of escalated enforcement action was an NOV without a civil penalty, with 54 of the 75 escalated actions (or 72 percent) issued during the year fitting this category. This percentage is consistent with the overall distribution of escalated enforcement actions during the past 5 years, where approximately 70 percent of all escalated actions issued between CY 2009 and CY 2013 have been NOVs without a civil penalty. Generally speaking, a large percentage of NOVs without civil penalties is considered a positive outcome because it reflects strong licensee corrective action programs, with the majority of licensees adequately responding to identified violations.

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The remaining 28 percent of escalated enforcement actions were almost equally split between NOVs and orders with a civil penalty, and orders without a civil penalty. As shown in Table 1 (below), the NRC issued 11 civil penalty actions (15 percent) and 10 orders without a civil penalty (13 percent). The 11 civil penalty actions included 10 NOVs and 1 of the ADR orders issued in CY 2013.

Figure 3 shows the distribution of enforcement actions based on the business line, or type of licensee to whom the NRC issued escalated enforcement actions in CY 2013. For this figure, enforcement actions issued to individuals were included in the appropriate category of licensee, instead of being counted separately. Tables 3 and 4 at the end of this report give further detail by identifying the region or program office that initiated the action, as well as additional detail on the type of licensee, nonlicensee, and individual involved.



**Figure 3 – Escalated Enforcement by Business Line (CY 2013)**

As shown in Figure 3, operating reactor licensees received the largest percentage of all escalated enforcement actions (47 percent) in CY 2013. This was followed closely by materials user licensees who received 43 percent of all escalated enforcement actions issued by the NRC. Because of the increase in construction activities at new reactor construction sites, Figure 3 now shows escalated actions issued to reactor licensees by operating reactors and new reactors in separate categories. In CY 2013, the NRC issued four escalated actions to new reactor licensees and vendors. All four new reactor enforcement actions were evaluated and issued under the traditional enforcement process; however, this might or might not be the case in upcoming years with the implementation of

the Construction Reactor Oversight Process (cROP) at the Vogtle and Summer new construction sites. The staff expects that the majority of findings and performance deficiencies discovered in the future will be evaluated under the cROP process.

**1. Escalated Enforcement Trends**

As previously noted, the NRC issued 75 escalated enforcement actions during CY 2013. The 75 actions represent a 34 percent decrease from the number of actions issued in CY 2012. Table 1 shows a breakdown of the total number of escalated enforcement actions issued by the NRC over the past 5 years by type of enforcement action. Figure 4 (below) displays this information in graphical form.

**Table 1 – Escalated Action Trends**

	<b>CY 2013</b>	<b>CY 2012</b>	<b>CY 2011</b>	<b>CY 2010</b>	<b>CY 2009</b>	<b>Average</b>
Escalated NOVs (w/o Civil Penalties)	54	79	90	79	99	80
NOVs and Orders (w/ Civil Penalties)	11	16	14	21	19	16
Orders (w/o Civil Penalties)	10	18	4	15	33	16
Orders Imposing Civil Penalties	0	0	0	1	4	1
<b>Total</b>	<b>75</b>	<b>113</b>	<b>108</b>	<b>116</b>	<b>155</b>	<b>113</b>

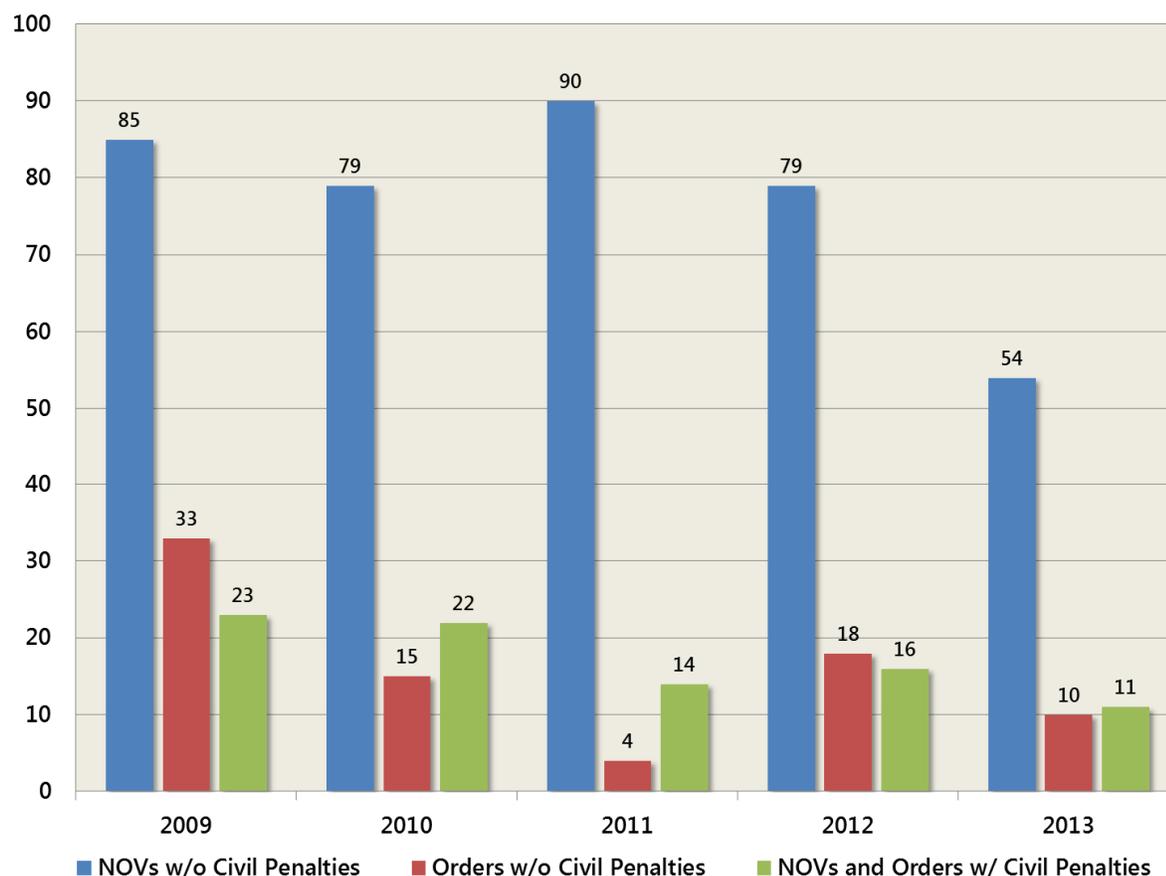
As shown in Table 1 above, the total number of escalated enforcement actions issued in CY 2013 is considerably less than the 5-year average. While the 1-year decrease might be viewed as significant, Figure 4 suggests that there has also been a steady decline in the number of escalated NOVs without a civil penalty issued since CY 2009, as well as an overall decrease in the number of orders and escalated actions with a civil penalty issued over the same 5-year period.

To help answer the reasons for these trends, Figure 5 (next page) provides escalated enforcement trends between CYs 2009 and 2013 based on business line. As shown in Figure 5, this year's decrease in escalated actions when compared to CY 2012 may be attributed to an almost equal reduction in the number of escalated enforcement actions issued to operating reactor and materials user licensees. However, when considering the past 5 years, the data shows that this trend has resulted from largely a steady decrease in the number of escalated actions issued to materials users and fuel facility licensees since CY 2009. During this period, there was an approximately 60 percent decrease in the total number of escalated actions issued to materials users and an 82 percent decrease at fuel facilities.

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The nuclear materials users' trend was primarily caused by a decrease in enforcement actions issued to gauge user licensees (an 80 percent reduction since CY 2009), hospitals (a 27 percent reduction from CY 2009), and radiographers (a 75 percent reduction from CY 2009). The staff's analysis of the materials user trend has not been conclusive. However, two causal factors are factual and impact the trend in the expected direction, therefore accounting for a substantial portion of the change but likely not the entire change. In the early years of the most recent five-year period, particularly in CY 2009, the number of cases involving security-related increased controls violations remained high due to the implementation of the additional requirements. Second, in 2011, the SL criteria of certain gauge cases were changed from SL III to SL IV, reducing the number of escalated actions issued thereafter.

A similar trend has been observed at fuel facilities and can be attributed to improved licensee performance in the area of problem identification and resolution, safety culture, as well as changes made as part of a major revision to the Enforcement Policy in CY 2010. In September 2010, the severity level examples for violations at fuel facilities were changed in the Policy to be more risk-informed, and this impacted the threshold for dispositioning violations as escalated actions at these facilities. Table 4 at the end of this report provides a more detailed breakdown of enforcement actions issued during CY 2013 by the type of licensee. As shown in Table 4, escalated enforcement actions without civil penalties issued to other materials licensees are relatively evenly dispersed among the different types of licensees.



**Figure 4 – Escalated Action Trends (CY 2009 to CY 2013)**

Figure 5 (below) also shows that the number of escalated enforcement actions issued to operating reactor licensees between CYs 2009 and 2013 has been mostly steady, generally ranging between 31 and 38 actions per year. However, in CY 2012 operating reactors were issued 51 escalated actions. Of these violations, 21 were associated with white SDP findings under the ROP, and six were associated with yellow and red SDP findings (which increased significantly over previous CYs). Also, CY 2012 experienced a higher number of violations issued to licensed operators, such as the multiple cases involving deliberate misconduct at River Bend in CY 2011.

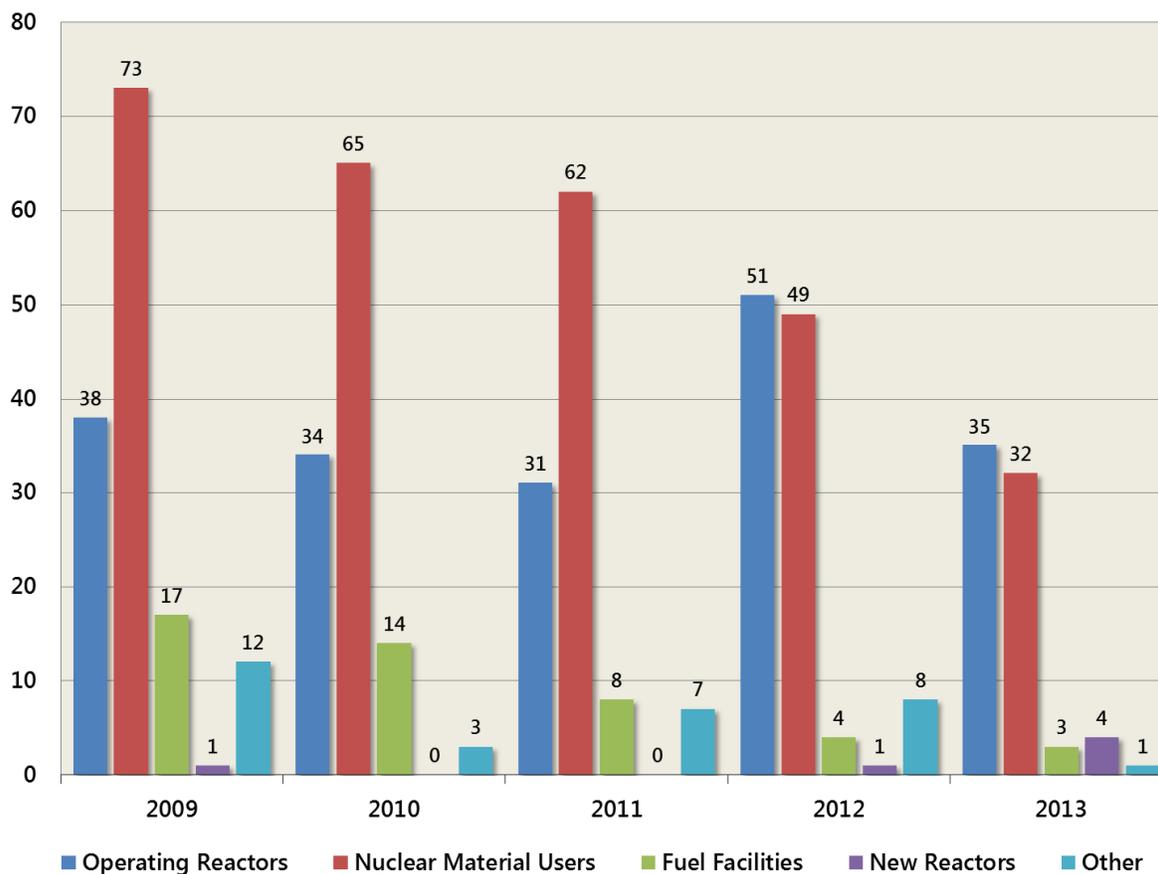


Figure 5 – Escalated Action Trends by Business Line (CY 2009 to CY 2013)

## 2. Civil Penalty Actions

In CY 2013, the agency processed 11 enforcement actions that involved civil penalties. One of the 11 actions was associated with a settlement that followed an ADR mediation session. One case involved a SL II violation identified at Chicago Bridge and Iron (formerly Shaw Nuclear Services) that was later withdrawn following ADR mediation. Another case involved the failure to supply and require the use of individual radiation monitoring devices (dosimeters) and the failure to provide complete and accurate information to an NRC inspector by Jackson Cardiology Associates, P.C.

Four of these cases involved “willfulness,” which is defined as either deliberate misconduct or careless disregard. The Commission is particularly concerned with the identification of willful violations. The NRC’s regulatory program is based on licensees

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and their contractors, employees, and agents acting with integrity and communicating with candor; therefore, the agency may consider a violation involving willfulness to be more egregious than the underlying violation, taken alone, would have been, and it may increase the SL accordingly.

**Table 2 – Civil Penalty Information**

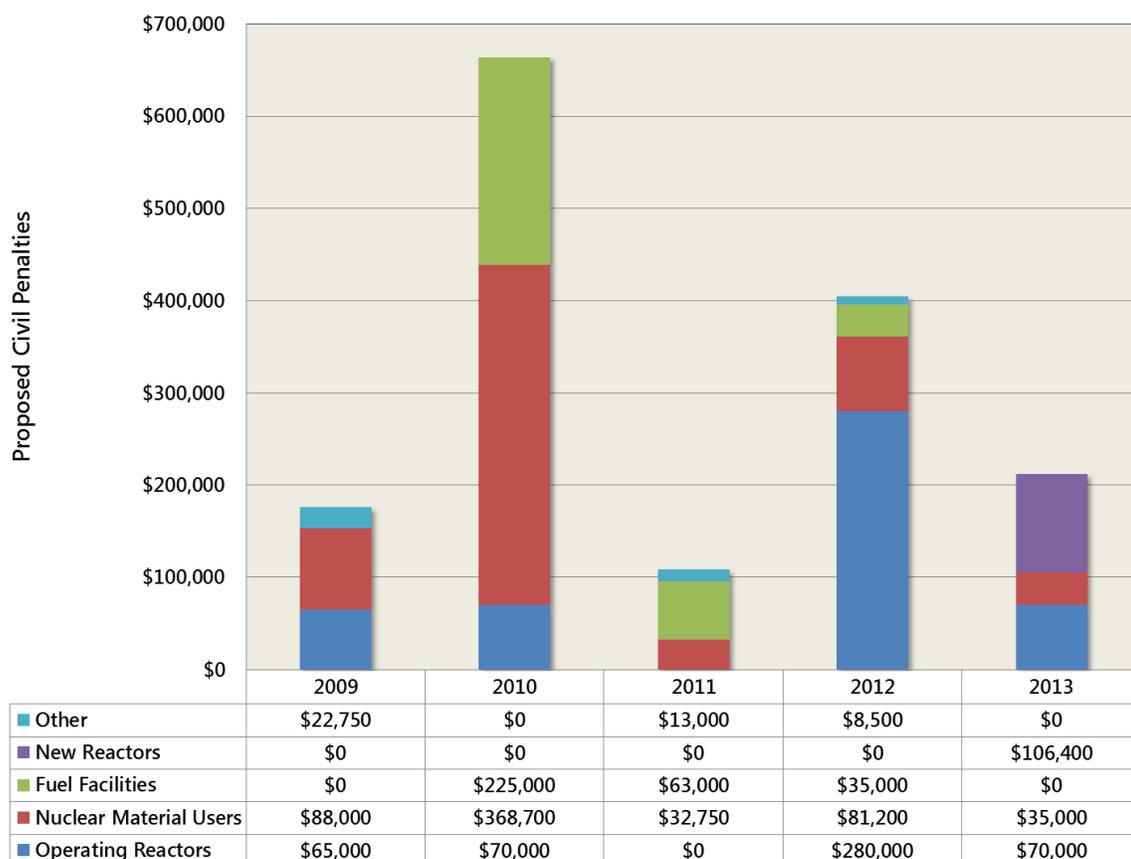
	2013	2012	2011	2010	2009	Average
No. of Proposed Civil Penalties	10	13	10	19	17	14
No. of Imposed Civil Penalties*	1	3	3	1	1	2
No. of Paid Civil Penalties	8	12	13	16	8	11
Amount of Proposed Civil Penalties	\$211,400	\$404,700	\$108,750	\$663,700	\$175,750	\$312,860
Amount of Imposed Civil Penalties	\$1,000	\$14,000	\$29,500	\$10,000	\$3,250	\$11,550
Amount of Paid Civil Penalties	\$176,500	\$402,700	\$130,529	\$624,950	\$228,250	\$312,586

\* Imposition cases and civil penalty (CP) amounts reflect CPs issued via an order and includes both (1) orders imposing a CP after a licensee does not pay a proposed CP, and (2) CPs agreed to in an alternative dispute resolution case that are included in the case confirmatory order. In the first scenario, the case is a subset of the proposed CP cases in that imposing the CP is the next step after a licensee does not pay a proposed CP. However, in the second scenario, an ADR settlement, potentially with a CP, can, and typically does, occur prior to any proposed CP. Consequently, neither addition nor subtraction of the "proposed" and "imposed" rows is appropriate.

Table 2 compares civil penalty assessments proposed, imposed, and paid for the most recent five calendar years and the 5-year average. When reviewing the information in this table, it is important to note that an enforcement action may include more than one civil penalty or more than one violation. In addition, a civil penalty may be proposed in one year and paid or imposed in another year. In some cases, the NRC has approved a civil penalty payment plan whereby a licensee is permitted to pay the civil penalty in regular installments. Finally, the amount of a proposed civil penalty may be reduced, for example, as a result of exercising discretion as part of a settlement agreement developed during ADR.

The total number of civil penalties proposed in CY 2013 decreased from the number proposed in CY 2012 and is below the average number proposed over the last 5 years. The total dollar amount of proposed civil penalties also decreased significantly (by approximately a factor of two) in CY 2013 compared to CY 2012. While the total dollar value is less than the five-year average, it is consistent with proposed civil penalty amounts in years that have not been driven by one or two high profile cases.

The number and total amount of civil penalties associated with ADR settlement agreements decreased from those issued in CY 2012. Only one civil penalty was issued in CY 2013 compared to three in CY 2012, even though the total number of ADR cases increased from 7 to 11. The amount of civil penalties associated with ADR settlements decreased from \$14,000 in CY 2012 to \$1,000 in CY 2013. The staff will monitor this trend in future years.



**Figure 6 – Proposed Civil Penalties Trends by Business Line (CY 2009 to CY 2013)**

Figure 6 shows the dollar amount of civil penalties proposed for reactor, materials, and fuel facility licensees in CY 2013 and the preceding 4 years. Figure 7 (next page) shows that reactor licensees have received a greater share of the total civil penalty amount issued over the past 2 years compared to fuel cycle and materials licensees. However, this has not always been the trend. The largest peaks are frequently the result of a single civil penalty (e.g., the Philadelphia VA Medical Center in 2010, and Kewaunee and Watts Bar 2 in 2013). As a consequence, a single year might not indicate a trend—an important factor to consider in assessing possible trends.

Appendix A to this report includes a brief description of each of the civil penalty actions for CY 2013. Security related issues involving NOVs with civil penalties are not addressed in Appendix A; however, the number of NOVs associated with security related issues is included in the data discussed in this report.

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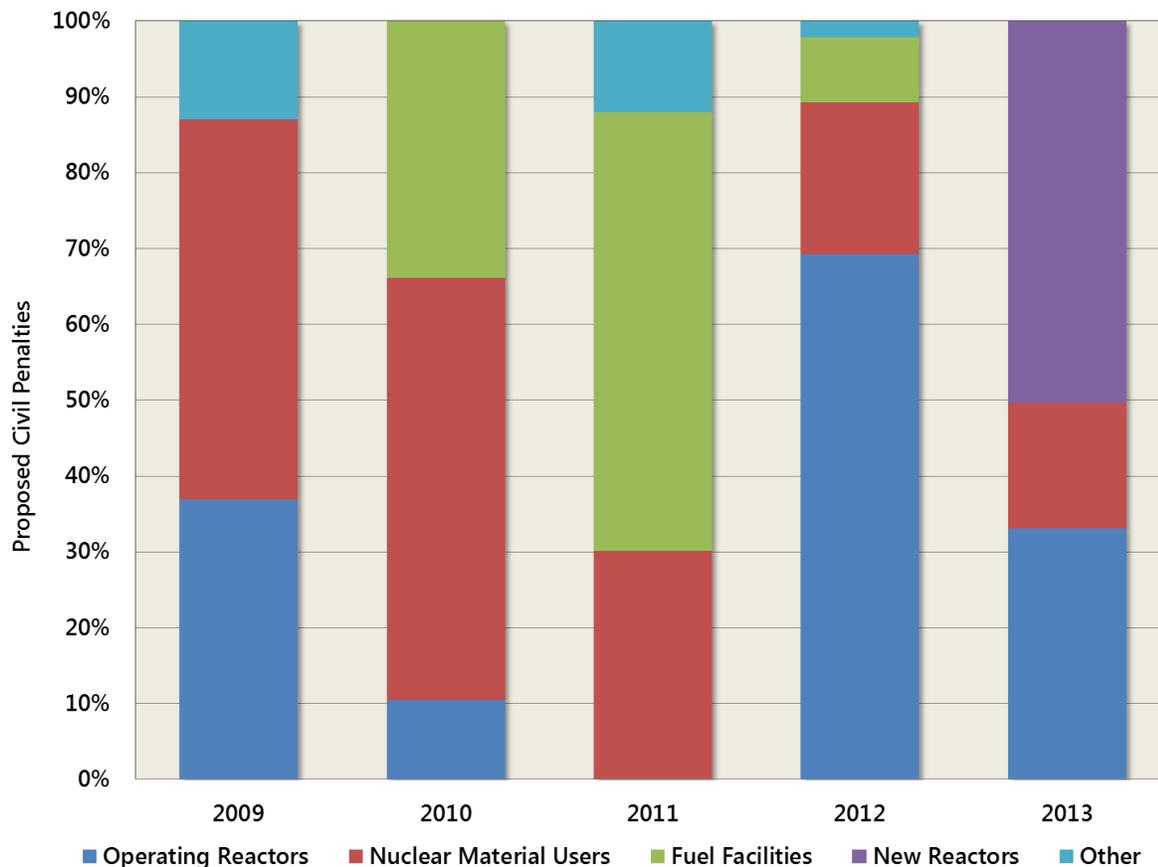


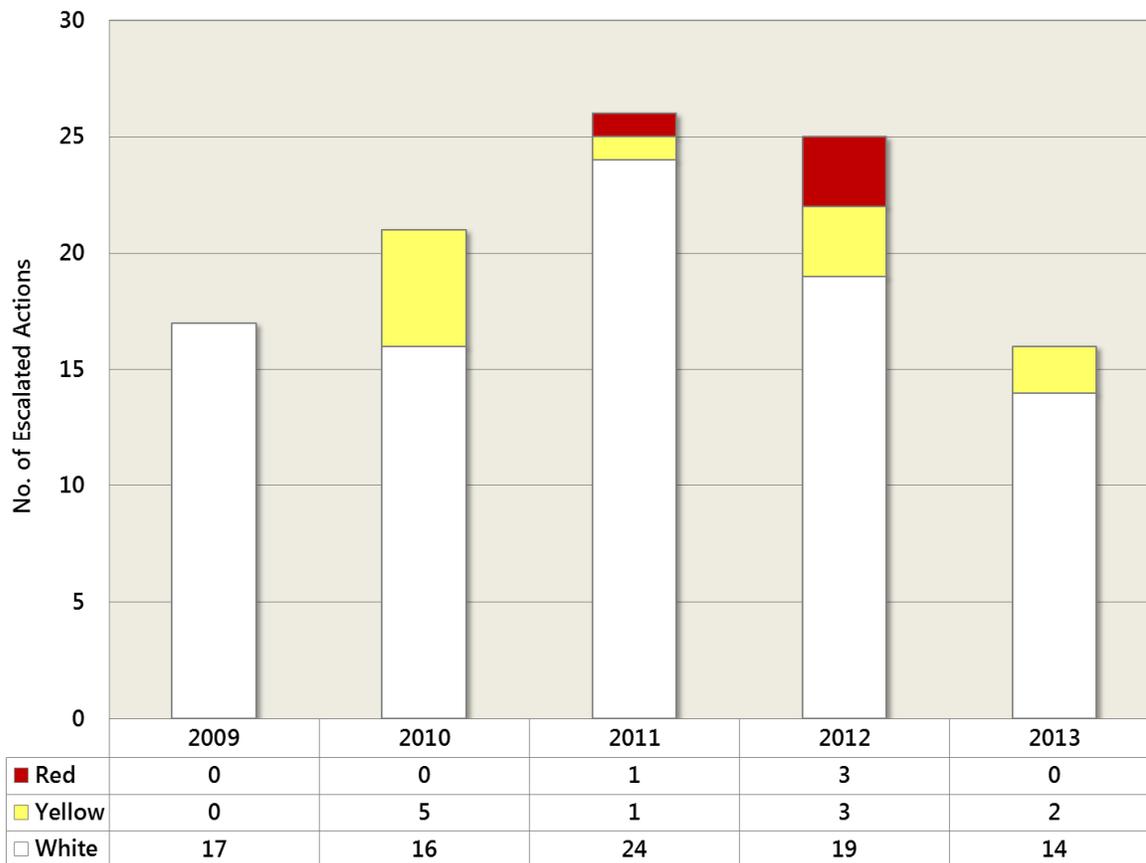
Figure 7 – Percentage of Proposed Civil Penalties by Business Line

### 3. Notices of Violation without Civil Penalties

In accordance with Section 2.3.4 of the Enforcement Policy, a civil penalty may not be warranted for escalated enforcement actions if certain criteria are met. For instance, (1) the identified violation is the first non-willful SL III violation identified in the past 2 years or two inspections at the licensee's facility and the licensee took adequate corrective action to prevent its recurrence, or (2) this was not the first non-willful SL III violation identified in the past 2 years or two inspections, but the licensee self-identified the violation and took adequate corrective action to prevent its recurrence. In addition, the agency may use enforcement discretion, when deemed appropriate, to refrain from proposing a civil penalty, regardless of the normal civil penalty assessment process described above.

In CY 2013, the NRC issued 54 escalated NOV without civil penalties. Approximately half (26 of 54) were issued to operating reactor licensees. Of these violations, 14 were associated with white SDP findings under the ROP, and two violations were related to yellow SDP findings. There were no red SDP findings with associated violations issued in CY 2013. Figure 8 (below) shows escalated NOV trends for SDP findings over the past 5 years. As indicated in Figure 8, the 16 escalated enforcement actions associated with SDP findings that were issued in CY 2013 represented a decrease in

the number issued when compared to CY 2012. This trend was also accompanied by a notable reduction in the more significant yellow and red SDP findings in CY 2013.



**Figure 8 – Escalated Enforcement Associated with ROP SDP Findings**

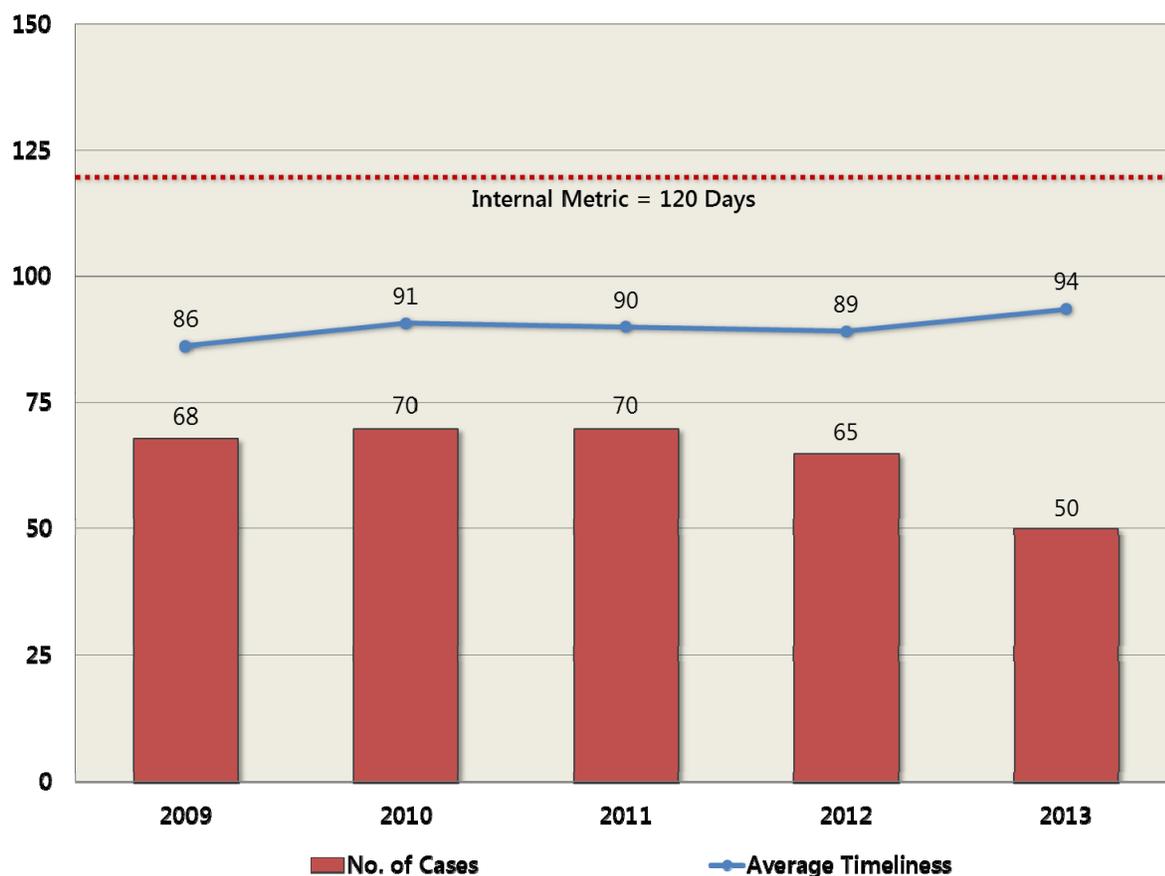
Of the remaining 28 escalated NOVs without civil penalties that were not issued to operating reactors, 24 were issued to nuclear materials users and 3 were issued to fuel facility licensees. Appendix B to this report summarizes each of these NOVs without civil penalties issued to licensees, as well as the NOVs associated with SDP findings. Security related issues involving NOVs without civil penalties are not addressed in Appendix B; however, the number of NOVs associated with security related issues is included in the data discussed in this report.

#### 4. Enforcement Program Timeliness

Escalated enforcement actions are issued in cases involving violations assessed at SL I, II, or III if they are dispositioned under the traditional enforcement process; and violations associated with white, yellow, or red findings for facilities participating in the ROP, as well as orders that impose sanctions. The timeliness associated with issuing escalated enforcement actions to reactor and materials licensees is an output measure (external goal) reported annually to Congress within the NRC’s Performance Accountability Report. The external goals were modified in 2012 to stress the importance of timely escalated enforcement actions and are: (1) 100 percent of

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non-Office of Investigations (non-OI) based cases are completed with an NRC processing time of less than or equal to 160 days; and (2) 100 percent of OI-based cases are completed with an NRC processing time of less than or equal to 330 days.



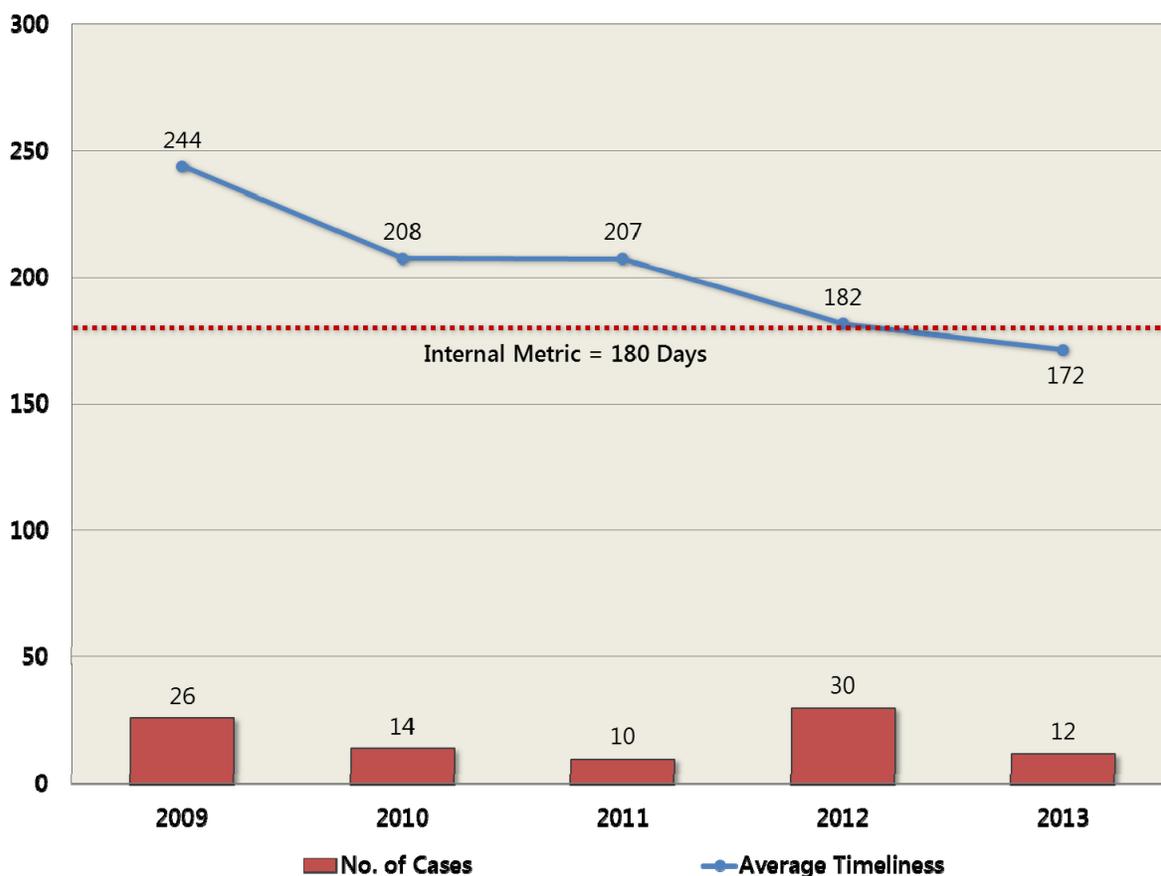
**Figure 9 – Non-OI Based Case Timeliness Trends (Average Number of Days)**

In addition to the external goals, the NRC staff continues to use the additional timeliness measures (internal goals) for trending purposes and to provide information to support potential improvements to our processes. The internal goals are: (1) completing non-OI based cases in an average NRC processing time of less than or equal to 120 days; and (2) completing OI based cases in an average NRC processing time of less than or equal to 180 days.

The NRC processing time starts on the latest of the following dates: (1) the inspection exit for non-OI cases; (2) the date of the OI memorandum forwarding the report to staff for OI related cases; (3) the date that the U.S. Department of Justice (DOJ) indicates that the NRC may proceed for cases either prosecuted or reviewed for an extended period of time by DOJ; or (4) the date of the Department of Labor decision that is the basis for the action. The cases are grouped together and treated as a single case whenever two or more enforcement action numbers are associated with one action.

All OI related enforcement actions were issued in less than 330 processing days and all non-OI related actions were issued in less than 160 processing days. Therefore, the external goals for dispositioning OI and non-OI related enforcement actions were

met in CY 2013. Figure 9 (above) also shows that, on the average, the agency required 94 processing days to issue a non-OI related enforcement action. This is less than the goal of 120 processing days and is consistent with trends for the past 5 years.



**Figure 10 – OI Based Case Timeliness Trends (Average Number of Days)**

Figure 10 shows the case processing timeliness trends for OI-related escalated enforcement actions for the five most recent CYs. The figure illustrates that, on average, the agency required 172 days to issue an OI-related enforcement action during CY 2013. This number is less than the internal goal of 180 days, and continues the steady decline in average processing time over the past 5 years. This positive (decreasing) trend may be attributed to business process improvements implemented in CY 2011 (e.g., increased coordination between offices following the issuance of an OI report) as well as increased staff focus on managing cases that involve OI investigations. The staff will continue to monitor this trend in future years.

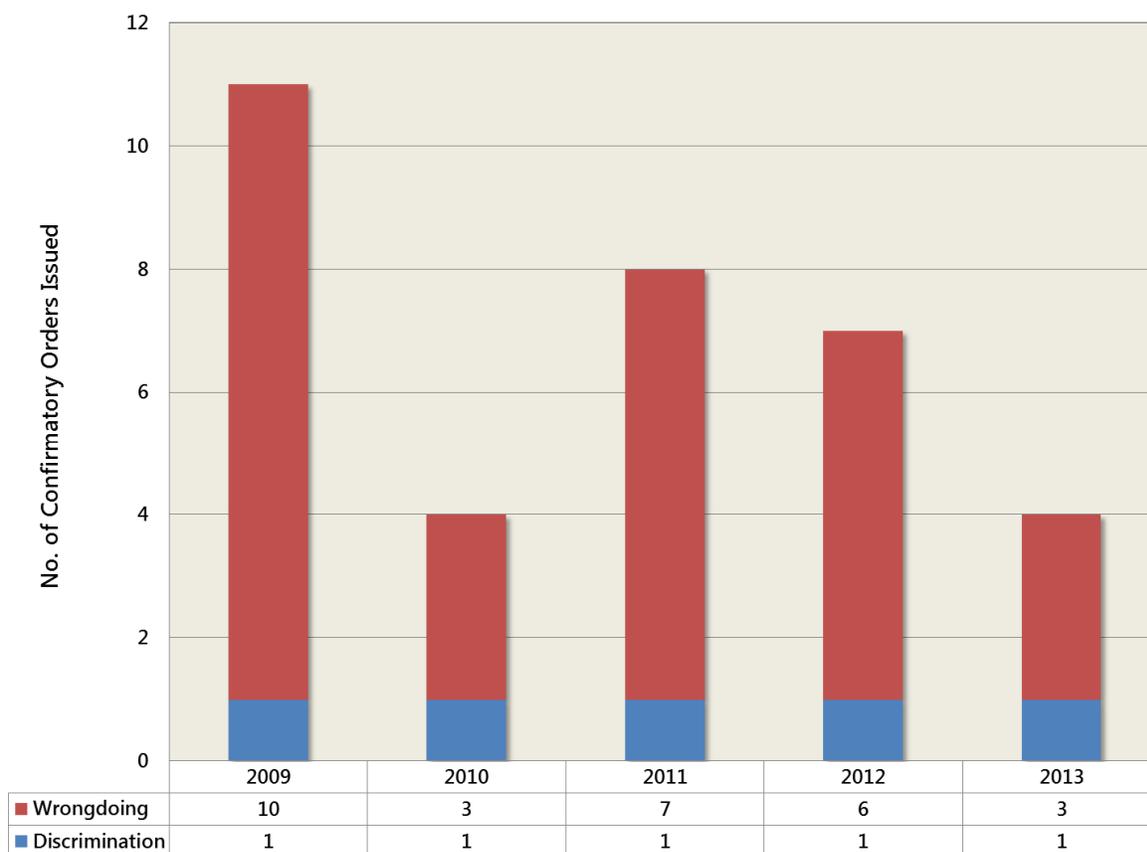
## 5. Alternative Dispute Resolution

Alternative Dispute Resolution (ADR) refers to a number of voluntary processes, such as mediation and facilitated dialogues that can be used to assist parties in resolving disputes and potential conflicts outside of courts using a neutral third party. The NRC employs mediation for its post-investigation ADR program, using a neutral third party with no decisionmaking authority to help the parties attempt to reach an agreement.

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The process is voluntary in terms of the decision to participate and the content of the final agreement.

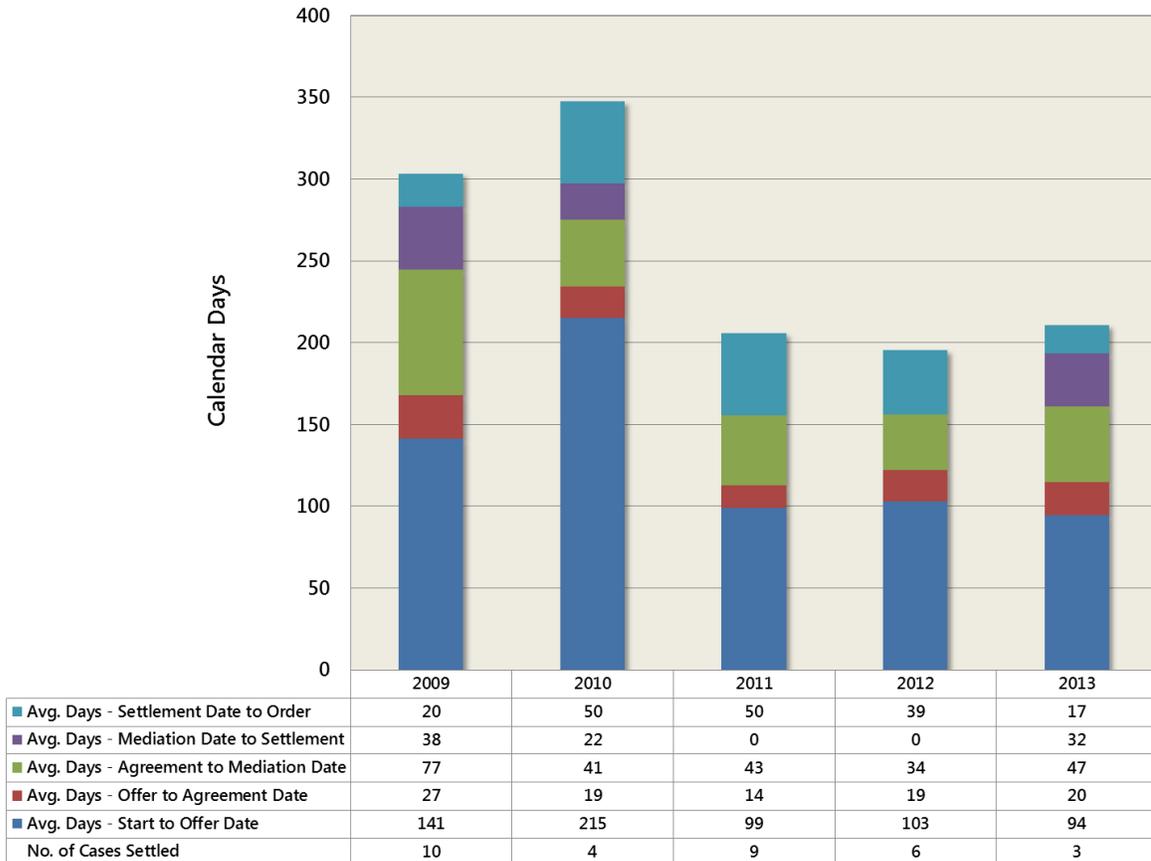
The term "post-investigation ADR" refers to the use of mediation after OI has completed its investigation and an enforcement panel has concluded that pursuit of an enforcement action appears to be warranted. On February 25, 2013, the NRC expanded the scope of the use of post-investigation ADR for a one-year pilot period. The pilot expanded ADR to include all escalated non-willful, traditional enforcement cases with proposed civil penalties (note that this does not include violations associated with findings assessed through the ROP). Although most stakeholders supported this expanded use of ADR, no parties requested to engage in the expanded ADR program in CY 2013.



**Figure 11 – ADR Confirmatory Orders Issued (CY 2009 to CY 2013)**

Under the NRC's post-investigation ADR process, mediation may be offered at three points in the enforcement process: (1) before a predecisional enforcement conference; (2) after the initial enforcement action is taken, typically with the issuance of an NOV or proposed imposition of a civil penalty; or (3) with the imposition of a civil penalty and before a hearing request. The staff believes that for certain escalated enforcement actions, mediation affords the staff an opportunity to institute broader or more comprehensive corrective actions to better ensure public health and safety than outcomes typically achieved through the traditional enforcement process.

As Figure 11 (above) shows, the number of COs arising from the post-investigation ADR program generally stayed at the same typical levels, averaging approximately seven confirmatory orders per year. In CY 2013, the NRC participated in five post-investigation ADR mediations, four of which resulted in orders confirming the terms of the parties' agreement. During the past 5 years, approximately 85 percent of cases that engaged in ADR resulted in settlements.

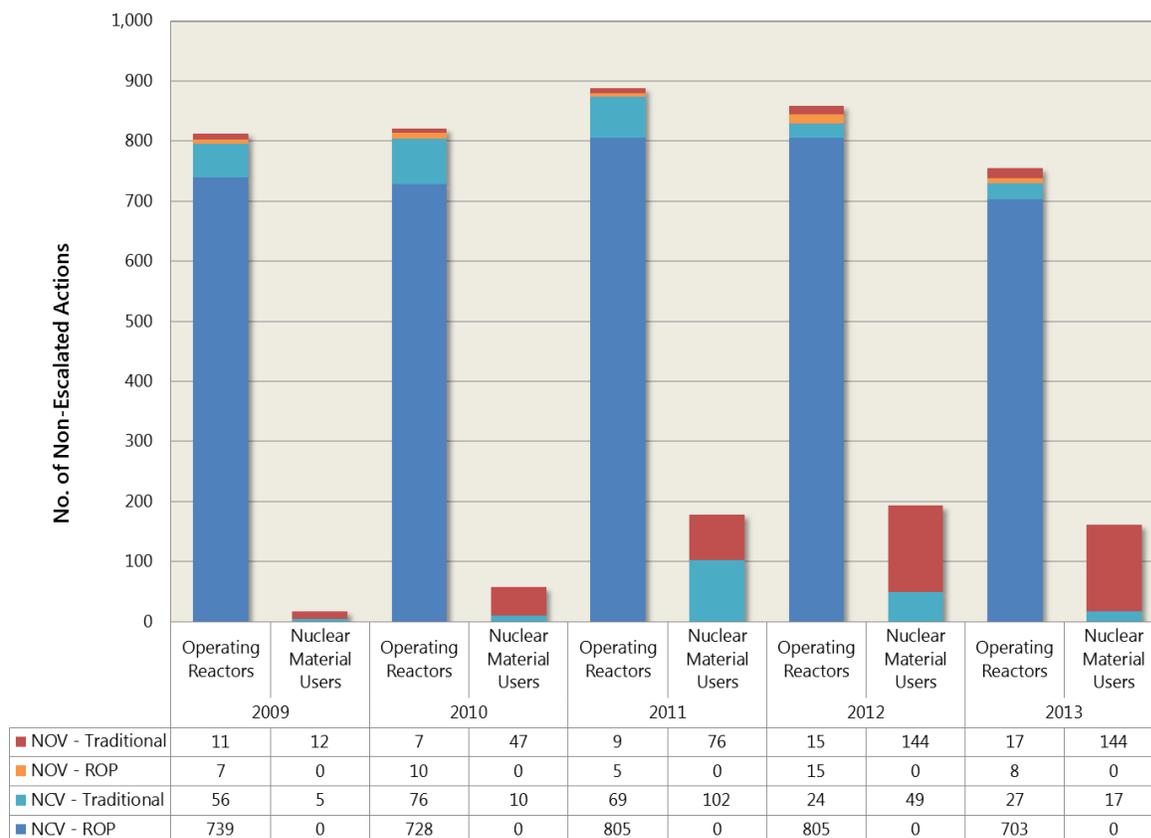


**Figure 12 – Calendar Days from NRC Action to Issuance of Confirmatory Order**

In CY 2013, the staff continued its focus on enhancing the post-investigation ADR program's timeliness, transparency and overall effectiveness. Program enhancements initiated in CY 2012 following an internal business process improvement review continue to have a positive impact on the ADR program, as reflected in the timeliness data (Figure 12). Specifically, over the past 3 years, cases processed within the ADR program maintain a positive timeliness rate - averaging 6 months (from initiation of the investigation to the issuance of the CO), which is similar to other investigation-related, escalated action cases that use the PEC process. Some of the other CY 2012 initiatives included, (1) public meetings to solicit feedback from stakeholders, (2) enhancements to the program's public Web page, (3) revisions to program documents, and (4) issuance of additional guidance documents.

## C. Non-Escalated Enforcement

The Enforcement Program Annual Report has historically focused on escalated enforcement actions with little information regarding non-escalated enforcement provided. Non-escalated actions include SL IV NOVs and NCVs under traditional enforcement and NOVs and NCVs associated with Green SDP Findings under the ROP. In recent years, OE has recognized that improving the ability to trend data for non-escalated enforcement across the various programs is necessary. One of the primary challenges in tracking and trending non-escalated enforcement actions is that these actions are recorded in separate databases by the various program offices. Operating reactors information is recorded in the Reactor Program System (RPS), materials user non-escalated actions are stored in the new web-based licensing (WBL) system, and new reactors construction data is maintained by the Construction Inspection Program Information Management System (CIPIMS). The availability of the WBL system will allow a more complete presentation of the agency's use of non-escalated enforcement actions. Consequently, OE has started to gather information from these systems in order to be able to provide improved trending. Figure 13 provides information that was obtained from the RPS and WBL systems.



**Figure 13 – Non-Escalated Enforcement Trends (CY 2009 to CY 2013)**

As shown in Figure 13, operating reactors are issued approximately 750 to 900 non-escalated enforcement actions each year, and nuclear materials users received, on average, 175 non-escalated actions for the three most recent CYs. OE notes that information from CY 2013 may be artificially low because violations are recorded by the

event date, and that there is often a time lag between this date, the date of the inspection report, and the date this information is recorded in RPS, WBL and CIPIMS.

During CY2013, the Government Accountability Office issued a report titled “Nuclear Power: Analysis of Regional Differences and Improved Access to Information Could Strengthen NRC Oversight.” The report’s second finding related to the enforcement program generally, and stated that “differences exist across NRC regions in identifying and resolving findings, and NRC has taken some steps to address them.” More specifically, GAO discussed the fact that the extent to which nonescalated findings, which equate to very low risk significance, have been identified differs across regions. GAO noted that some steps had been taken to address these differences but that a comprehensive review of the reasons had not been undertaken. The number of escalated findings, which equate to greater risk significance, was more similar across regions. Consequently, the Office of Nuclear Reactor Regulation, with the support of OE and the regions, initiated a review to determine the cause, or causes, of the differences. The review and any appropriate follow-up action will continue in CY2014.

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## II. Enforcement Case Work

### A. Significant Enforcement Actions

In CY 2013, the agency was involved in several significant enforcement actions that required coordination among internal stakeholders beyond the typical enforcement case and were noteworthy in some aspects.

#### **Chicago Bridge & Iron**

On July 29, 2011, the Office of Investigations (OI) initiated an investigation into an allegation of discrimination involving Shaw Nuclear Services (SNS).<sup>1</sup> The investigation focused on whether or not a former employee was terminated for engaging in protected activities after the individual had raised a potential 10 CFR Part 21 concern. OI completed its investigation on June 5, 2012. Based on its review of evidence stemming from the investigation, the staff concluded that SNS (now CB&I) discriminated against the former employee, in part, for raising safety concerns in violation of 10 CFR 52.5, "Employee protection."

On June 11, 2013, the staff participated in an alternative dispute resolution (ADR) mediation session with CB&I. As the result of the mediation, CB&I agreed to take a number of actions for all CB&I employees (excluding short-term employees), contractors and subcontractors who are engaged in work associated with NRC-regulated activities. Those actions include: (1) reinforcing through a written communication from CB&I's Chief Executive Officer the company's strategy to improve its nuclear safety culture; (2) updating CB&I's nuclear safety culture and safety conscious work environment policies and documents to ensure that they are consistent with and informed by NRC and industry guidance, (3) developing and/or revising the company's employee protection, nuclear safety culture and safety conscious work environment training; (4) establishing a uniform Executive Review Board process to ensure independent management review of all proposed significant adverse actions; and (5) performing tailored comprehensive nuclear safety culture assessments, including site surveys, of all CB&I nuclear business entities.

The NRC issued a CO to CB&I on September 16, 2013, to formalize the commitments made as a result of the ADR mediation session. The NRC also exercised enforcement discretion and withdrew a notice of violation and proposed imposition of civil penalties (\$36,400) that was issued on April 18, 2013, in consideration of CB&I's adoption of the commitments outlined in the CO.

#### **Inspection Manual Chapter 0350 Activities at Fort Calhoun Station**

In 2011, an outage at the Omaha Public Power District's Fort Calhoun Station (FCS) was extended because of the Missouri River flooding that affecting the site from June through September 2011. Restart of the facility was delayed by performance concerns involving the recovery actions associated with the flood, including restoration of plant systems, security, and geotechnical/site restoration. As a result of the continuous performance assessment of FCS, on December 13, 2011, the NRC modified its regulatory oversight to Inspection

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<sup>1</sup> During the investigation, SNS was purchased by Chicago Bridge and Iron, Inc. (CB&I).

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Manual Chapter (IMC) 0350 "Oversight of Reactor Facilities in a Shutdown Condition due to Significant Performance and/or Operations Concerns" rather than the usual IMC 0305 "Operating Reactor Assessment Program" oversight. The IMC 0350 process establishes a regulatory oversight framework adhering to implementation of an oversight panel, inspection plan, restart checklist and a record of actions taken and technical issues resolved to provide adequate protection of public health and safety, and security. These actions were agreed to in a Confirmatory Action Letter (CAL) dated September 2, 2011. On February 26, 2013, the NRC revised the CAL to confirm corrective actions that the NRC determined to need review or inspection before the restart of the plant.

Additional information about the IMC 0350 process is available on the NRC website at: <http://www.nrc.gov/info-finder/reactor/fcs/special-oversight.html>. The IMC 0350 Oversight Panel reviews apparent deficiencies, findings and violations identified during IMC 0350 inspections. The functions of the normal enforcement process, including the review of apparent escalated violations, the conduct of regulatory conferences, and the issuance of NOVs with civil penalties or orders are superseded by the authority given to the Oversight Panel. All greater-than-green issues are reviewed by the panel and documented in an inspection report. The significance of these findings are typically bounded by the Yellow finding associated with the flooding event and therefore are not characterized by a color significance. Since the identified deficiencies, findings and violations are evaluated by the NRC under the IMC 0350 process and captured in the restart checklist, there is typically not a regulatory conference. The licensee always has the option to request a conference, present their position on an item, or dispute a deficiency, finding or violation under the normal process.

The following is a summary of the significant enforcement actions processed under IMC 0350, in which the items are documented in an inspection report issued in CY 2013 and captured in the restart checklist.

- On February 14, 2013, one finding involving multiple violations of NRC requirements was identified by the NRC. This finding was determined to be a violation related to a previously-issued Yellow finding regarding the ability to mitigate an external flooding event. The significance of the finding was bounded by the previous Yellow finding and was, therefore, not characterized by color.
- On February 26, 2013, a revision to CAL 4-12-002 was issued to reflect changes made to the FCS Restart Checklist. Specifically, as reported in the 3rd quarter of 2012, the Safety System Functional Failures Performance Indicator transitioned from Green to White. As a result, this item was added to Section 1 of the Restart Checklist, "Causes of Significant Performance Deficiencies and Assessment of Organizational Effectiveness." In addition, two specific items involving qualification of containment electrical penetrations and containment internal structure deficiencies were added to Section 2, "Flood Restoration and Adequacy of Structures, Systems, and Components."
- On March 11, 2013, a finding was identified involving the failure to classify the river sluice gates as Safety Class 3. This finding was determined to involve a violation of NRC requirements and related to the previously-issued Yellow finding regarding the ability to mitigate an external flooding event and its significance was, therefore, not characterized by color.

- On July 16, 2013, one finding was identified and determined to be a violation related to a previously issued Yellow finding regarding the ability to mitigate an external flooding event. Another finding was identified and determined to be a violation related to a previously issued Red finding regarding a significant internal fire event in the 480-Vac safety-related switchgear. The significance of these findings was bounded by the previous Yellow finding and a related Red finding and was, therefore, not characterized by a color.

### **Oconee Nuclear Station (Duke Energy Carolinas, LLC)**

On July 1, 2013, the NRC issued a Confirmatory Order (CO) and NOV for a SL III violation to Duke Energy Carolinas, LLC (Duke). These actions were based on Duke's failure to comply with a license condition associated with the license amendment to complete their transition to the National Fire Protection Association Standard 805 for its Oconee Nuclear Station, Units 1, 2, and 3. Duke received the NOV for not incorporating the protected service water (PSW) modification into its fire protection program site documents and confirming the risk reduction from the modification prior to January 1, 2013, as required by its license. The CO was issued to provide a heightened regulatory accountability for the completion of the PSW system, and interim milestones associated with this modification. The only milestone for CY 2013 contained in the order was met by the licensee.

### **Violations Associated with Red and Yellow Findings**

In CY 2013, the NRC issued NOVs associated with two separate yellow SDP findings to two reactor licensees. There were no red SDP findings with an associated NOV issued during CY 2013. In CY 2012, the NRC issued NOVs associated with three red SDP findings to one reactor licensee and three separate yellow SDP findings to three additional reactor licensees. Short summaries of the non-security cases issued in CY 2013 follow:

- On June 4, 2013, the NRC issued an NOV associated with a Yellow SDP finding to Tennessee Valley Authority (TVA), Watts Bar, Unit 1. The Yellow finding, a violation of Technical Specification (TS) 5.7.1, "Procedures," was issued for the failure of Watts Bar personnel to maintain an adequate procedure to implement its flood mitigation strategy within 27 hours as described in Watts Bar's Updated Final Safety Analysis Report from initial licensing to July 2012.
- On August 28, 2013, the NRC issued an NOV to Northern States Power Company for a violation of TS Section 5.4.1, Procedures, associated with a Yellow SDP finding involving the failure of Monticello Nuclear Generating Plant personnel to maintain a flood plan to protect the site against external flooding events. Specifically, from February 29, 2012, to February 15, 2013, the site failed to maintain flood Procedure A.6, "Acts of Nature," in such a way that it could support the timely implementation of flood protection features within the 12-day timeframe credited in the design basis, as stated in the updated safety analysis report.

## **B. Hearing Activities**

No enforcement related proceedings were held before the Atomic Safety and Licensing Board in CY 2013.

### C. Enforcement Orders

In CY 2013, the NRC issued 11 orders to licensees, nonlicensees, and individuals. These included four Confirmatory Orders that were issued to confirm commitments associated with ADR settlement agreements. One of these orders included a requirement to pay a civil penalty as a result of the settlement agreement. Another order was associated with employee discrimination and was issued to a contractor providing services to a new reactors licensee.

Two of the 11 orders were issued to individuals, and both were prohibited from involvement in NRC-licensed activities until such time that they can provide the NRC with reasonable assurance that licensed activities can be conducted in compliance with the Commission's requirements.

As shown in Table 1, the number of orders the NRC issued in CY 2013 decreased from CY 2012, in part, because of a decrease in the number of cases involving individuals.

Appendix C includes a brief description of the enforcement orders issued in CY 2013.

### D. Enforcement Actions Supported by the Office of Investigations

In CY 2013, an OI investigation supported 23 percent of the escalated enforcement actions (17 of the 75). This figure is lower than the percentage supported by OI investigations in CY 2012. The escalated actions supported by OI investigations include the following:

- 4 of the 11 escalated NOVs and orders with civil penalties (36 percent)
- 6 of the 54 escalated NOVs without civil penalties (11 percent)
- 7 of the 10 enforcement orders without civil penalties (70 percent)

The 17 enforcement actions supported by OI investigations is approximately one-half of the 37 enforcement actions supported in CY 2012 but is more in line with the average number of enforcement actions supported by OI investigations over the previous 2 years (CY 2010 through CY 2011). Also, the percentage of enforcement actions supported by an OI investigation (23 percent) is consistent with the percentage of enforcement actions supported by OI investigations over the past 5 year period from CY 2009 through CY 2013 (26 percent).

### E. Actions Involving Individuals and Nonlicensee Organizations

In CY 2013, the agency issued five escalated enforcement actions to licensed and unlicensed individuals. This number is included in the total number of escalated enforcement actions (NOVs and orders) that the agency issued in 2013. Appendix C summarizes the orders that were issued to individuals and Appendix D summarizes the NOVs issued to individuals in CY 2013. These appendices do not include individual enforcement actions involving security related violations. The number of escalated actions issued to individuals in CY 2013 is approximately one-third the number of actions issued to individuals in CY 2012 (18).

The agency issued one escalated enforcement action to a nonlicensee organization in CY 2013. Appendix E summarizes this action.

## **F. Enforcement Action Involving Discrimination**

In CY 2013, one case involving an allegation of discrimination was resolved using post-investigation ADR. Between CY 2009 and CY 2013, the NRC has handled, on average, one substantiated discrimination case each year, and this past year was consistent with that trend. On September 16, 2013, the NRC issued a CO to Chicago Bridge and Iron, Company (CB&I) to formalize the commitments made as a result of the ADR mediation session held on June 11, 2013, between CB&I and the NRC. The CO arose out of an apparent violation of 10 CFR 50.7, "Employee Protection," in which the NRC had reached a preliminary conclusion that an employee at CB&I was terminated because he had raised a concern about a possible 10 CFR Part 21 issue. A more detailed discussion of this case is located in on page 19 and in Appendix E.

## **G. Use of Judgment and Discretion in Determining Appropriate Enforcement Sanctions**

The NRC may choose to exercise discretion and either escalate or mitigate enforcement sanctions or otherwise refrain from taking enforcement action within its statutory authority. The exercise of discretion allows the NRC to determine actions that are appropriate for a particular case, consistent with the Enforcement Policy. After considering the general tenets of the Policy and the safety and security significance of a violation and its surrounding circumstances, the NRC may exercise judgment and discretion in determining the severity levels of violations and the appropriate enforcement sanctions.

In CY 2013, the NRC exercised enforcement discretion in 26 cases to address violations of NRC requirements. This number reflects a 45 percent decrease in the number of cases in which discretion was used from CY 2012 (47 cases) and a 24 percent decrease from CY 2011 (34 cases). This decrease is caused, in large part, by a corresponding decrease in the use of discretion in accordance with EGM-09-004 to disposition violations of the Naturally Occurring and Accelerator-Produced Radioactive Materials (NARM) requirements. Below is a discussion of the significant cases dispositioned using enforcement discretion in CY 2013.

### **1. Discretion Involving Enforcement Guidance**

In 18 cases, the NRC used discretion in accordance with either the Interim Enforcement Policies related to fire protection and permanent implant brachytherapy issues (Sections 9.1 and 9.2 of the Policy) or an enforcement guide memorandum (EGM).

- The NRC dispositioned six violations using discretion in accordance with EGM-11-004, "Interim Guidance for Dispositioning Violations of Security Requirements for Portable Gauges," dated April 28, 2011. Enforcement discretion in the form of a reduced severity level may be exercised for violations of 10 CFR 30.34(i) if certain criteria are met as described in EGM-11-004.
- The agency dispositioned five violations using discretion in accordance with EGM-09-004, "Interim Guidance for Dispositioning Violations of Naturally Occurring and Accelerator-Produced Radioactive Materials (NARM) Requirements," dated May 13, 2009. Enforcement discretion may be exercised

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for violations of the NARM requirements if certain criteria are met as described in the EGM. The five cases that used this guidance represented a sharp decline over CY 2012 when the staff used this guidance to disposition 17 cases.

- The NRC continued to perform fire protection inspections at power reactor sites to verify compliance with requirements of 10 CFR 50, Appendix R, “Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979.” Violations of these requirements that were identified at sites transitioning to the National Fire Protection Association Standard 805 (NFPA 805) and met the criteria as stated in the Interim Enforcement Policy, “Enforcement Discretion for Certain Fire Protection Issues (10 CFR 50.48)” warranted enforcement discretion and notices of violation were not issued. Three cases involved this type of discretion.
- In April 2013, the staff issued EGM-13-003, “Interim Guidance for Dispositioning Violations Involving 10 CFR 35.60 and 10 CFR 35.63 for the Calibration of Instrumentation to Measure the Activity of Rubidium-82 and the Determination of Rubidium-82 Patient Dosages.” The agency dispositioned two cases that met the criteria under this new guidance.
- The NRC dispositioned one violation using discretion in accordance with EGM-11-003, “Dispositioning Boiling Water Reactor Licensee Non-Compliance with Technical Specification Containment Requirements During Operations with a Potential for Draining the Reactor Vessel,” dated October 4, 2011. Enforcement discretion may be exercised for violations of certain technical specification requirements at boiling water reactors if certain criteria are met as described in EGM-11-003.
- In July 2013, the staff issued a new Interim Enforcement Policy, Section 9.2, “Enforcement Discretion for Permanent Implant Brachytherapy Medical Event Reporting (10 CFR 35.3045).” This section set forth criteria in which enforcement discretion may be used in certain medical event reporting scenarios. One documented case involved use of this type of discretion.

## 2. Discretion Involving Special Circumstances

Six cases involved use of discretion to disposition violations in accordance with Section 3.5 of the Enforcement Policy, “Special Circumstances.” In four of the six cases, the staff determined that the Enforcement Policy would lead to categorizing the violation at SL IV; however, based on Section 3.5 of the Policy, the NRC determined that it was appropriate to refrain from issuing an NOV. Below is a brief discussion of the cases dispositioned in CY 2013.

- A violation of a material licensee’s license, normally categorized at SL IV, was dispositioned using enforcement discretion in accordance with Section 3.5 of the Enforcement Policy. At a government facility located in New Cumberland, Pennsylvania, the materials licensee was found to be not in compliance with certain conditions of its license. Specifically, the licensee did not perform an annual physical inventory that accounted for all sources and/or devices received and possessed under its license. As a result, the methodology to perform the

annual physical inventory to ensure material accountability was not adequate to account for all material received and possessed under its license. However, the NRC exercised discretion under Section 3.5 of the Policy because the licensee believed its annual inventory method was acceptable given that the methodology had been reviewed and approved by the NRC during the licensing process in 2008 and previous NRC inspections that included review of the inventory process did not identify any issues.

- The NRC concluded that the merits of three cases warranted disposition of violations in accordance with Section 3.5 of the Enforcement Policy because of inadequate guidance or lack of clear guidance. One of the three violations involved the failure to control and maintain constant surveillance of licensed material that was in a controlled or unrestricted area and was not in storage, as required by 10 CFR 20.1802. Two violations involved the failure to perform and document an adequate evaluation of changes at a fuel facility, and the failure to submit annual updates at a fuel facility under construction, as required by 10 CFR 70.72.
- Two violations, one normally categorized at SL III, were also dispositioned to not issue a violation using enforcement discretion in accordance with Section 3.5 of the Enforcement Policy. Further details are not provided because of the security-related nature of the violations.

### **3. Discretion Involving Violations Identified Because of Previous Enforcement Actions**

The staff exercised enforcement discretion, in accordance with Section 3.3 of the Enforcement Policy, if the violation was identified by the licensee as part of the corrective action for a previous enforcement action and the violation has the same or similar root cause as the violation for which enforcement action was previously taken. In CY 2013, one violation of the NRC's import and export license requirements, normally categorized at SL III, was dispositioned in accordance with Section 3.3 of the Policy. Specifically, the case involved the export of byproduct material to an embargoed destination without a specific NRC license. The staff exercised enforcement discretion to not issue an NOV because the unauthorized shipment was identified by the licensee as a result of the self-audit performed in response to a previous enforcement action.

### **4. Notices of Enforcement Discretion**

Occasionally, circumstances might arise in which a power reactor licensee's compliance with a technical specification or other license condition would require a plant transient or performance testing, inspection, or other system realignment that is of greater risk than the current specific plant conditions. In these circumstances, the NRC staff may choose not to enforce the applicable requirements. The staff exercises this enforcement discretion, designated as a notice of enforcement discretion (NOED) in accordance with Section 3.8 of the Enforcement Policy, only if it is clearly satisfied that the action is consistent with protecting the public health and safety. The staff may also issue NOEDs in cases involving severe weather or other natural phenomena when it determines that exercising this discretion will not compromise safety. NOEDs

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require justification from a licensee or certificate holder that documents the safety basis for the request and provides whatever other information the staff deems necessary to issue an NOED. The NRC issued four NOEDs in CY 2013; one request was denied.

- NOED 13-04-001: The NRC verbally granted enforcement discretion on January 10, 2013, to the Wolf Creek Nuclear Operating Corporation (WCNOC) to not enforce compliance with the actions required in Wolf Creek's TS 3.8.1, "AC Sources - Operating," Required Action B.4.1. On January 8, 2013, emergency diesel generator (EDG) B was removed from service for planned maintenance. On January 9, 2013, maintenance personnel contacted one of the eight cylinder head studs and identified that the head stud was broken. Enforcement discretion was sought to permit additional time to complete repairs and restoration of EDG B before a plant shutdown was required. WCNOC requested an additional 96 hours to restore EDG B such that the completion time of Required Action B.4.1 would expire at 5:00 a.m. on January 15, 2013. Based on its review of information provided by the licensee, the NRC exercised discretion to not enforce compliance with TS 3.8.1, Required Action B.4.1, for an additional period of 96 hours.
- NOED 13-2-001: The NRC granted enforcement discretion on April 17, 2013, to the Carolina Power and Light Company to not enforce compliance with the actions required in Brunswick Steam Electric Plant (BSEP), Unit No. 1, required actions of TS 3.7.3, "Control Room Emergency Ventilation (CREV) System;" TS 3.8.1, "AC Sources – Operating;" TS 3.8.4, "DC Sources – Operating;" and TS 3.8.7, "Distribution Systems – Operating." On April 11, 2013, a degraded condition was identified on the E8 power transformer during preventive maintenance. A visual inspection of the transformer core indicated that the transformer may have been overheated, and a decision was made to replace the transformer. At that time, the necessary replacement parts were available onsite and the established work schedule would have allowed the work to be completed before the applicable TS LCO action statements would expire. However, late on April 14, 2013, additional associated work and testing activities were recognized that extended the work completion time beyond that allowed by the TS. Based on its review of information provided by the licensee, the NRC exercised discretion to not enforce compliance with the TSs.
- NOED 13-4-002 – The NRC verbally granted enforcement discretion to WCNOC on June 17, 2013, to not enforce compliance with Wolf Creek Technical Specification LCO 3.0.3, and the Required Actions associated with TS 3.8.4, "DC Sources – Operating," TS 3.8.7, "Inverters – Operating," and TS 3.8.9, "Distribution Systems – Operating." The licensee requested enforcement discretion after it had declared the Train A Class 1E electrical equipment air conditioning unit nonfunctional when it determined that the unit was not capable of performing its specified function important to safety for its full mission time. WCNOC's determination was based, in part, on oil samples that showed aluminum particles indicative of abnormal wear, as well as elevated running current and vibration levels. Based on its review of information provided by the licensee, the NRC exercised discretion to not enforce compliance with TSs

impacted by the loss of the air conditioning unit for a total period of 168 hours that expired on June 24, 2013.

- NOED 13-4-003 – On October 18, 2013, the NRC denied another request made by the WCNOG to exercise enforcement discretion at its Wolf Creek facility. The licensee requested enforcement discretion after it had discovered that the Train A Class 1E electrical equipment air conditioning unit was nonfunctional and not capable of performing its specified function for the full mission time. The unit was tripping on a low lube oil pressure signal from a faulty pressure sensor. The NRC denied the request after it was unable to reconcile differences between the NRC staff's risk assessment and the risk assessment presented by the licensee. In particular, the staff's assessment indicated that without crediting a reduction in risk from the proposed compensatory measures, the value for the incremental change in core damage frequency would exceed the threshold discussed in Inspection Manual Chapter 0410 (5E-7).
- NOED 13-4-004 – The NRC verbally granted enforcement discretion to Luminant Generation Company LLC on December 5, 2013, to not enforce compliance with Comanche Peak Nuclear Power Plant (CPNPP) Technical Specification 3.8.1, Condition C, Required Action C.2. On December 4, 2013, the licensee experienced a loss of safeguards electrical power that occurred during planned modification work to install an additional 138 kV transformer (XST1A). Power was lost to the 345 kV transformer (XST2) which at the time was providing power to the 6.9 kV safeguards buses for both CPNPP Units 1 and 2. The licensee determined that the loss of offsite power to the safeguards buses was caused during the modification work when workers inadvertently cut into an energized 6.9 kV cable for transformer XST2, rather than an intended de-energized cable for transformer XST1. CPNPP Units 1 and 2 entered Technical Specification 3.8.1, Condition C, Required Action C.2, to restore one required offsite circuit to operable status within 24 hours, or face the shutdown of both units. Luminant sought enforcement discretion to permit additional time to make repairs and restore transformers XST1 or XST2 to operable status. Based on its review of information provided by the licensee, the NRC exercised discretion to not enforce compliance with TSs for an additional period of 14 hours, which expired on December 6, 2013.

## H. Withdrawn Actions

Licensees can challenge enforcement actions for several reasons; for example, a licensee might dispute the requirements, the facts of the case, the agency's application of the Enforcement Policy, or the significance of the violation. Licensees may provide clarifying information that was not available at the time of the inspection, and this may affect a finding of noncompliance.

In addition, OE has established a metric for quality of enforcement actions based on the number of disputed and withdrawn nonescalated enforcement actions. The goal is fewer than 4 withdrawn nonescalated enforcement actions in a calendar year per region. This metric does not include violations that are withdrawn on the basis of supplemental information that was not available to an inspector before the assessment of an enforcement sanction. In CY 2013, the agency issued approximately 900

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nonescalated enforcement actions to reactor, materials, and fuel facility licensees. This number is generally consistent with the number of nonescalated enforcement actions issued annually in the past 2 years. Of these actions, 11 nonescalated enforcement actions were disputed. While this number is slightly higher than the nine disputed actions submitted in CY 2012, it is consistent with the average number of actions that have been disputed between CYs 2009 and 2013. In CY 2013, the NRC withdrew only one nonescalated action. The action was not disputed by the licensee, but was withdrawn by the NRC after it had received additional information that was not available to the staff before issuance of the original action. The single withdrawn action is a decrease from the three nonescalated enforcement actions withdrawn in CY 2012. As a result, the goal for disputed violations was met in CY 2013 indicating that NOVs and other nonescalated enforcement actions were prepared properly and accurately.

In CY 2013, the agency issued 75 escalated enforcement actions to reactors, materials, and fuel facility licensees, of which none were formally disputed.

### III. Ongoing Activities

#### A. Enforcement Policy

##### 1. Enforcement Policy Revisions

The NRC Enforcement Policy is periodically revised to reflect regulatory changes, experience, and stakeholder input. In Staff Requirements Memorandum [SRM-SECY-09-0190](#), “Revisions to the Nuclear Regulatory Commission Enforcement Policy,” dated December 30, 2009 (ADAMS Accession No. ML093200520), which approved the Policy that became effective on September 30, 2010 ([75 FR 60485](#)), the Commission directed the staff to evaluate specific topics for inclusion in a future policy revision. The topics included guidance for (1) determining when daily civil penalties are appropriate; (2) providing credit to fuel cycle licensees with effective corrective action programs; and (3) reevaluating the Policy related to construction activities, including cases for which discretion may be appropriate.

##### ***January 28, 2013 Revision***

On January 28, 2013, the staff issued a revision to the Policy to: (1) incorporate changes directed by the Commission in SRM-SECY-09-0190; (2) make other changes proposed and approved by the Commission; and (3) make minor edits. Specifically, the changes, following an opportunity for public comment, included:

- A revision to Section 2.3.2, “Non-Cited Violation,” to allow all licensees with an NRC-approved corrective action program (CAP) to have SL IV violations treated as noncited violations (NCVs), regardless of who identified the violation, if certain other criteria are met. Before the revision, this CAP credit was only available to power reactor licensees, and this revision gives fuel cycle licensees (and all other licensees or nonlicensees) the same credit for an NRC-approved CAP.
- Revisions to Section 2.3.2.b, “All Other Licensees,” to permit nonlicensees to be issued NCVs when they meet the NCV criteria stated in Section 2.3.2.b.
- Changes to Section 2.3.4, “Civil Penalty,” to allow the civil penalty assessment process to be more consistent with the NRC’s policy on lost radioactive sources.
- The addition of new Sections 2.3.11, “Inaccurate and Incomplete Information,” and 2.3.12, “Reporting of Defects and Noncompliance.”
- Clarifications to Section 2.3.5, “Orders;” Section 2.4.1, “Predecisional Enforcement Conference;” Section 2.4.3, “Alternative Dispute Resolution;” and Section 4.0, “Enforcement Actions Involving Individuals.”
- Revisions to Section 6.0, “Violation Examples,” by adding several new violation examples and revising several previous examples.

The January 28, 2013, revision to the Enforcement Policy is available on the NRC’s public Web site and in ADAMS as Accession No. ML12340A295.

### ***July 9, 2013 Revision***

The Policy was most recently revised on July 9, 2013, to add Interim Enforcement Policy (IEP) Section 9.2, "Enforcement Discretion for Permanent Implant Brachytherapy Medical Event Reporting (10 CFR 35.3045)." The IEP set forth a new interim policy that allows the staff to exercise enforcement discretion for certain violations of 10 CFR 35.3045. Enforcement discretion will typically be exercised for reporting violations in the following scenarios, subject to other specified criteria when the authorized treatment mode is permanent implant brachytherapy: (1) the licensee uses total source strength and exposure time for evaluating the existence of a treatment site medical event; or (2) the total absorbed dose to the treatment site equals or exceeds 120 percent of the prescribed dose. The IEP does not provide regulatory relief from complying with any other aspect of 10 CFR 35.41 or 35.3045, including the requirements related to the evaluation of dose to normal tissue.

The July 9, 2013, revision to the Enforcement Policy is available on the NRC's public Web site and in ADAMS as Accession No. ML13228A199.

## **2. Future Enforcement Policy Revision Activities**

On March 21, 2011, SRM – SECY-10-0140, "Options for Revising the Construction Reactor Oversight Process (cROP) Assessment Program," (ADAMS Accession No. ML110800557) directed the staff to develop a construction assessment program for nuclear power plants that includes: (1) a regulatory framework; (2) the use of a construction significance determination process to determine the significance of findings identified during the construction inspection program; and, (3) the use of a construction action matrix to determine the appropriate NRC response to findings. On January 1, 2012, the staff initiated a 12-month pilot program for the new cROP. EGM-11-006, "Enforcement Actions Related to the Construction Reactor Oversight Process," dated December 21, 2011, provided enforcement guidance for use during the cROP pilot program. The cROP was fully implemented in July 2013, and the guidance provided in the EGM will remain in effect until the staff issues a subsequent revision to the Enforcement Policy.

## **3. Enforcement Guidance Memoranda**

OE issues EGMs to provide guidance on the interpretation of specific provisions of the Enforcement Policy. Links to the full text of all publicly available EGMs is available on the NRC's public Web site, and are contained in Appendix A to the NRC Enforcement Manual. The office issued three EGMs and revised one existing EGM in CY 2013, and these are summarized below.

- February 25, 2013, EGM 13-001, "Pilot Program – Post-Investigation Alternative Dispute Resolution Expansion." The purpose of this EGM is to provide guidance regarding the expansion of the scope of use of post-investigation alternative dispute resolution (ADR) for a 1-year pilot period. The pilot program expanded the scope of post-investigation ADR to include all escalated non-willful (traditional) enforcement cases with proposed civil penalties. The pilot program did not include violations associated with findings assessed under the ROP.

- April 3, 2013, EGM 13-002, “Enforcement Discretion Not To Cite Violations Involving the Use of the New American Society of Mechanical Engineers (ASME) Certification Marks Instead of ASME Code Symbol Stamps, while Rulemaking Changes are Being Developed.” This EGM grants enforcement discretion for the use of ASME Certification Marks in instances in which ASME Code Symbol Stamps are required by Section III of the ASME Boiler and Pressure Vessel Code.
- April 18, 2013, EGM 13-003, “Interim Guidance for Dispositioning Violations Involving 10 CFR 35.60 and 10 CFR 35.63 for the Calibration of Instrumentation to Measure the Activity of Rubidium-82 and the Determination of Rubidium-82 Patient Dosages.” This EGM provides guidance for dispositioning inspection findings related to a licensee’s implementation of calibration requirements for rubidium-82 (Rb-82) activity measurement systems in accordance with 10 CFR 35.60; and the requirement to determine the Rb-82 dosage before medical use in accordance with 10 CFR 35.63.
- December 13, 2013, Revision 2 to EGM 11-003, "Dispositioning Boiling Water Reactor Licensee Non-Compliance with Technical Specification Containment Requirements During Operations with a Potential for Draining the Reactor Vessel." This EGM provides guidance on how to disposition boiling water reactor licensee noncompliance with TS containment requirements during operations with a potential for draining the reactor vessel. Revision 2 extended the time period of enforcement discretion to December 31, 2015, to permit refueling outage planning while the NRC staff and the Boiling Water Reactor Owners Group finalize a generic solution for TS changes.

### **B. Knowledge Management and Improvement Initiatives**

In CY 2013, OE engaged in several knowledge-management and continuous improvement activities. Some of the ongoing activities being conducted to maintain an adequate knowledge base included supporting training, completing reviews and self assessments, developing internal office procedures, mentoring new staff members with more experienced staff, and conducting counterpart meetings.

#### *Enforcement Counterpart Meetings*

The regional and headquarters enforcement staff held a counterpart meeting from September 10 – 12, 2013, to discuss ways to improve the enforcement process and enhance communications among staff. The meeting resulted in a number of action items to improve the enforcement program. Examples included: (1) review the process for profiling enforcement documents in ADAMS; (2) consider developing additional tools (e.g., iLearn training) to conduct enforcement refresher training; (3) develop an OE office procedure on timeliness; (4) develop program office-specific guidance for the Enforcement Manual; (5) review/improve Enforcement Manual guidance on Factual Summaries; (6) initiate discussions on the 2-year licensee performance lookback and whether or not escalated ROP-related violations are considered in the civil penalty assessment process; (7) expand the use of the new electronic Enforcement Action Worksheet (EAW) and consider whether only one form should be used; and (8) consider additional guidance on the topic of “materiality” for the Enforcement Manual.

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### *Reviews and Self Assessments*

In CY 2013, OE completed one regional enforcement assessment. OE typically performs two assessments each year; however, only one assessment was conducted to meet the budgetary guidelines implemented in fiscal year 2013.

In May 2013, an assessment was completed in Region II that was performed by a team of enforcement specialists from OE and Region III. The primary focus of the assessment, which was requested by Region II management, was to ensure that the enforcement program in the new construction inspection area is being consistently implemented in the region. The assessments also provided the opportunity to share “best practices” between the regions and to enhance knowledge management for the enforcement process. The assessments involved the review of nonescalated enforcement actions and processes, which do not normally involve headquarters. The team concluded that Region II maintains a strong regional enforcement program and is effectively implementing the NRC Enforcement Policy through an effective collaboration among inspectors, enforcement and allegation coordination staff, and regional and division management. The team also identified opportunities to heighten training and the transfer of knowledge to the regional construction inspection staff.

A review of the assessment program will be conducted in CY 2014 and program modifications, if necessary, will be incorporated during future assessments.

### *Continuous Improvement Initiatives*

The Enforcement Manual was reformatted and revised during the year to improve the efficiency of future revisions, supporting increased ease of providing additional guidance. Additional updates, including review and revisions of over 60 boilerplate documents, were included in the revision.

OE continues to improve the internal procedures used to execute various aspects of the enforcement program. During CY2013, at least six internal procedures were developed, reviewed and implemented, supporting both knowledge management goals and improving the enforcement staff’s effectiveness and efficiency.

Other activities included significantly improving the search capability of the escalated enforcement database to aid in consistency and precedence reviews and the development of additional guidance and boilerplates to support a variety of program areas such as import/export reporting requirements, improved guidance on the use of confirmatory action letters, and additional information on the agency’s use of orders.

### *Training*

Headquarters and regional enforcement staff conducted training for the Region II construction staff in August 2013 as a followup to the program assessment performed in May 2013. The training focused on the documentation of nonescalated enforcement actions and staff members from headquarters and the region also shared other “best practices” at the training sessions.

## C. Regional Accomplishments

In CY 2013, the regions conducted both routine and focused self assessments of the enforcement area to ensure effective performance and to identify opportunities for continuous improvement. The self-assessments encompassed both the reactor and materials arenas; considered performance associated with development and issuance of both nonescalated and escalated enforcement actions; and included activities that required a high degree of coordination with other NRC stakeholders.

Overall, the self-assessments showed that the regions were effectively implementing the Enforcement Program. Recommendations were made for any weaknesses identified.

In addition to assessments, the enforcement staff (1) trained regional technical staff, in part, on the revised Enforcement Policy, recent EGMs, and proper enforcement documentation requirements for inspectors and (2) participated on inspector qualification review boards as necessary.

## D. Calendar Year 2014 Focus Areas

During CY2014, OE plans to address several activity areas that include: (1) a potential revision to the Enforcement Policy, (2) the development of interim enforcement policies and implementation guidance, (3) enhancing the understanding of regional differences with respect to enforcement (particularly in the area of non-escalated enforcement), and (4) continued development of enforcement staff expertise are all planned.

- A proposed revision to the Enforcement Policy is being considered, which would likely include specific topical areas with a few changes to support additional clarity. Topical areas being considered include: clarification of whether significance determination process (SDP) findings from the reactor oversight process should be included in licensee performance history when a traditional enforcement action is being processed for a potential civil penalty; revision to different areas of violation examples to clarify and reflect staff experience in specific areas; and incorporation of an expanded scope for the alternative dispute resolution (ADR) program, namely, not restricting the program to wrongdoing cases but allowing a case with a civil penalty to be considered for ADR.
- Several interim enforcement policies and enforcement guidance memoranda will be considered in CY 2014. The relatively large amount of activity in this area will be a challenge with regard to resources, particularly when considered in conjunction with continued priority support for case work. In addition, action items identified during the 2013 Enforcement Counterpart Meeting will be addressed during CY 2014.
- OE will support the agency effort to understand the differences between the regions regarding the number of non-escalated enforcement actions (which are primarily SDP Green NCVs). While OE is not normally involved in individual, non-escalated enforcement actions, and the majority of the issues result from the SDP criteria, as an enforcement program issue, OE continues to support the Office of Nuclear Reactor Regulation in determining the cause and whether any agency action is appropriate.

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- Although the average experience level of the enforcement staff is increasing, additional development opportunities will be utilized when possible. Continued turnover, particularly in the regional enforcement staff recently, has reduced the level of expertise available to support the inspection staff throughout the agency. The hiring, training, and development of internal procedures needs to continue to reduce reliance on a very limited number of individuals.

**Table 3 – Escalated Enforcement Actions by Region and Program Office**

Region/Office	NOVs w/o Civil Penalties	Orders w/o Civil Penalties	NOVs and Orders w/ Civil Penalties	Total
REGION I	9	1	1	11
REGION II	13	1	1	15
REGION III	23	3	6	32
REGION IV	6	0	1	7
NRR	2	4	0	6
OE	0	1	2	3
NSIR	1	0	0	1
FSME	0	0	0	0
NMSS	0	0	0	0
NRO	0	0	0	0
OIP	0	0	0	0
<b>Total</b>	<b>54</b>	<b>10</b>	<b>11</b>	<b>75</b>

Key to Offices

- NRO – Office of New Reactors
- NSIR – Office of Nuclear Security and Incident Response
- FSME – Office of Federal and State Materials and Environmental Management Programs
- NMSS – Office of Nuclear Material Safety and Safeguards
- OIP – Office of International Programs

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**Table 4 – Escalated Enforcement Actions by Type of Licensee, Nonlicensee, or Individual**

	<b>NOVs w/o Civil Penalties</b>	<b>Orders w/o Civil Penalties</b>	<b>NOVs and Orders w/ Civil Penalties</b>	<b>Total</b>
Operating Reactor	24	5	1	30
Hospital	8	0	0	8
Gauge	5	0	0	5
Radiographer	2	0	3	5
Academic	3	0	1	4
Physician (M)	0	0	3	3
Fuel Facility	3	0	0	3
Irradiator	2	0	0	2
Vendor - New Reactors	0	1	2	3
Materials Distributor	2	0	0	2
Licensed Operator	0	2	0	2
Research Reactor	1	1	0	2
Individual Actor - Reactors	1	0	0	1
Individual Actor - Materials	0	1	0	1
Waste Disposal	1	0	0	1
New Construction - Reactor	0	0	1	1
Well Logger	1	0	0	1
Other	1	0	0	1
<b>Grand Total</b>	<b>54</b>	<b>10</b>	<b>11</b>	<b>75</b>

## Appendix A – Summary of Cases Involving Civil Penalties\*

### Civil Penalties Issued To Reactor Licensees

Dominion Energy Kewaunee, Inc.  
Kewaunee Power Station

EA-12-266

On April 30, 2013, the U.S. Nuclear Regulatory Commission (NRC) issued a notice of violation to Dominion Energy Kewaunee, Inc. (licensee) for a SL III problem with a proposed civil penalty of \$70,000, and a White Significance Determination Process (SDP) finding for an associated performance deficiency. The violations were based on the licensee's failure to follow License Condition 2.C.(3), "Fire Protection" and Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.9(a), "Completeness and accuracy of information." Specifically, from at least August 19, 2009 to December 20, 2011, a Kewaunee fire brigade trainer willfully failed to conduct announced fire drills in accordance with the Kewaunee license condition and implementing procedure and falsified fire drill evaluation or critique forms.

Tennessee Valley Authority  
Watts Bar Nuclear Plant, Unit 2

EA-13-019

On June 18, 2013, the NRC issued a notice of violation and proposed civil penalty in the amount of \$70,000 to the Tennessee Valley Authority (TVA) for a SL III problem involving three violations of NRC requirements relating to the commercial grade dedication program at the Watts Bar Nuclear Plant, Unit 2 (WB2). Specifically, TVA failed to: (1) verify the proper critical characteristics for certain safety-related items procured for the WB2 project starting with the resumption of construction activities in 2008 as a result of a breakdown in its quality assurance (QA) program; under Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities"; (2) report the breakdown in its QA program to the NRC as required by 10 CFR 50.55(e)(4) and (e)(5); and (3) follow plant procedures and identify a significant condition adverse to quality and, thus, reevaluate corrective action categorization when the QA program breakdown was found to be more significant than originally reported.

### Civil Penalties Issued To Material Licensees

Jackson Cardiology Associates, P.C.  
Jackson, Michigan

EA-13-134

On October 30, 2013, the NRC issued a notice of violation and proposed imposition of civil penalty in the amount of \$3,500 to Jackson Cardiology Associates, P.C., for a SL III problem involving two violations. The first violation involved the failure to supply and require the use of individual monitoring devices by adults likely to receive a dose in excess of 10 percent of the limits in 10 CFR 20.1201(a) as required by 10 CFR 20.1502(a)(1). The second violation involved the failure to ensure that information provided to the NRC was complete and

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\* Please note that cases involving security-related issues are not included

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accurate in all material respects as required by 10 CFR 30.9. Specifically, on August 20, 2012, a nuclear medicine technologist informed an NRC inspector that dosimetry had been left at home although it had been misplaced at the end of June 2012. The technologist neglected to inform the inspector that payments had not made to the vendor to continue the dosimetry contract nor were the services of a replacement vendor obtained.

Centro de Medicina Nuclear  
Santurce, Puerto Rico

EA-13-059

On November 5, 2013, the NRC issued a notice of violation and proposed imposition of civil penalty in the amount of \$7,000 to Centro de Medicina Nuclear (CDM) for a SL III violation involving CDM's failure to comply with an Order issued on August 7, 2012, after CDM failed to pay the NRC licensing fee. Specifically, as of November 5, 2013, CDM (1) had not submitted an answer to the Order, (2) paid the license fee, or (3) submitted the required written report regarding the amount, condition, and status of its licensed material by August 27, 2012; or begun decommissioning its site by October 26, 2012.

Southwest X-Ray Corp.  
Glenrock, Wyoming

EA-13-164

On November 12, 2013, the NRC issued a notice of violation and proposed imposition of civil penalty in the amount of \$7,000 to Southwest X-Ray Corporation for a SL III problem involving the failure to implement both 10 CFR 34.41(a), requiring the radiographer to be accompanied by a qualified radiographer when not conducting radiography at a permanent radiographic installation, and 34.46(c), requiring a radiographer to personally supervise a radiographer's assistant who is using radiographic exposure devices. Specifically, on July 8, 2013, the radiographer was in the office area of the facility and did not observe the assistant performing radiographic operations.

## Appendix B – Summary of Escalated Notices of Violation without Civil Penalties\*

### Notices of Violation Issued to Power Reactor Licensees

Entergy Nuclear Operations, Inc.  
Pilgrim Nuclear Power Station

EA-11-260

On July 17, 2013, the NRC issued a notice of violation to Entergy Nuclear Operations, Inc. (Entergy) for a SL III problem involving two violations of NRC requirements associated with licensed reactor operator medical examinations and reporting at the Pilgrim Nuclear Power Station (PNPS). The first violation involved Entergy's failure to ensure that licensed operators at PNPS met medical prerequisites for performing NRC-licensed operator activities and Entergy's failure to obtain prior NRC approval, as required by 10 CFR 55.3, 10 CFR 55.31 and 10 CFR 55.23. Specifically, on various dates, licensed reactor operators performed duties without meeting medical prerequisites (blood pressure limits and stamina tests) and without prior NRC approval. The second violation involved Entergy's non-willful failure to provide the NRC with information that is complete and accurate in all material respects, as required by 10 CFR 50.9. Specifically, Entergy submitted NRC Form-396s for renewal of two reactor operator licenses that certified that the operators met the medical requirements of American National Standards Institute (ANSI)/American Nuclear Society (ANS) 3.4-1983, when, in fact, the facility licensee had not verified, by conducting a stamina test, that the operators had met the requirements.

Pennsylvania Power and Light (PPL) Susquehanna, LLC  
Susquehanna

EA-12-216

On August 28, 2013, a notice of violation was issued to Pennsylvania Power and Light (PPL) Susquehanna, LLC for a SL III problem for several issues with PPL's process for conducting biennial medical exams for licensed reactor operators (ROs) and reporting changes in RO medical conditions. Between August 2007 and June 2012, eight ROs performed licensed duties when they had permanent disabilities or illnesses that caused them to not meet the requirements of 10 CFR 55.33, "Disposition of an initial application." PPL also provided information to the NRC that was not complete and accurate when it submitted an initial RO application and three NRC licensed operator renewal applications. This was determined to be a non-willful violation of 10 CFR 50.9, "Completeness and accuracy of information."

NextEra Energy Point Beach, LLC  
Point Beach Nuclear Plant, Unit 1

EA-12-220

On January 2, 2013, the NRC issued a notice of violation to NextEra Energy Point Beach, LLC for a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." This violation was associated with a White SDP finding involving the failure of Point Beach personnel to prescribe maintenance on the safety-related turbine driven auxiliary feedwater (TDAFW) pump, an activity affecting quality, by documented instructions

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\* Please note that cases involving security-related issues are not included

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of a type appropriate to the circumstances. Specifically, a work order used to perform maintenance on the TDAFW pump specified a first time evolution of unbolting the steam exhaust piping to the turbine, aligning the turbine to the pump, and then re-bolting the steam piping to the turbine. The documented instructions were not appropriate to the circumstances in that they did not ensure that the final turbine-to-pump alignment was performed after the bolting of the steam exhaust piping to the turbine flange. This led to the failure of the turbine-to-pump coupling on May 21, 2012.

Southern Nuclear Operating Company, Inc.  
Farley Nuclear Plant, Units 1 and 2

EA-12-240

On March 4, 2013, a notice of violation was issued to Southern Nuclear Operating Company, Inc. for a SL III problem for the failure to implement: (1) 10 CFR 50.48, "Fire Protection," and (2) 10 CFR 50.9(a), "Completeness and Accuracy of Information." Between September and December 2011, four contract employees willfully failed to complete fire watch rounds required to ensure that Farley remained in compliance with 10 CFR 50.48. In addition, these same employees falsified fire watch logs by annotating that hourly fire watches were completed when in fact they had not been performed. These actions were identified by the licensee and caused Farley to be in violation of 10 CFR 50.48 and 10 CFR 50.9(a).

Dominion Energy Kewaunee, Inc.  
Kewaunee Power Station

EA-12-272

On April 4, 2013, the NRC issued a notice of violation to Dominion Energy, Kewaunee, Inc. for a violation of 10 CFR 50.54, "Conditions of Licenses," and risk significant planning standards 10 CFR 50.47(b)(4) and (b)(8) associated with a White SDP finding, which involved the loss of the Auxiliary and Reactor Building system particulate iodine and noble gas (SPING) indication. Specifically, from February 28, 2011, to March 30, 2011, SPING indication on the plant process computer system (PPCS) and local server station was inoperable, which rendered emergency action levels ineffective. Kewaunee neither identified nor took timely corrective action to repair failed equipment necessary to support the emergency preparedness program.

Northern States Power Company  
Prairie Island Nuclear Generating Plant

EA-12-273

On March 26, 2013, the NRC issued a notice of violation to Northern States Power Company, Minnesota for a violation of 10 CFR 50.54, "Conditions of Licenses," and risk significant planning standards 10 CFR 50.47(b)(4) and (b)(8) associated with a White SDP finding. The finding involved the failure to recognize that the shield building high range vent gas radiation detector at Prairie Island Nuclear Generating Plant (Prairie Island) was a single piece of equipment necessary for emergency preparedness action levels and failure to recognize its importance to the emergency preparedness program. Specifically, from July 24, 2011, to May 18, 2012, the high range detector was inoperable, which degraded Prairie Island's ability on Unit 1 to classify and declare general emergencies or site area emergencies. Prairie Island did not take timely corrective actions to restore the monitor.

Entergy Operations, Inc.  
Arkansas Nuclear One

EA-12-275

On June 10, 2013, the NRC issued a notice of violation to Entergy Operations, Inc. (Entergy) for a SL III violation of NRC Regulations. Between December 14, 2010 and January 11, 2012, the licensee failed to maintain information required by the Commission's regulations as complete and accurate in all material respects. Specifically, a senior emergency planner formerly employed by Arkansas Nuclear One, deliberately falsified documents regarding the performance of Emergency Preparedness drills and communication surveillances. The senior emergency planner documented that the drills and surveillances were completed when they had not actually been performed. These actions were identified by the licensee and caused Arkansas Nuclear One to be in violation of 10 CFR 50.9(a), which requires, in part, that information provided to the Commission by the licensee, or information required by the Commission's regulations to be maintained by a licensee, shall be complete and accurate in all material respects.

Duke Energy Carolinas, LLC  
Oconee Nuclear Station

EA-13-010

On July 1, 2013, the NRC issued a Confirmatory Order (CO) and a notice of violation (NOV) for a SL III violation to Duke Energy Carolinas, LLC (Duke). These actions are based on Duke's failure to comply with a license condition associated with the amendment to complete their transition to the National Fire Protection Association Standard 805 for its Oconee Nuclear Station, Units 1, 2, and 3. Duke received the NOV for not incorporating the protected service water (PSW) modification into its fire protection program site documents and confirming the risk reduction from the modification prior to January 1, 2013, as called for in its transition license condition. A CO was issued to provide a heightened regulatory accountability for the completion of the PSW system, and interim milestones associated with this modification.

Tennessee Valley Authority  
Watts Bar Nuclear Plant, Unit 1

EA-13-018

On June 4, 2013, the NRC issued a notice of violation associated with a Yellow SDP finding, a White SDP finding, and a SL III violation to Tennessee Valley Authority (TVA). The Yellow finding, a violation of TS 5.7.1, "Procedures," was issued for the failure of Watts Bar personnel to maintain an adequate procedure to implement its flood mitigation strategy within 27 hours as described in Watts Bar's Updated Final Safety Analysis Report from initial licensing to July 2012. The White finding, a violation of TS 5.7.1, "Procedures," was issued for the failure of Watts Bar personnel to establish and maintain an adequate procedure to implement its flood mitigation strategy prior to September 30, 2009, such that earthen dams located upstream of the facility could potentially overtop, causing a subsequent breach and resulting in onsite flooding and the submergence of critical equipment. The SL III violation involved the failure of Watts Bar personnel to implement 10 CFR 50.72(b)(3)(ii)(B) on December 30, 2009, when Watts Bar personnel failed to notify the NRC within 8 hours upon confirmation that a postulated Maximum Probable Flood (MPF) level would exceed the current licensing basis and the design basis MPF flooding event would result in overtopping of critical earthen dam structures upstream of the Watts Bar facility.

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Tennessee Valley Authority  
Sequoyah Nuclear Plant, Units 1 and 2

EA-13-023

On June 4, 2013, the NRC issued a notice of violation associated with a White SDP finding and a SL III violation to Tennessee Valley Authority. The White finding, a violation of TS 6.8.1, "Procedures and Programs," involved the failure of Sequoyah personnel to establish an adequate Abnormal Condition Procedure to implement its flood mitigation strategy. Specifically, prior to September 30, 2009, AOP-N.03, "External Flooding," was inadequate to mitigate the effects of a Maximum Probable Flood (MPF) event, in that earthen dams located upstream of the facility could potentially overtop, causing a subsequent breach and resulting in onsite flooding and the submergence of critical equipment. The SL III violation of 10 CFR 50.72(b)(3)(ii)(B) involved the failure of Sequoyah personnel to report within 8 hours an unanalyzed condition that significantly degraded plant safety. Specifically, on December 30, 2009, Sequoyah personnel failed to notify the NRC upon confirmation that a postulated MPF level would exceed the current licensing basis and the design basis MPF flooding event would result in overtopping of critical earthen dam structures upstream of the Sequoyah facility.

Tennessee Valley Authority  
Sequoyah Nuclear Plant, Units 1 and 2

EA-13-045

On June 4, 2013, the NRC issued a notice of violation to Tennessee Valley Authority for a violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," associated with a White SDP finding involving the failure of Sequoyah personnel to translate the design basis related to onsite flooding into specifications, drawings, procedures, and instructions. Specifically, prior to December 15, 2012, Sequoyah's design documentation for the essential raw cooling water (ERCW) pumping station did not contain information to identify design basis flood barriers to prevent water from flooding the building during a design basis flood. As a result, the ERCW pump station would not remain functional when subjected to the maximum flood level, the ERCW intake station would not remain dry during flood mode, and portions of the ERCW walls and penetrations would not withstand all static and dynamic forces imposed by the design basis flood.

Exelon Generation Company, LLC  
Three Mile Island Unit 1

EA-13-046

On April 30, 2013, the NRC issued a notice of violation to Exelon Generation Company, LLC (Three Mile Island) for a violation of 10 CFR 50, Appendix B, Criterion XVI, associated with a White SDP finding involving Three Mile Island's failure to identify, during external flood barrier walk downs, that electrical cable conduit couplings in the Three Mile Island Nuclear Station, Unit 1 Air Intake Tunnel (AIT) were not sealed, as designed, to maintain the integrity of the external flood barrier system. Specifically, Exelon staff, during visual inspections of the couplings and conduits in the AIT, did not identify that flood seals and material had not been installed, as designed.

Exelon Generation Company, LLC  
Dresden Nuclear Power Station

EA-13-079

On July 31, 2013, the NRC issued a notice of violation to Exelon Generation Company, LLC for a violation of TS Section 5.4.1, "Procedures," associated with a White SDP finding involving the failure of Dresden personnel to establish a written procedure to address the

effect of an external flooding scenario on the plant. Specifically, prior to November 21, 2012, procedure DOA 0010-04, "Floods," did not account for reactor vessel inventory makeup during an external flooding scenario up to and including the probable maximum flood event which could result in reactor vessel water level lowering below the top of active fuel.

Southern California Edison Company  
San Onofre Nuclear Generating Station, Unit 3

EA-13-083

On December 23, 2013, the NRC issued a notice of violation associated with a White SDP finding identified during an inspection of the San Onofre Nuclear Generating Station, Unit 3. This White finding involves the failure of San Onofre personnel to verify the adequacy of the thermal-hydraulic and flow-induced vibration design of the Unit 3 replacement steam generators, which resulted in significant and unexpected steam generator tube wear and the loss of tube integrity on Unit 3 Steam Generator 3EO-88 after 11 months of operation.

Northern States Power Company, Minnesota  
Monticello Nuclear Generating Plant

EA-13-096

On August 28, 2013, the NRC issued a notice of violation to Northern States Power Company, Minnesota for a violation of Technical Specification Section 5.4.1, "Procedures," associated with a Yellow SDP finding involving the failure of Monticello personnel to maintain a flood plan to protect the site against external flooding events. Specifically, from February 29, 2012, to February 15, 2013, the site failed to maintain flood Procedure A.6, "Acts of Nature," such that it could support the timely implementation of flood protection features within the 12-day timeframe credited in the design basis, as stated in the Monticello Updated Safety Analysis Report.

Aerotest Operations, Inc.  
Auburn Hills, Michigan

EA-13-108

On December 18, 2013, the NRC issued a SL III notice of violation to Aerotest Operations, Inc. involving the failure to implement TS 10.2. Specifically, for an indeterminate period of time, beginning at a point after the last full fuel inspection in 2006 and lasting until October 15, 2010, when the facility ceased reactor operation, the licensee operated the reactor with significant defects in the fuel elements. During fuel inspections conducted following reactor shutdown, 22 fuel elements were identified as having varying degrees of cracking in the aluminum cladding, representing a significant defect in the fuel elements and loss of the integrity of a fission product barrier.

Tennessee Valley Authority  
Browns Ferry Nuclear Plant, Unit 2

EA-13-118

On August 23, 2013, the NRC issued a notice of violation to Tennessee Valley Authority for a violation of Technical Specification Section 5.4.1, "Procedures," associated with a White SDP finding involving the failure of Browns Ferry personnel to properly implement a procedure recommended in Regulatory Guide 1.33, Revision 2, Appendix A, dated February 1978. Specifically, on December 22, 2012, the licensee failed to properly implement the procedure for Startup, Operation, and Shutdown of the Reactor Protection System, 2-OI-99, Reactor Protection System, when an operator incorrectly opened the RPS motor generator set tie to battery board 2 Breaker on the A RPS bus motor generator set while attempting to

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start the B RPS bus motor generator set. The failure to properly implement 2-OI-99 caused a Unit 2 reactor scram and main steam isolation valve (MSIV) closure.

NextEra Energy, Point Beach, LLC  
Point Beach Nuclear Plant

EA-13-125

On August 9, 2013, the NRC issued a notice of violation to NextEra Energy, Point Beach, LLC for a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," associated with a White SDP finding involving the failure of Point Beach personnel to have a procedure appropriate to the circumstances to address flooding as described in the Final Safety Analysis Report (FSAR). Specifically, from January 19, 1996, to March 13, 2013, procedure PC 80 Part 7, "Lake Water Determination," as implemented, would not protect safety-related equipment in the turbine building or pump house because the procedure: (1) did not appropriately prescribe the installation of barriers such that gaps between the barriers were eliminated to prevent water intrusion, (2) did not protect equipment by requiring barriers to be placed in front of the doors, from 1996 to 2008, as described in the FSAR, and (3) did not require the barriers to protect the plant to an elevation of at least 9 feet as described in the FSAR.

Carolina Power and Light  
H.B. Robinson Steam Electric Plant, Unit 2

EA-13-129

On September 19, 2013, the NRC issued a notice of violation to Carolina Power and Light for a violation of 10 CFR 50.63(c)(2), Loss of all Alternating Current Power, Implementation – Alternating AC Source, associated with a White SDP finding involving the failure of Robinson to have an alternate AC power source with acceptable capability to withstand station blackout for the required durations specified in its coping analysis. Specifically, during surveillance testing of the Dedicated Shutdown Diesel Generator (DSDG) on October 2, 2012, the DSDG automatically shut down on high engine temperature due to a failure of the radiator drive belts. Based on the failure of the DSDG and necessary repair time, this degraded condition would have prohibited the DSDG from supplying power to shutdown equipment within 1 hour following a station blackout and could have rendered the plant unable to cope for 8 hours after a postulated station blackout or to provide emergency power for certain selected fire-related safe shutdown scenarios.

NextEra Energy Duane Arnold, LLC  
Duane Arnold

EA-13-182

On December 18, 2013, the NRC issued a notice of violation to NextEra Energy Duane Arnold, LLC for a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," associated with a White SDP finding involving the failure of Duane Arnold personnel to prescribe a work instruction of a type appropriate to the circumstances for the re-assembly of the 'A' standby diesel generator lube oil heat exchanger. Specifically, on October 18, 2012, the licensee completed a work order which replaced the 'A' standby diesel generator lube oil heat exchanger tube bundle. The work order did not contain a specific and detailed sequence for re-assembly of the heat exchanger and connected piping system to achieve uniform and appropriate compression of the tube bundle-to-shell gasket. This contributed to the catastrophic failure of the tube bundle-to-shell gasket during a maintenance run of the engine on March 8, 2013, rendering the 'A' standby diesel generator unavailable.

**Notices of Violation Issued to Material Licensees**

Missouri Baptist Medical Center Hospital  
St. Louis, Missouri

EA-12-242

On January 29, 2013, the NRC issued a notice of violation to Missouri Baptist Medical Center Hospital for a SL III violation involving the failure to develop, implement, and maintain written procedures to provide high confidence that each administration was in accordance with the written directive as required by 10 CFR 35.41(a). In accordance with 10 CFR 35.41(b)(2), the procedures required by 10 CFR 35.41(a) must address verifying that the administration is in accordance with the treatment plan, if applicable, and the written directive. However, as of October 19, 2012, the licensee's procedures failed to address verification that the administered dosage was in accordance with the prescribed dosage on the written directive prior to administration. Specifically, on or about May 1, 2012, a yttrium-90 (Y-90) procedure was performed, and the written directive indicated a prescribed dosage other than the authorized user intended to deliver to the patient. The authorized user electronically signed and dated the written directive immediately before the administration of the dose without verifying that the written directive indicated the intended activity. The administration represented a dosage 39 percent greater than the prescribed dosage documented on the written directive. Additionally, on or about May 31, 2012, a medical procedure involving samarium-153 was performed and the "prescribed activity" section was blank in the written directive as no data had been entered into the applicable area. The calculations attached to the written directive indicate that the authorized user intended to give a dosage that was within 20 percent of the administered dosage.

Deaconess Hospital  
Newburgh, Indiana

EA-12-245

On January 31, 2013, the NRC issued a notice of violation to Deaconess Hospital for a SL III violation involving the failure to develop, implement, and maintain written procedures to provide high confidence that each administration is in accordance with the written directive as required by 10 CFR 35.41(a). In accordance with 10 CFR 35.41(b)(2), the procedures required by 10 CFR 35.41(a) must address verifying that the administration is in accordance with the treatment plan, if applicable, and the written directive. However, as of March 5, 2012, the licensee administered a 34 Gray dose to a patient, and the licensee's procedures did not require verifying that the administration was in accordance with the applicable treatment plan and written directive.

Havells USA Inc.  
Atlanta, Georgia

EA-12-258

On March 6, 2013, the NRC issued a notice of violation to Havells USA Inc. (Havells) for a SL III violation. The violation involved a failure to limit the distribution of products containing byproduct material from only those locations authorized on its NRC exempt distribution license. Specifically, between March 11, 2009, and December 7, 2012, on an unspecified number of occasions Havells distributed lamps containing exempt quantities of krypton-85 from Mullins, South Carolina and Atlanta, Georgia locations, and these locations are not authorized by its NRC license.

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Bruker Detection Corporation  
Billerica, Massachusetts

EA-13-012

On March 29, 2013, the NRC issued a notice of violation to Bruker Detection Corporation (Bruker), for a SL III violation involving the failure to file NRC Form 241 "Report of Proposed Activities in Non-Agreement States," at least 3 days prior to engaging in licensed activities within NRC jurisdiction, as required by 10 CFR 150.20 (b). Specifically, from April 16 to April 21, 2012, Bruker, a licensee of the Commonwealth of Massachusetts, possessed and used ion mobility spectrometer devices containing nickel-63 sealed sources in Indiana, a non-Agreement State, without first filing a Form-241 with the NRC, at least 3 days before engaging in such activity.

Mercy Hospital  
St. Louis, Missouri

EA-13-049

On May 16, 2013, the NRC issued a notice of violation to Mercy Hospital for a SL III violation involving the failure to secure from unauthorized removal or limit access to licensed material stored in controlled or unrestricted areas as required by 10 CFR 20.1801. On October 9, 2012, and February 25, 2013, the licensee failed to secure from unauthorized removal or limit access to licensed material that was stored in controlled or unrestricted areas as noted during an internal audit and an NRC inspection.

Nordlund and Associates  
Ludington, Michigan

EA-13-053

On June 27, 2013, the NRC issued a notice of violation to Nordlund and Associates for a SL III problem. One of the violations included in the SL III problem involved the failure to confine possession and use of byproduct materials to the locations and purposes authorized by the license as required by 10 CFR 30.34(c). As for accelerator-produced radioactive material or discrete sources of radium-226 that require a license amendment, licensees may continue to use these materials for authorized purposes until the specified date provided the person submits an amendment application within 6 months from the NRC's waiver expiration date. However, from August 7, 2009, to April 3, 2013, the licensee possessed four radium-226 gauges and used one of these gauges for density measurements at a temporary job site on July 3 and 5, 2012. The licensee was not authorized to possess the gauges and did not submit a license amendment until February 19, 2013, which is more than 6 months from the waiver expiration date. Another violation involved the conduct of operations so that the dose in any unrestricted area from external sources does not exceed 2 millirem in any 1 hour as required by 10 CFR 20.1301(a)(2). Specifically, as of January 16, 2013, the licensee stored its radium gauges in an outdoor shed in an unrestricted area in a manner that resulted in a dose of approximately 4.5 millirem per hour external to the shed.

Braun Intertec Corporation  
Bloomington, Minnesota

EA-13-056

On May 14, 2013, the NRC issued a notice of violation to Braun Intertec Corporation for a SL III violation. The violation involved the failure to, at least 3 days before engaging in the activity for the first time in a calendar year, file a submittal containing an NRC Form 241, "Report of Proposed Activities in Non-Agreement States," a copy of the Agreement State specific license, and the appropriate fee as required by 10 CFR 150.20. Also, if applicable, the Agreement State licensee must file an amended form to request approval for changes in

work locations. However, the Agreement State licensee possessed and used radioactive material in an area of exclusive federal jurisdiction in 2013 without filing an initial submittal. Additionally, the Agreement State licensee failed to file an amended form for a different work location in 2012.

GeoLog Well Services, Inc.  
Wayne City, Illinois

EA-13-067

On June 11, 2013, the NRC issued a notice of violation to GeoLog Well Services, Inc., for a SL III violation. The violation involved the failure to, at least 3 days before engaging in the activity for the first time in a calendar year, file a submittal containing an NRC Form 241, "Report of Proposed Activities in Non-Agreement States," a copy of the Agreement State specific license, and the appropriate fee as required by 10 CFR 150.20. However, on multiple occasions between August 5, 2005, and March 14, 2013, the Agreement State licensee possessed and used licensed materials at temporary job sites in Indiana, a Non-Agreement State, without first filing the required documentation with the NRC.

Camden-Clark Memorial Hospital Corporation  
Parkersburg, West Virginia

EA-13-107

On August 8, 2013, the NRC issued a notice of violation to Camden-Clark Memorial Hospital Corporation (CCMHC) for a SL III problem involving two violations. The first violation involved the failure to implement its written procedure to provide high confidence that an administration was performed in accordance with the written directive as required by 10 CFR 35.41. Specifically, on February 25, 2011, CCMHC implanted a patient with 63 palladium-103 seeds to deliver a dose of 125 Grays; however, 16 of the 63 prescribed palladium-103 seeds were implanted outside the planned treatment area. CCMHC's subsequent assessment of the implant on April 1, 2011, did not identify that the delivered dose was different from the prescribed dose by more than 20 percent. This failure to identify the medical event contributed to the second violation, specifically, CCMHC not notifying the NRC Operations Center by the next calendar day, in accordance with 10 CFR 35.3045(c), that a medical event had occurred. Instead, CCMHC reported the medical event on March 5, 2012.

Maui Memorial Medical Center  
Wailuku, Hawaii

EA-13-126

On September 3, 2013, the NRC issued a notice of violation to Maui Memorial Medical Center for a SL III violation involving the failure to implement 10 CFR 35.40(a) and related conditions of its license when it failed to ensure that the written directive was dated and signed by an authorized physician user before administering sodium iodine (I-131) at greater than 1.11 megabecquerels (30 microcuries). Specifically, on October 31 and November 21, 2012, for a total of three occasions, the licensee allowed a physician that was not listed as an authorized user on the license to sign a written directive for the administration of 5 millicuries of I-131 for diagnostic use.

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ADCO Services, Inc.  
Tinley Park, Illinois

EA-13-131

On October 30, 2013, the NRC issued a notice of violation to ADCO Services, Inc., for a SL III violation. The violation involved the licensee's failure to have an individual specifically named on the license fulfill the duties of the Radiation Safety Officer (RSO) as required by License Condition 11. A of the NRC License. Specifically, the RSO left the company on June 30, 2012, and the licensee did not hire a new qualified RSO and submit an amendment request to the NRC until February 1, 2013.

Canberra Industries, Inc.  
Meriden, Connecticut

EA-13-184

On November 1, 2013, the NRC issued a notice of violation to Canberra Industries, Inc., (Canberra) for a SL III violation involving the licensee's failure to secure from unauthorized removal or access licensed materials that are stored in controlled or unrestricted areas as required by 10 CFR 20.1801. Specifically, Canberra stored an americium-241/ beryllium source in a locked calibration room in which there was a pass-through window to an unlocked outer room that was open and accessible. Also, the source was inside a shielded drum that was not secured to the floor and the motorized device that is used to expose the source could have been operated by unauthorized individuals via an unlocked switch located in the outer room.

### **Notices of Violation Issued to Fuel Cycle Licensees**

None

### **Notices of Violation Issued to Individuals**

Notices of violation issued to individuals are discussed in Appendix D

## Appendix C – Summary of Orders\*

### Orders Issued To Reactor Licensees

Entergy Operations, Inc. EA-13-031  
Arkansas Nuclear One, Unit 1

On March 20, 2013, a Confirmatory Order was issued to Entergy Operations, Inc. (Entergy), confirming Entergy's commitment to submit a license amendment request to transition Arkansas Nuclear One, Unit 1 to the National Fire Protection Association Standard 805. Entergy had originally planned to submit its application on August 31, 2012. The NRC reviewed Entergy's justification for the delay, and accepted the proposed new submittal date of January 31, 2014.

Southern Nuclear Operating Company, Inc. EA-12-145  
Farley Nuclear Plant

On May 6, 2013, the NRC issued a Confirmatory Order to Southern Nuclear Operating Company, Inc. (SNC) to formalize commitments made as a result of an ADR mediation session held on March 15, 2013. The commitments were made as part of a settlement agreement between SNC and the NRC regarding apparent violations of NRC requirements. The agreement resolves the apparent deliberate violations involving falsification of radiation worker training exams by security officers at Farley Nuclear Plant. The proctors and security officers self-proctoring the radiation worker exams were not ensuring that the exams were not compromised either by someone providing answers, hinting to the answers, or using material such as study guides during the exams. As such, the security officers did not complete their radiation worker training requalification exams in accordance with SNC procedures in order to maintain unescorted access to Protected/Vital Areas or Radiation Controlled Areas; yet they continued to have unescorted access to those areas. SNC agreed to a number of corrective actions, issuing fleet-wide messages that will clearly articulate that willful misconduct is incompatible with safe nuclear construction and operation, conducting fleet-wide stand-downs with all employees and contractors to address trustworthiness and integrity, and modifying guidance involving investigations based on allegations to include an initial evaluation of potential nuclear safety implications and to identify any appropriate immediate mitigating measures to be taken while the investigation is ongoing.

FirstEnergy Nuclear Operating Co. EA-12-254  
Beaver Valley Power Station, Units 1 and 2

On February 20, 2013, a Confirmatory Order was issued to the FirstEnergy Nuclear Operating Company (FENOC), confirming FENOC's commitment to submit a license amendment request to transition its two units to the National Fire Protection Association Standard 805. FENOC had originally planned to submit its application on September 30, 2012. The NRC reviewed FENOC's justification for the delay, and accepted the proposed *new* submittal date of December 31, 2013.

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\* Please note that cases involving security-related issues are not included

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Exelon Generation Company, LLC  
Dresden Nuclear Power Station

EA-13-068

On October 28, 2013, the NRC issued a Confirmatory Order (CO) to Exelon Generating Company, LLC. (Exelon) to formalize commitments made as a result of an alternative dispute resolution (ADR) mediation session held on September 18, 2013. The commitments were made as part of a settlement agreement between Exelon and the NRC regarding the apparent violation of 10 CFR 73.56, "Personnel access authorization requirements for nuclear power plants." The agreement resolves the apparent violation which involved the failure of several Dresden Nuclear Power Station (Dresden) individuals to immediately inform a reviewing official of the questionable behavior of a now former Dresden senior reactor operator (SRO). This individual, along with another former Dresden SRO, planned and attempted to recruit another former employee to commit a violent off-site crime. As part of the ADR settlement agreement, Exelon completed or intends to complete a number of corrective actions. These actions include fleet wide procedure revisions and training, fleet wide briefings, a presentation at an appropriate industry forum and submittal of an operating experience summary to an industry wide organization. In consideration of the corrective actions and commitments outlined in the CO, the NRC agreed to refrain from issuing a notice of violation and to preclude consideration of this CO as enforcement history for the Dresden Station.

Aerotest Operations, Inc.  
Auburn Hills, Michigan

EA-13-097

On July 19, 2013, the NRC issued a letter to Aerotest Operations, Inc. denying an application for license renewal of the Aerotest Radiography and Research Reactor license because Aerotest is owned by a foreign corporation. The staff also denied an application for transfer of the license. As a result, on July 24, 2013, NRC issued an order to prohibit Aerotest from operating the reactor and placing the facility and its licensed material in a possession-only condition. The order also requires submission of an updated decommissioning plan and updated decommission funding.

### **Orders Issued To Material Licensees**

Bradley D. Bastow, D. O.

EA-13-025

On September 3, 2013, the NRC issued a Confirmatory Order, notice of violation, and a civil penalty to Bradley D. Bastow, D. O., a medical licensee, confirming commitments reached as part of an alternative dispute resolution (ADR) mediation settlement agreement between the licensee and the NRC. This action is based on information discovered during an inspection and an investigation conducted by the NRC Office of Investigations (OI), wherein violations were identified related to the failure to calibrate and use survey instrumentation, to conduct radiation surveys, to accurately record radiation safety activities, and the Radiation Safety Officer failing to ensure that radiation safety activities were being performed in accordance with licensee-approved procedures and regulatory requirements. The licensee agreed to pay a civil penalty of \$1,000 in addition to numerous corrective actions in accordance with the conditions contained in the Confirmatory Order.

**Orders Issued To Fuel Cycle Licensees**

None

**Orders Issued To Individuals**

Landon E. Brittain

IA-13-024

On October 28, 2013, the NRC issued an immediately effective Order prohibiting involvement in NRC-licensed activities to Mr. Landon E. Brittain, a former Dresden Nuclear Power Station (Dresden) senior reactor operator (SRO) until such time that he can provide reasonable assurance to the NRC that licensed activities can be conducted in compliance with the Commission's requirements. Specifically, the NRC determined that Mr. Brittain was approached and recruited by a now former Dresden SRO to assist in an armored car robbery. Mr. Brittain's failure to report this aberrant behavior to Dresden management is a violation of 10 CFR 73.56, "Personnel access authorization requirements for nuclear power plants." The NRC is also aware that local authorities have charged Mr. Brittain with a number of criminal offenses, including aggravated vehicular hijacking, vehicular hijacking, and obstruction of justice. The NRC has concluded that Mr. Brittain's failure to report the questionable behavior and his apparent participation in criminal activities have demonstrated a lack of trustworthiness.

Michael J. Buhrman

IA-13-025

On October 28, 2013, the NRC issued an immediately effective Order prohibiting involvement in NRC-licensed activities to Mr. Michael J. Buhrman, a former Dresden Nuclear Power Station (Dresden) senior reactor operator (SRO) until such time that he can provide reasonable assurance to the NRC that licensed activities can be conducted in compliance with the Commission's requirements. Specifically, the NRC determined that Mr. Buhrman held conversations with a now former Dresden Station SRO and a former equipment operator, in which Mr. Buhrman either recruited them, or attempted to recruit them to assist him in an armored car robbery. However, prior to executing the armored car robbery, Mr. Buhrman was apprehended by police for hijacking a car at gunpoint, released on bail and fled the country. Mr. Buhrman was later tried in absentia, found guilty of aggravated vehicular hijacking and sentenced to a 40-year prison term. The NRC has concluded that Mr. Buhrman's criminal activities related to both the carjacking and the planning of an armored car robbery have demonstrated a lack of trustworthiness.

Joseph S. Shepherd

IA-13-038

On December 23, 2013, the NRC issued Mr. Joseph S. Shepherd, owner of Foss Therapy Services, an Order conditioning involvement in NRC-licensed activities and notice of violation associated with a willful failure to adhere to some of the conditions set forth in NRC Order IA-08-014. Specifically, on April 13, 2012, Mr. Shepherd, with careless disregard, failed to notify his customer of NRC Order IA-08-014 and did not make the Order available to them. This current Order, NRC Order IA-13-038, conditions Mr. Shepherd's involvement in NRC-licensed activities for a period of 3 years, and also requires certain documentation for an additional year. Under this Order, before beginning work in NRC jurisdiction, Mr. Shepherd must notify customers of NRC Order IA-08-014 and make it available for their review, must provide future employers with a copy of the Order and must also notify the

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NRC no less than 5 business days before conducting licensed activities within NRC jurisdiction. The provisions above will remain in effect for 3 years from the effective date of the Order. Mr. Shepherd must also determine whether the customer is under NRC jurisdiction, document his determination and state the basis for his determination. The provision will remain in effect for 3 years from the effective date of the Order. The documentation of this requirement must be maintained for a period of 4 years from the effective date of the Order. The NRC also issued a SL III notice of violation for Mr. Shepherd's failure to follow certain conditions set forth in NRC Order IA-08-014.

## Appendix D – Summary of Escalated Enforcement Actions Against Individuals\*

### Orders

Orders issued to individuals during 2013 are discussed in Appendix C.

### Notices of Violation

Anthony Bullard

IA-13-026

On July 29, 2013, the NRC issued a notice of violation to Mr. Anthony Bullard, formerly employed as a contract General Foreman at Florida Power and Light Company's (FPL) Turkey Point Nuclear Plant, for a violation of 10 CFR 50.5(a)(2) associated with a SL III violation involving his deliberate submittal to a licensee, information that he knew to be incomplete or inaccurate in some respect material to the NRC. Specifically, while employed as a contract General Foreman at the Turkey Point Nuclear Plant, Mr. Bullard signed paperwork certifying that the urine specimen he was providing during a random drug screen was his and was not adulterated. He then submitted a urine sample to FPL that he knew was not his own at the time of testing, in an attempt to subvert the testing. The information was material to the NRC because licensees, through fitness-for-duty testing, provide the requisite assurance that workplaces are free from the presence of illegal drugs and alcohol.

Joel A. Keown

IA-13-028

On October 7, 2013, the NRC issued Mr. Joel A. Keown, an information technology manager, formerly employed by Southern California Edison Company at its San Onofre Nuclear Generating Station (SONGS), a SL III violation of 10 CFR 73.56(g), "Personnel access authorization requirements for nuclear power plants." Specifically, Mr. Keown failed to report a driving under the influence arrest to SONGS management.

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\* Please note that cases involving security-related issues are not included

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**Appendix E – Summary of Escalated Enforcement Actions Against  
Nonlicensees  
(Vendors, Contractors and Certificate Holders)\***

**Confirmatory Orders**

Chicago Bridge & Iron  
Charlotte, North Carolina

EA-12-189

On September 16, 2013, the NRC issued a Confirmatory Order to Chicago Bridge & Iron (CB&I) to formalize commitments made as a result of an ADR mediation session. CB&I agreed to these commitments as part of a settlement agreement with the NRC regarding two violations of 10 CFR 52.5, "Employee protection," for: (1) terminating a former Quality Assurance Supervisor because he/she notified another NRC licensee of potential 10 CFR Part 21 issues regarding possible faulty rebar that may have been shipped to their facility by a third party vendor; and (2) prohibitive language in the company's Corporate Code of Conduct which prohibits, restricts, or otherwise discourages an employee from participating in a protected activity including notifying an NRC licensee of matters within the NRC's regulatory responsibility. As the result of the mediation, CB&I agreed to take a number of actions for all persons employed by CB&I, including contractors and subcontractors, excluding short term employees, who are engaged in work associated with NRC-regulated activities. Those actions include: (1) reinforcing through a written communication from CB&I's Chief Executive Officer the Company's strategy to improve its nuclear safety culture; (2) updating its nuclear safety culture and safety conscious work environment policies and documents to ensure they are consistent with and informed by NRC and industry guidance, (3) developing and/or revising the company's employee protection, nuclear safety culture and safety conscious work environment training; (4) establishing a uniform Executive Review Board process to ensure independent management review of all proposed significant adverse actions; and (5) performing tailored comprehensive nuclear safety culture assessments, including site surveys, of all CB&I nuclear business entities. In consideration of these commitments and subject to the satisfactory completion of the conditions of the Confirmatory Order by CB&I, the NRC exercised enforcement discretion and withdrew the two notices of violation and proposed imposition of civil penalties (totaling \$36,400) that were issued on April 18, 2013.

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\* Please note that cases involving security-related issues are not included

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