ENFORCEMENT PROGRAM ANNUAL REPORT

Calendar Year 2010

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

Contents

- TABLES –

- FIGURES -

- APPENDICES -

Executive Summary

The staff concluded that it effectively implemented the U.S. Nuclear Regulatory Commission (NRC) Enforcement Policy and Program in calendar year (CY) 2010. The relevant NRC Headquarters and regional offices continued to focus on appropriate and consistent enforcement of the agency's regulations.

Escalated Enforcement Action Data

In CY 2010, the agency issued 124 escalated enforcement actions, which included 23 proposed civil penalties totaling $673,700; 84 escalated notices of violation without civil penalties; and 17 enforcement orders including prohibitions of individuals from involvement in NRC-licensed activities and an imposition of a civil penalty. Although the monetary amount of civil penalties in CY 2010 is an increase from CY 2009, the total number of escalated enforcement actions did not significantly deviate from the previous 5-year average.

Noteworthy Program Accomplishments

On September 30, 2010 the revised Enforcement Policy (75 FR 60485) became effective. In addition, significant improvements were made to the Alternative Dispute Resolution program.

Significant Cases

In CY 2010, the agency processed a number of significant cases, which required extensive coordination and cooperation between internal and external stakeholders. These significant cases included: (1) Severity Level II and Severity Level III violations and a civil penalty issued to the U.S. Department of Veterans Affairs - Philadelphia Veterans Affairs Medical Center, (2) notices of violation associated with yellow significance determination process findings issued to five separate reactor facilities (Browns Ferry, Fort Calhoun, St. Lucie, Catawba, and Oconee), (3) Atomic Safety and Licensing Board Orders issued following successful settlement agreements reached during prehearing negotiations with two separate licensees (Mattingly Testing Services, Inc. and Babcock & Wilcox, Nuclear Operations Group), and (4) an Immediately Effective Confirmatory Order issued to the U.S. Department of Commerce's National Institute of Standards and Technology.

Near Term Focus Areas to Enhance Performance

In CY 2011, the staff intends to continue focusing on knowledge management issues. OE will enhance the consistent application of the agency's enforcement program among regions by conducting additional regional assessments and continue efforts to improve enforcement timeliness, particularly in investigation based cases.

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 NRC-licensed activities and associated activities 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 provide the NRC with 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 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 provides 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.

The NRC enforces compliance as necessary. 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 authority includes the use of notices of violation, civil penalties, demands for information, 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 SLIV for those of more than minor concern to SLI for the most significant.

For operating nuclear reactors, the enforcement process is supplemented by the Reactor Oversight Process (ROP). Under the ROP, violations are not normally assigned a SL and are instead assessed through the ROP and usually referred to as findings. Under this program, the risk significance of inspection findings is determined using the significance determination process (SDP), which assigns the colors of green, white, yellow, or red with increasing risk. 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. While the ROP can process most violations at operating power reactors, aspects of some violations cannot be addressed through the ROP and require the use of the traditional enforcement process. These include violations that resulted in actual safety or security consequences, violations that may impact the ability of the NRC to perform its regulatory oversight function, and violations involving willfulness. Additionally, while ROP findings are not normally subject to civil penalties, civil penalties are considered for any violation that involves actual consequences. SLIV violations and violations associated with green ROP findings are normally dispositioned as noncited violations (NCV). Inspection reports or inspection records document NCVs and briefly describe the corrective action that the licensee has taken or plans to take, if 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.

The Office of Enforcement (OE) develops policies and programs for enforcement of NRC requirements. In addition, OE exercises oversight of NRC enforcement, providing programmatic and implementation direction to regional and Headquarters offices conducting or involved in enforcement activities, and ensures that regional and program office enforcement programs are consistently implemented.

The Director of OE reports directly to the Deputy Executive Director for Materials, Waste, Research, State, Tribal, and Compliance Programs (DEDMRT), and is responsible for ensuring that DEDMRT is kept apprised of escalated actions. DEDMRT is consulted on any case involving novel issues, substantial legal, programmatic, or policy issues raised during the enforcement review process, or when the Director of OE believes that DEDMRT involvement is warranted. OE works in partnership with NRC Headquarters and regional offices to enforce the agency's requirements.

The NRC's enforcement Web site includes a variety of information such as the Enforcement Policy, the Enforcement Manual, and current temporary enforcement guidance contained in enforcement guidance memoranda (EMG). This Web site also contains information about significant enforcement actions issued to reactor and materials licensees, nonlicensees (vendors, contractors, and certificate holders), and individuals. Consistent with NRC practices and policies, most security-related actions and activities are not included on the NRC's public Web site. However, OE does include in its enforcement documents collection security orders that impose compensatory security requirements on various licensees. The enforcement Web site is located at http://www.nrc.gov/about-nrc/regulatory/enforcement.html.

In addition to enforcement activities, OE oversight responsibilities also include, in part, the Allegations Program, Employee Protection/Discrimination, and the ADR Program (both early-ADR and post-investigation ADR). Additional information about the responsibilities of OE is available at http://www.nrc.gov/about-nrc/organization/oefuncdesc.html on the NRC's public Web site.

B. Assessment of Escalated Enforcement Actions

Escalated enforcement actions include the following:

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

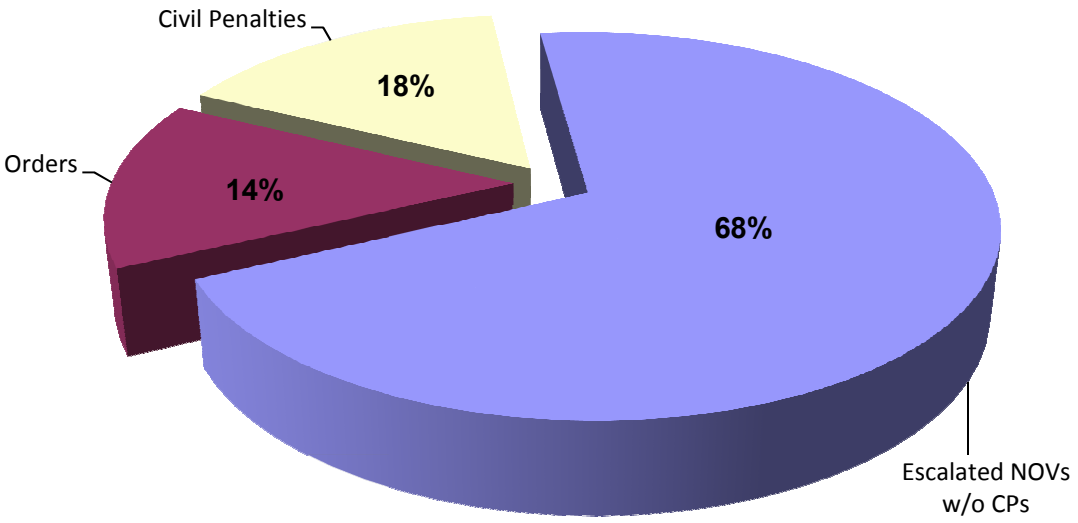

Figure 2: Escalated Enforcement by Type

Figure 2 above shows the distribution of escalated enforcement actions issued in calendar year (CY) 2010 by type of action. This includes the 124 total actions issued throughout the year to all licensees. The most common escalated enforcement action was an NOV without a civil penalty. The agency issued 84 NOVs without a civil penalty in CY 2010. In accordance with the Enforcement Policy, Section 2.3.4, civil penalties may not be warranted if adequate corrective action is taken by a licensee to prevent recurrence of an identified SLIII violation. Generally, the large percentage of NOVs without civil penalties reflects a strong licensee program with regard to responding to escalated enforcement action. The staff considers this a positive indicator that licensees are identifying and promptly correcting noncompliances. There were 23 actions involving a proposed civil penalty, which is greater than the number issued in CY 2009 and slightly greater than the 5-year average. There were 17 actions involving the issuance of an order, which is a decrease from the 31 orders issued in CY 2009 and is below the 5-year average.

Figure 3 below shows the distribution of enforcement actions based on the type of licensee to whom escalated enforcement actions were issued in CY 2010. For this chart, individual actions were included in the appropriate category and not counted separately. The following charts and the tables at the end of this report give further detail by identifying the region or program office that initiated the action, as well as the licensees, nonlicensees, and individuals involved.

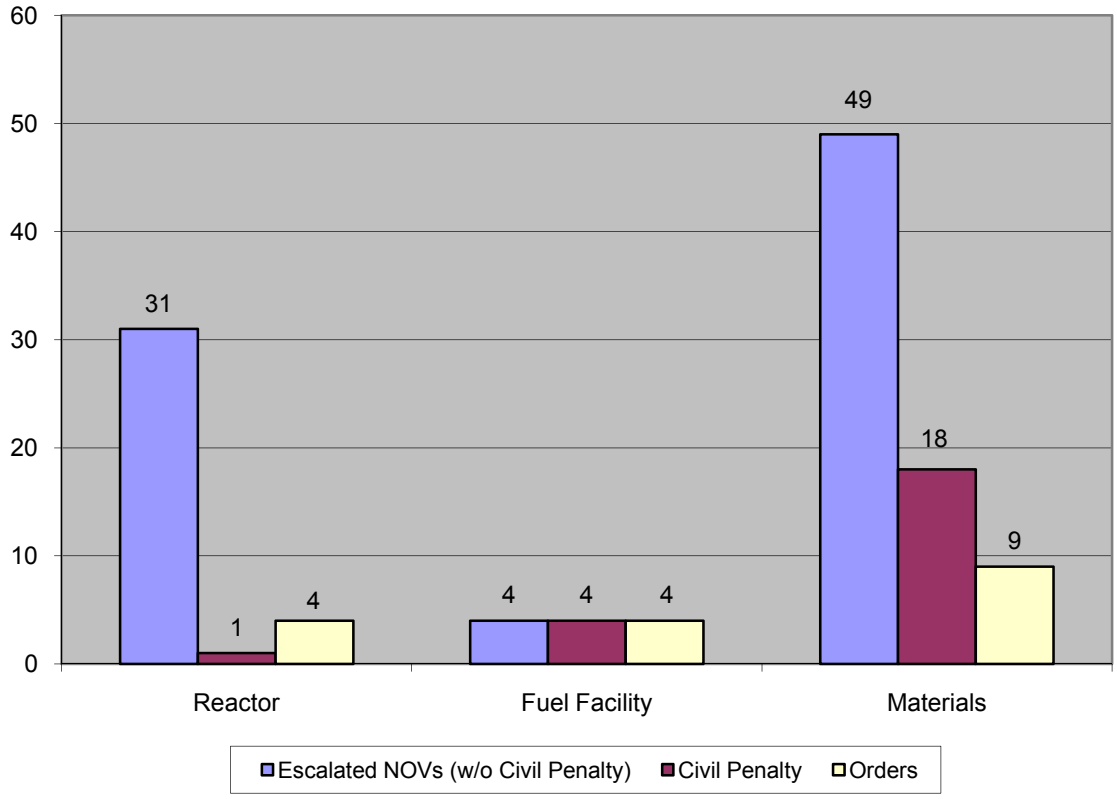

Figure 3: Escalated Enforcement by Licensee

The larger number of escalated enforcement actions issued to materials licensees reflects the significantly larger number of materials licenses (more than 22,000) when compared to licenses for operating reactors (104) and fuel facilities (13). The majority of the materials escalated enforcement actions without civil penalties were issued to gauge users and hospitals, as indicated in Table 4 (see page 29). This is consistent with the distribution of escalated enforcement actions issued to materials licensees in past years and reflects the increased emphasis on inspections for security and control of licensed materials. The number of escalated enforcement actions associated with reactor facilities did not increase significantly from the past year. However, the NRC issued five yellow findings in CY 2010 when no yellow or red findings were issued in CY 2009 and CY 2008. The total number of escalated enforcement actions issued to fuel cycle facilities when compared to those issued to materials or reactor licensees is consistent with the relative number of licenses. However, civil penalties issued to fuel facilities increased both in number and monetary amount.

1. Escalated Enforcement Trends

During CY 2010, the agency issued 124 escalated enforcement actions. This number is approximately equal to the average number of escalated enforcement actions issued for the last 5 years. Table 1 provides information on the total number of escalated enforcement actions from CY 2006 to CY 2010. Figure 4 provides this information in graphical form.

Table 1: Escalated Action Trends

	CY 2010	CY 2009	CY 2008	CY 2007	CY 2006	**Average**
Escalated NOVs (w/o CPs)	84	78	94	77	57	**78**
CPs	23	17	28	18	15	**20**
Orders	16	28	35	22	15	**23**
Orders Imposing CPs	1	3	0	1	0	**1**
Total	**124**	**126**	**157**	**118**	**87**	**122**

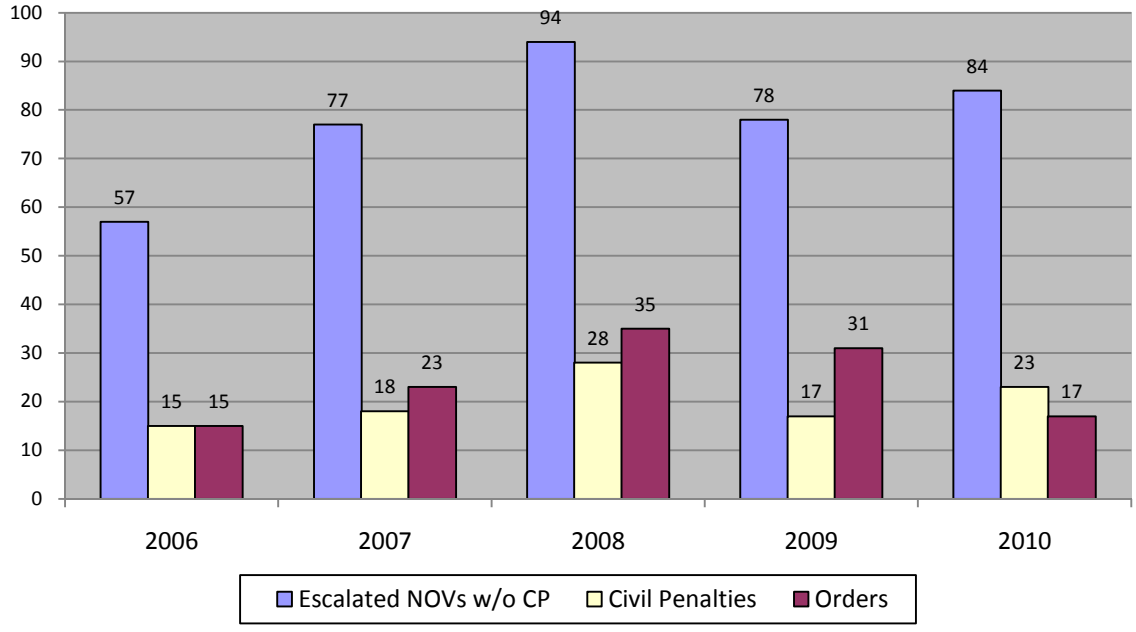

Figure 4: Escalated Action Trends (CY 2006 – CY 2010)

As noted in Table 1, the total number of escalated enforcement actions issued in CY 2010 is approximately equal to the 5-year average. However, the number of escalated NOVs not associated with a civil penalty increased from that issued in CY 2009 due, in part, to the increase in the non-civil penalty enforcement actions issued to fuel facility licensees.

2. Civil Penalty Actions

During CY 2010, the agency processed 23 enforcement actions involving proposed civil penalties. Eight of these actions involved willfulness. Willfulness is defined as either deliberate misconduct or careless disregard.

Information regarding willful violations is identified because such violations are of particular concern to the Commission. The NRC's regulatory program is based on licensees and their contractors, employees, and agents acting with integrity and communicating with candor; therefore, a violation involving willfulness may be considered more egregious than the underlying violation taken alone would have been, and the SL may be increased.

Table 2: Civil Penalty Information

	CY 2010	CY 2009	CY 2008	CY 2007	CY 2006	**Average**
Number of Proposed Civil Penalties	23	17	28	18	15	**20**
Number of Orders That Imposed Civil Penalties	1	3	0	1	0	**1**
Number of Civil Penalties Paid	21	15	29	17	16	**20**
Amount of Proposed Civil Penalties	$673,700	$174,000	$1,185,900	$383,200	$332,350	**$549,830**
Amount of Imposed Civil Penalties[1]	$32,500	$29,250	$0	$3,250	$0	**$13,000**
Amount of Civil Penalties Paid	$639,480	$279,750	$1,039,850	$446,500	$375,500	**$556,216**

[1] The NRC issues an "order imposing civil monetary penalty" when a licensee chooses not to pay a proposed civil penalty, unless a basis exists for withdrawal of the proposed penalty.

Table 2 provides information comparing civil penalty assessments for the current calendar year to the previous 4 years. 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. 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 2010 increased from the number proposed in CY 2009 and is approximately equal to the average number issued over the last 5 years. However, the total amount of proposed civil penalties increased significantly in CY 2010 (by almost a factor of 4 over that from CY 2009) mainly as a result of the civil penalties issued to the U.S. Department of Veterans Affairs - Philadelphia Veterans Affairs Medical Center (PVAMC), Nuclear Fuel Services (NFS), and Florida Power and Light's Turkey Point Plant.

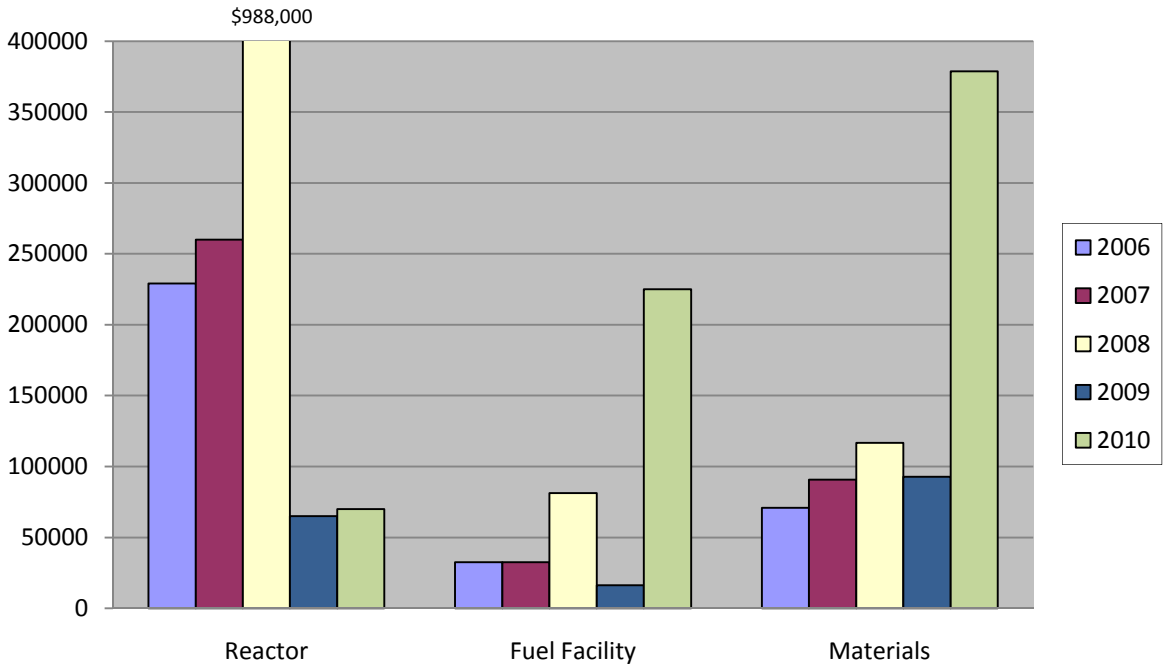

Figure 5: Comparison of Amount of Proposed Civil Penalties (in U.S. Dollar) by Licensee Type for CY 2006-2010

Figures 5 and 6 show the amount of civil penalties proposed for reactor, materials, and fuel facility licensees in each of the past 5 years. The data show a significant increase in the percentage of the total civil penalty amount issued to fuel cycle and materials licensees in CY 2010 and a significant decrease in the percent attributed to reactor licensees since CY 2008. The largest peaks are frequently the result of a single civil penalty (NFS, PVAMC). Consequently, a single year does not indicate a trend, an important factor to consider in assessing possible trends.

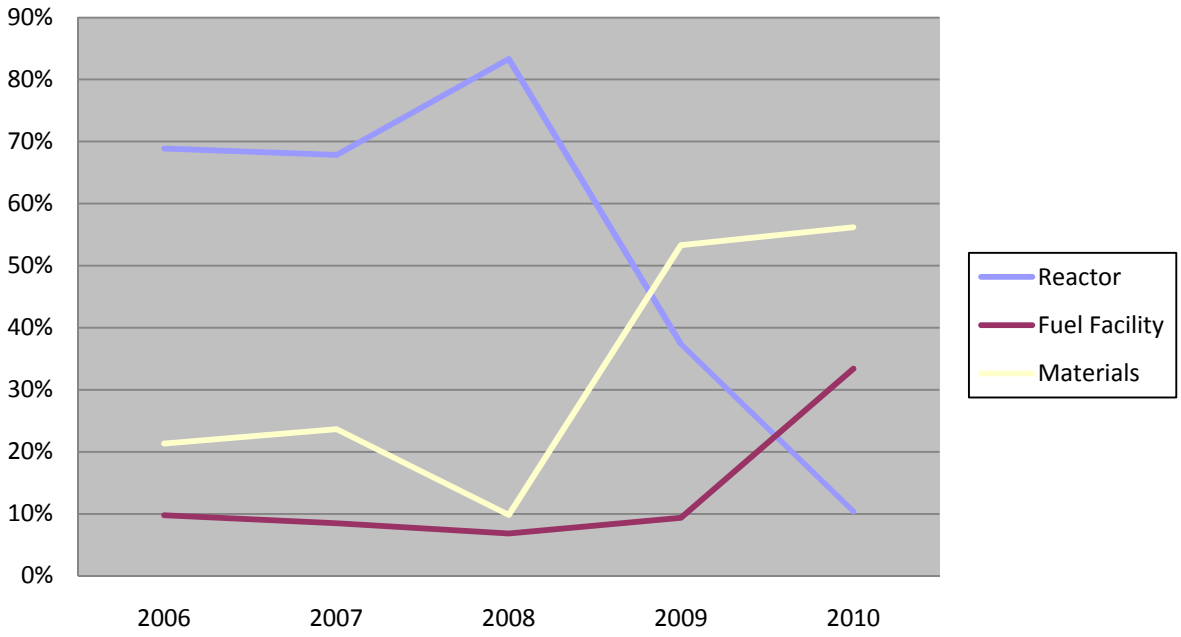

Figure 6: Percentage of Proposed Civil Penalties by Licensee Type for CY 2006-2010

Appendix A to this report includes a brief description of each of the civil penalty actions for CY 2010. 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.

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) if the identified violation is the first nonwillful SLIII violation identified in the past 2 years or two inspections at the licensee's facility and the licensee took adequate corrective action to prevent recurrence, or (2) if this was not the first nonwillful SLIII 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.

During CY 2010, the NRC issued 84 escalated NOVs without civil penalties. Of these violations, 17 were associated with white SDP findings under the ROP. Five violations were associated with yellow SDP findings. No violations were associated with red SDP findings. Seven NOVs associated with green SDP findings were issued to licensees. NOVs associated with green SDP findings are not considered escalated enforcement actions.

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. Alternative Dispute Resolution

The term "post-investigation ADR" refers to the use of mediation after the NRC Office of Investigations (OI) has completed its investigation and an enforcement panel has concluded that pursuit of an enforcement action appears to be warranted. Under the NRC's post-investigation ADR process, mediation may be offered at three points in the enforcement process for discrimination and other wrongdoing cases: (1) before a predecisional enforcement conference; (2) after an NOV is issued; or (3) when cases result in the issuance of an Order Imposing a Civil Penalty. Mediation is an informal and voluntary process in which a neutral mediator with no decision-making authority assists the parties in attempting to reach an agreement. The staff believes that for certain escalated enforcement actions mediation affords the staff the opportunity to institute broader or more comprehensive corrective actions that may work to better ensure public health and safety than outcomes typically achieved through the traditional enforcement process.

As depicted in Figure 7 below, the number of confirmatory orders arising out of the post-investigation ADR program declined from the uncharacteristically high level issued in CY 2009, returning to the more typical levels of approximately 10 confirmatory orders per year.

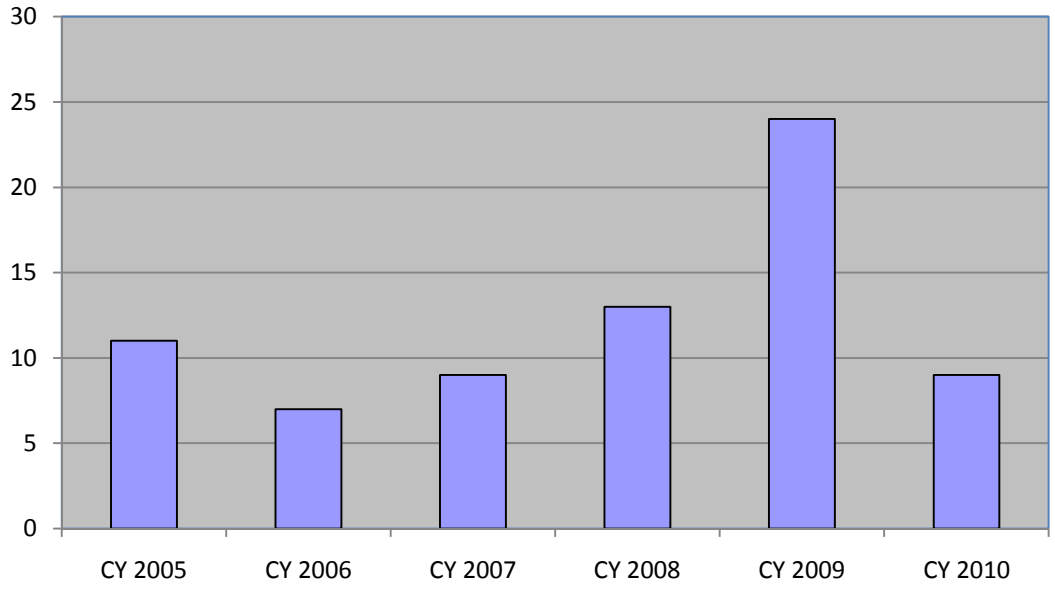

Figure 7: ADR Confirmatory Orders Issued in CY 2005-2010

During CY 2010, the NRC participated in 10 post-investigation ADR mediations where an agreement was reached (1 reactor licensee, 1 reactor licensee contractor, 6 materials licensees, and 2 individuals). All agreements were negotiated before a predecisional enforcement conference was held.

II. Enforcement Case Work

A. Significant Enforcement Cases

During CY 2010, the agency was involved in several significant enforcement actions that required coordination among internal and external stakeholders beyond the typical enforcement case and were noteworthy in some aspects.

U. S. Department of Veterans Affairs

On March 17, 2010, an NOV and Proposed Imposition of Civil Penalty in the amount of $227,500 was issued to the U.S. Department of Veterans Affairs (DVA) for violations identified as a result of NRC investigation and inspection activities at the Philadelphia Veterans Affairs Medical Center (PVAMC). The violations included two SLII violations assessed civil penalties, an additional SLII violation not assessed a civil penalty, two SLIII violations and a SLIII problem associated with two additional violations assessed civil penalties, and two separate SLIV violations. The NRC exercised enforcement discretion to escalate the civil penalty amount derived from the normal civil penalty assessment process for SLII violations and applied a single maximum statutory daily civil penalty amount to each of the identified SLII violations. In addition, base civil penalties were applied to each of the two SLIII violations and the SLIII problem. Based on these investigation and inspection activities into the DVA's reported 97 prostate brachytherapy medical events between January 2002 and May 2008, the NRC determined that a significant programmatic breakdown of the prostate brachytherapy program occurred. The NRC also determined that additional information was required from Dr. Gary Kao and Mr. Gregory Desobry, the physician and medical physicist respectively who were involved in a significant number of the reported events, to determine (1) whether there existed reasonable assurance of safety that these individuals could provide adequate protection without undue risk when using NRC licensed materials for the benefit of patients, and (2) if individual enforcement action was warranted. Subsequently, an order prohibiting involvement in NRC-licensed activities was issued to Dr. Kao on February 23, 2011, and, on the same date, an order was issued to Mr. Desobry requiring him to notify the NRC if he again began similar work, so that NRC could have an opportunity to assess the effectiveness of the corrective actions that he had taken in response to a Demand for Information (DFI) (See Section II.I for additional information regarding these DFIs). The NRC conducted additional inspections at the other DVA medical facilities operating under Master Material License (MML) 03-23853-01VA to determine the extent of condition regarding compliance with requirements associated with active prostate brachytherapy programs. Subsequently, an NOV and Proposed Imposition of Civil Penalty in the amount of $39,000 was issued to the DVA for several SLIII violations related to activities at (a) the VA Sierra Nevada Health Care System, Reno, NV; (b) the G.V. (Sonny) Montgomery VA Medical Center, Jackson, MI; (c) the VA Boston Healthcare System, Boston, MA; and (d) VA New York Harbor Health Care System, Brooklyn, NY. In addition, several SLIV violations were identified. During the conduct of inspection and enforcement activities, the NRC conducted open public meetings and participated

in congressional information sessions and responded to internal and external stakeholder questions regarding these matters. Additional violations were identified at DVA facilities unrelated to the above issues at PVAMC. An NOV and Proposed Imposition of Civil Penalty in the amount of $14,000 was issued to DVA for two SLIII violations identified as a result of a medical event that occurred at the San Diego Healthcare System facility. The medical event occurred when iodine-131 was injected into the wrong port of the gastrostomy feeding tube (g-tube) resulting in an underdose to the patient's thyroid and an unintended dose to the patient's stomach. Violations were also identified at four different DVA medical facilities and were dispositioned using enforcement discretion to not cite the licensee in accordance with the Enforcement Policy. In these cases, the NRC determined that the National Health Physics Program appropriately identified, and ensured corrective actions for the violations in accordance with the enforcement procedures described in MML 03-23853-01VA.

U. S. Department of Commerce

On March 1, 2010, an Immediately Effective Confirmatory Order was issued to the U.S. Department of Commerce's National Institute of Standards and Technology (NIST or licensee) to confirm commitments made as a result of an ADR mediation session held on January 5, 2010. In addition, on the same date, an Order Prohibiting Involvement in NRC-licensed activities for a period of one year was issued to Mr. Lawrence Grimm, a former Radiation Safety Officer (RSO) for NIST. These enforcement actions were based on 10 apparent violations of NRC requirements at NIST's facility in Boulder, CO, which were identified during NRC inspection and investigation activities conducted in response to a June 9, 2008 plutonium spill. The apparent violations involved the licensee's failure to conduct the radiation safety program at NIST-Boulder in accordance with NRC requirements and the conditions of the NIST-Boulder license, and the deliberate failure of the former RSO to provide complete and accurate information to the NRC. In response to the June 9, 2008 event, NIST implemented extensive corrective actions including: (1) decontaminating the NIST-Boulder facility, (2) designating new and additional managers with responsibility for oversight of the radiation and overall safety programs, (3) implementing a hazards analysis and control policy, and (4) undertaking efforts to evaluate and improve the safety culture at NIST. In addition, as part of the ADR settlement agreement, NIST agreed to take a number of other actions including: (1) hiring an independent consultant to evaluate the effectiveness of its radiation safety program, (2) submitting its annual audits to the NRC, (3) improving its new employee indoctrination program regarding radiation safety, (4) making specific improvements to its radiation safety training program, (5) submitting a license amendment to reduce the number of authorized radionuclides at the NIST-Boulder facility, (6) implementing a radiation hazards analysis process, (7) revising the Ionizing Radiation Safety Committee's charter to include additional oversight of communications with the NRC, and (8) paying a civil penalty in the amount of $10,000. In consideration of these commitments, and actions already completed by NIST, the NRC agreed not to pursue any additional enforcement actions for the apparent violations. Mr. Grimm participated in a predecisional enforcement conference (PEC) on January 7, 2010, at his request, in lieu of ADR. At the PEC, Mr. Grimm acknowledged that the information he had provided the NRC in a license amendment request was not complete and accurate, but denied that he had deliberately violated NRC requirements. The staff considered

this information but determined that, in fact, a deliberate violation of NRC requirements did occur an issued the Order. Subsequently, Mr. Grimm requested ADR. However, an agreement could not be reached. Therefore, the terms and conditions of the Order Prohibiting Involvement in NRC-licensed activities for a period of one year remained in effect.

Violations Associated with Yellow Findings

In CY 2010, the NRC issued NOVs associated with yellow SDP findings to five different reactor licensees. This is noteworthy because no violations associated with yellow findings were issued in CY 2009 or CY 2008. Short summaries of the non-security related cases follow:

- On April 19, 2010, the Tennessee Valley Authority was issued an NOV for two violations associated with yellow and white SDP findings at its Browns Ferry Nuclear Plant, Units 1, 2, and 3. The yellow finding was associated with a violation for multiple examples, in all three units, of a failure to satisfy fire protection requirements for safe shutdown capability, which could have delayed proper operator response to a major disabling fire event.

- On August 12, 2010, Duke Energy Carolinas, LLC, was issued an NOV for a violation associated with yellow and white SDP findings at its Oconee Nuclear Station, Units 1, 2 and 3. The yellow finding involved the failure to meet technical specification minimum flow requirements for the Standby Shutdown Facility (SSF) Reactor Coolant Makeup (RCM) system and the length of time that the system was inoperable. The licensee identified the cause of the reduced flow as a partially blocked filter, but failed to identify and correct a similar condition at Units 2 and 3 in a timely manner.

- On October 6, 2010, the Omaha Public Power District was issued an NOV for a violation associated with a yellow SDP finding at its Fort Calhoun Station. This finding involved an inadequate licensee procedure for coping with external flooding events to protect vital facilities and equipment to the level described in the Updated Final Safety Analysis Report. This could have resulted in flooding with an impact multiple, redundant trains of equipment required for safe shutdown of the plant.

- On April 19, 2010, Florida Power & Light Company was issued an NOV for a violation associated with a yellow SDP finding at its St. Lucie Nuclear Plant. This finding involved the failure to meet the requirements of 10 CFR 50, Appendix B, Criterion XVI, “Corrective Action.” In 2008, the licensee experienced an air in-leakage event into the closed cooling water system which affected the system’s ability to supply adequate cooling to essential equipment. The licensee’s troubleshooting and corrective actions failed to identify the source of the air in-leakage, which resulted in a similar event in 2009.

Babcock and Wilcox Nuclear Operations Group, Inc.

On February 23, 2010, an NOV and Proposed Imposition of Civil Penalty (Notice) in the amount of $32,500 was issued to Babcock & Wilcox, Nuclear Operations Group (B&W or the licensee). This action was based on a SLIII violation associated with the licensee's failure to include instructions in a plant procedure addressing the proper method to use when neutralizing acid spills. The Notice concerned an event on April 28, 2008 in which a process operator took inappropriate actions to neutralize a spill by adding sodium hydroxide, a strong base, to a spill of hydrogen fluoride acid. The acid and base combination reacted violently and resulted in the operator sustaining an ocular exposure which, the staff concluded, could have led to irreversible or other serious, long-lasting health effects. The letter dated February 23, 2010, transmitting this Notice also withdrew a SLIII violation and proposed civil penalty similarly related to the event on April 28, 2008. This violation had been previously issued on October 20, 2008. The licensee did not agree with the staff's characterization of the issues and, by letter dated March 31, 2010, denied that a violation had occurred. The NRC staff evaluated the licensee's written response and concluded that a violation had occurred as stated. Accordingly, the agency issued an Order Imposing a Civil Monetary Penalty in the amount of $32,500 on June 15, 2010. The licensee continued to disagree with the staff's assessment of the regulatory issues and, in accordance with the order and 10 CFR 2.205, "Civil Penalties," on July 27, 2010, requested that the Atomic Safety and Licensing Board (ASLB or the Board) conduct a hearing into these matters. See Section II.B, "Hearing Activities" for further details.

Mattingly Testing Services, Inc.

On September 2, 2010, an Immediately Effective Order Revoking License was issued to Mattingly Testing Services, Inc. (MTS or the licensee) for multiple violations identified during an NRC inspection and investigation. On the same day, an Immediately Effective Order Prohibiting Involvement in NRC-Licensed Activities for a period of 7 years was issued to Mr. Mark Ficek, president and owner of MTS. In part, these actions were based on (1) the licensee's deliberate failure to implement specified actions required by Confirmatory Order (EA-08-271) which was issued on March 6, 2009, to formalize commitments made as a result of an ADR mediation session; (2) the licensee's deliberate failure to establish and maintain a prearranged response plan with the Local Law Enforcement Agency (LLEA) in accordance with the requirements of the Increased Controls Order; (3) the deliberate failure by the licensee's president to provide complete and accurate information to an NRC inspector, and under oath to an NRC investigator, regarding the licensee's effort to establish a prearranged response plan with the LLEA; (4) the licensee's failure to maintain a dependable means to detect, assess, and respond to unauthorized access to radioactive materials as required by the Increased Controls Order; (5) the licensee's failure to properly secure a radiographic exposure device for transport that led to the device being temporarily lost; and, (6) the licensee's willful failure to immediately notify the NRC about the lost radiographic exposure device. Mr. Ficek did not agree with the NRC characterization of the issues and, on September 22, 2010 requested, in accordance with the order and 10 CFR 2.205, that the ASLB conduct a hearing into these matters. See Section II.B, "Hearing Activities" for further details.

B. Hearing Activities

During CY 2010, two requests were made for hearings before the ASLB relating to enforcement actions against (1) B&W Nuclear Operations Group, and (2) MTS and its former president and owner. Although the ASLB established review boards, each case was successfully closed before the conduct of any adjudicatory proceedings when the Board approved settlement agreements reached between the NRC and the affected parties.

Babcock and Wilcox Nuclear Operations Group, Inc.

On August 11, 2010, the ASLB granted a request by B&W, Nuclear Operations Group (B&W or licensee) for a hearing to resolve issues identified during a March 23 through June 21, 2008 inspection. On August 13, 2010, the licensee and the NRC jointly submitted a motion asking the Board to hold this administrative enforcement proceeding in abeyance pending the outcome of proposed settlement negotiations. On October 12, 2010, the ASLB approved a Settlement Agreement successfully negotiated by the NRC and B&W. Pursuant to the Settlement Agreement: (1) B&W will not challenge the existence of a violation of NRC requirements resulting from the chemical exposure event which occurred at the B&W Lynchburg facility on April 28, 2008, and will seek dismissal of its Request for Hearing; (2) the NRC will recategorize the February 23, 2010 NOV from a SLIII violation to a violation with no assigned SL; (3) the NRC will withdraw the Order Imposing Civil Penalty dated June 15, 2010, within 21 days of the Board Order approving the settlement agreement; (4) B&W will pay $32,500, in lieu of the withdrawn civil penalty, as a settlement payment, within 21 days of the Board Order and in accordance with NUREG/BR-0254; (5) B&W will perform one quarterly emergency drill with the Lynchburg General Hospital responding to a hydrofluoric acid-exposed worker within 12 months of the Board Order; and, (6) B&W will give a presentation at the 2011 Fuel Cycle Information Exchange addressing lessons learned from the chemical exposure event which occurred on April 28, 2008. The complete Board Order can be viewed from the NRC's Agency-Wide Document Access and Management System (ADAMS) at ML102850179. For more information regarding this case, see the discussion in Section II.A of this report concerning B&W.

Mattingly Testing Services, Inc.

On October 6, 2010, the ASLB granted a request by Mr. Mark Ficek, president and owner of Mattingly Testing Services, Inc. (MTS), for a hearing to resolve issues associated with two orders issued by the NRC on September 2, 2010, associated with violations identified during an NRC investigation. These orders were: (1) an Order Revoking License to MTS; and, (2) an Order Prohibiting Involvement in NRC-Licensed Activities for a period of seven years to Mr. Ficek. On the same date, the ASLB denied a request by Ms. Dayna Thompson, an employee of MTS, to forgo the immediate effectiveness of the MTS Order. On November 4, 2010, the licensee and NRC jointly submitted a motion asking the Board to hold this administrative enforcement proceeding in abeyance pending the outcome of proposed settlement negotiations. On February 22, 2011, the ASLB approved a Settlement Agreement successfully negotiated by the NRC and Mr. Ficek. The Board found that its terms reflected a fair

and reasonable settlement of these matters in keeping with the objectives of the NRC's Enforcement Policy, and satisfied the requirements of 10CFR2.338(g) and (h). The Board Order stipulates, in part, that Mr. Ficek will not own a controlling share and/or interest of a NRC licensee, Mr. Ficek will refrain from engaging in NRC-licensed activities until September 2, 2017, the revoked MTS license will not be reinstated, and for a period of three years, Mr. Ficek will provide notice to the Director, Office of Enforcement 10 days prior to beginning employment involving certain specified NRC-licensed activities. The complete Board Order can be viewed in ADAMS at ML110530327. For more information regarding this case, see the discussion in Section II.A of this report concerning Mattingly Testing Service, Inc.

C. Orders

During CY 2010, the NRC issued 17 orders to licensees and to individuals. These included nine confirmatory orders that were issued to confirm commitments associated with ADR settlement agreements, four orders issued to individuals (three of which restricted their involvement in NRC licensed-activities), and one order imposing a civil penalty.

Two of the four orders issued to individuals resulted from successful ADR mediation sessions. Orders issued to individuals restricting involvement in NRC licensed activities included: one individual being prohibited from involvement in NRC-licensed activities for 7 years; one individual being prohibited from involvement in NRC-licensed activities for 5 years; and one individual being prohibited from involvement in NRC-licensed activities for 1 year.

As seen in Table 1, the number of orders issued in CY 2010 decreased from CY 2009, partly because of a decrease in the number of cases involving ADR and a decrease in the number of cases involving individuals.

Appendix C includes a brief description of the enforcement orders issued in CY 2010.

D. Cases Supported by the Office of Investigations

In CY 2010, an OI Report supported 26 percent or 32 of the 124 escalated actions:

- 8 of the 23 escalated NOV cases with civil penalties (35 percent)
- 9 of the 84 escalated NOVs without civil penalties (10 percent)
- 15 of the 17 enforcement orders (88 percent)

The 32 cases supported by an OI investigation represent a 32 percent decrease from the 47 cases supported in CY 2009 and is a decrease in the average number of OI supported cases over previous years. The percentage of cases supported by OI investigations also decreased from CY 2009.

E. Actions Involving Individuals and Nonlicensee Organizations

During CY 2010, the agency issued 11 escalated 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 CY 2010. Appendix C provides summaries of the orders that were issued to individuals, including those orders prohibiting or limiting their participation in NRC-licensed activities. Appendix D summarizes the NOVs issued to individuals in CY 2010.

The number of escalated actions issued to individuals in CY 2010 decreased from the 17 escalated actions issued to individuals in CY 2009.

The agency issued two escalated enforcement actions to nonlicensees in CY 2010. Appendix E provides a summary of these actions.

F. Cases Involving Discrimination

During CY 2010, one case involving an allegation of discrimination was resolved using post-investigation ADR. On September 10, 2010, a Confirmatory Order was issued to confirm commitments made as result of an ADR session, held on August 24, 2010, between Stone & Webster Construction, Inc., a Shaw Group company and the NRC. This Confirmatory Order arose out of the U.S. Department of Labor Administrative Review Board's (ARB) September 4, 2009 Final Decision and Order of Remand (ARB Case No. 06-041), reversing a Department of Labor Administrative Law Judge's recommended Decision and Order concluding that Shaw had not retaliated against a former painter foreman at the Browns Ferry Nuclear Plant.

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 what actions should be taken in a particular case, notwithstanding the guidance contained in the Enforcement Policy. After considering the general tenets of the Enforcement Policy and the safety and security significance of a violation and its surrounding circumstances, the NRC may exercise judgment and discretion in determining the SLs of violations and the appropriate enforcement sanctions.

In CY 2010, the NRC exercised enforcement discretion in 34 cases to address violations of NRC requirements. Below is a discussion of the more significant cases dispositioned with discretion in CY 2010.

1. Discretion Involving Enforcement Guidance

The NRC exercised discretion in a number of cases involving the use of either the Interim Enforcement Policy guidance related to fire protection issues or Enforcement Guidance Memoranda (EGM).

- The NRC continued to perform fire protection inspections at power reactor sites to verify compliance with requirements of 10 CFR 50, Appendix R. Violations of these requirements which 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. There were three documented cases involving this type of discretion. Violations involving multiple fire induced circuit faults identified at sites who are not transitioning to NFPA 805 and meet the criteria as stated in EGM-09-002, "Enforcement Discretion For Certain Fire Induced Circuit Faults", also warranted enforcement discretion. There was one documented case involving this type of discretion. However, discretion was not exercised in six instances where noncompliance with fire protection requirements was identified and the criteria for exercise of discretion as stated above were not satisfied. NOVs were issued in these cases.

- The agency dispositioned 10 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 for violations of the NARM requirements if certain criteria are met as described in EGM-09-004.

2. Discretion Involving Special Circumstances

Thirteen cases involved use of discretion in accordance with Section 3.5 of the Enforcement Policy (or Section VII.B.6 of the former policy). In each case, the staff determined that the facts supported issuance of a closeout letter to the licensee in lieu of an NOV. Below is a discussion of the more significant cases dispositioned in CY 2010.

- Violations identified at four different DVA medical facilities were dispositioned using enforcement discretion in accordance with Section 3.5 of the Enforcement Policy. In each case, the staff determined that the National Health Physics Program staff had appropriately identified and ensured corrective actions for the violations in accordance with the enforcement procedures described in the MML and that the level of enforcement (SLIII) taken by the licensee against the permittee would not have been exceeded by the level of action that would have been taken by the NRC.

- The NRC dispositioned violations involving small reactor coolant pressure boundary leakage (below detection thresholds) at three operating reactors in accordance with Section 3.5 of the Enforcement Policy. In each case, the staff concluded that, although any reactor coolant system leakage at power constitutes a violation and would normally be categorized at SLIV, the licensee's actions did

not contribute to a degraded condition, and were reasonable to identify and address the matter. Furthermore, the staff concluded that the licensee's quality assurance program or other control measures could not have been reasonably expected to detect the condition.

3. Discretion Used in Determining the Amount of a Civil Penalty

The staff exercised enforcement discretion, in accordance with Section 3.6 of the Enforcement Policy, to escalate or mitigate the amount of a civil penalty in two separate cases to ensure that the proposed civil penalty reflected the significance of the circumstances of the violation. The resultant proposed civil penalty differed from the amount determined by the normal civil penalty assessment process described in Section 2.3.4 of the Enforcement Policy.

- In recognition of particularly poor performance by NFS and previous escalated enforcement history at its facility, the staff exercised enforcement discretion and doubled the $70,000 civil penalty derived from the normal civil penalty assessment process for a SLIII problem associated with an event which occurred on October 13, 2009. A proposed Imposition of a Civil Penalty in the amount of $140,000 was issued to NFS on September 2, 2010. (See Appendix A for further details).

- The NRC concluded that enforcement discretion to forego proposing a civil penalty was appropriate in the case of a Global Nuclear Fuels – Americas, LLC (GNF-A) problem identified in an NRC letter dated June 9, 2010. The basis for the agency's conclusion was that the staff had not previously found, during the integrated safety analysis (ISA) summary review and subsequent approval of a renewed license, that GNF-A was not meeting regulatory requirements, and GNF-A believed the NRC staff was aware of the manner in which it was implementing its ISA methodology. Normally, a base civil penalty would be proposed for a SLIII problem. (See Appendix B for further details).

4. Notices of Enforcement Discretion

Occasionally, circumstances may arise where a power reactor licensee's or gaseous diffusion plant certificate holder'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 requirement(s). The staff exercises this enforcement discretion, designated as a notice of enforcement discretion (NOED) in accordance with Section 3.7 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 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 two NOEDs during CY 2010.

- NOED 10-4-001, issued April 8, 2010, to Union Electric Company, (Callaway Plant, Unit 1), provided enforcement discretion that allowed the licensee to extend the 72-hour completion time for Technical Specification 3.8.1, "AC Sources – Operating," Required Actions B.4., by 48 hours to restore a diesel generator or commence a plant shutdown.

- NOED 10-02-002, issued May 6, 2010, to U.S. Enrichment Corporation, (Paducah Gaseous Diffusion Plant), provided enforcement discretion that allowed the licensee to extend the 24-hour completion time for Technical Safety Requirements (TSR) Limiting Condition for Operations (LCO) 2.4.3.4, "Action A, Completion Time for the R-114 Coolant Overpressure Control System", by 10 days in order to place the number of affected cells in "mode Cascade 1 with process motors deenergized" in a planned and safe manner.

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 the finding of a noncompliance.

During CY 2010, the agency issued 124 escalated enforcement actions to reactors, materials, and fuel facility licensees of which two were disputed. The NRC withdrew both of these disputed actions. Specifically, on October 23, 2010, the NRC withdrew an NOV for a SLIII violation and a proposed imposition of civil penalty issued to B&W Nuclear Operations Group, Inc. (EA-08-204) based on additional review by the NRC staff. However, based on its review, the NRC issued a revised NOV and corresponding civil penalty to the licensee. (See Section II.A and Appendix C for further details). On May 3, 2010, the NRC withdrew an NOV for a SLIII violation involving inadequate control of a portable gauge and a proposed imposition of civil penalty issued to a licensee because of additional new information provided by the licensee that had previously not been available to the staff.

During CY 2010, the agency issued approximately 1000 nonescalated enforcement actions to reactor, materials, and fuel facility licensees. Of these actions, 12 nonescalated enforcement actions were disputed. In CY 2010, the NRC withdrew only one of these disputed actions.

I. Demand for Information

When the NRC concludes that additional information is necessary to determine whether an order or other enforcement action is warranted, the agency may issue a DFI (see 10 CFR 2.204, "Demand for Information") to a licensee or other person subject to the jurisdiction of the Commission. A DFI requires the licensee or other person to provide more information or a context for its action(s) so that the NRC is able to complete its assessment of the issue and make a final enforcement determination.

During CY 2010, the NRC issued three DFIs as follows:

- Vermont Yankee (EA-10-034) – On March 1, 2010, a DFI was issued to Entergy Nuclear Operations to confirm that information provided to the NRC by certain Vermont Yankee employees was accurate and that the impact of recent personnel changes at the site had been assessed with regards to regulatory program performance and safety culture. This DFI was necessary to ensure public health and safety in light of inaccurate remarks made by some plant officials and staff to the State of Vermont related to underground piping at the facility. On March 31, 2010, Entergy responded to the DFI and concluded that the information provided to the NRC by certain employees was complete and accurate. On June 17, 2010, the NRC issued Inspection Report 05000271/2010007 which provided the results of an NRC independent review of Entergy's investigation and concluded that (1) the information considered material that Entergy provided to the NRC was complete and accurate; (2) as a result, no corrective actions were necessary for materiality deficiencies; (3) in light of organizational changes resulting from the Entergy investigation, Entergy provided for continued acceptable regulatory performance at Vermont Yankee; (4) the Entergy investigation and actions did not have a negative impact on the safety-conscious work environment; and, (5) Entergy made its investigation available to the NRC for review. On June 17, 2010, the NRC closed the DFI by sending a letter to Entergy in which the NRC concluded that Entergy had met the requirements of the DFI and that no further regulatory action concerning this matter was warranted.

- Dr. Gary Kao (IA-09-035) – On May 24, 2010, a DFI was issued to a former physician at the DVA medical facility in Philadelphia, to determine whether reasonable assurance existed, that Dr. Kao could provide adequate protection when using NRC licensed materials for the benefit of patients without undue risk. Dr. Kao's response to this DFI, dated June 1, 2010, supplemented a response to a prior DFI issued in 2009. The NRC staff assessed Dr. Kao's response in light of his involvement in numerous medical events that occurred at the DVA facility in Philadelphia from January 2002 through May 2008, and determined that additional actions were necessary to ensure public health and safety. As a result, on February 23, 2011, the NRC issued an order prohibiting Dr. Kao from involvement in NRC-licensed activities.

- Mr. Gregory Desobry (IA-09-279) – On May 24, 2010, a DFI was issued to a former medical physicist at the DVA medical facility in Philadelphia, to determine whether reasonable assurance existed, that Mr. Desobry could provide adequate protection when using NRC licensed materials for the benefit of patients without undue risk. Mr. Desobry's response to this DFI, dated June 28, 2010, provided the NRC with the information it sought and indicated that Mr. Desobry had taken steps to ensure that he could safely use radioactive material in treatment of patients. After considering the information in his response, the NRC issued an order to Mr. Desobry on February 23, 2011, which required him to notify the NRC if he resumed similar work, so that the NRC could have an opportunity to assess the effectiveness of the corrective actions that he had taken.

III. Ongoing Enforcement Program Activities

A. Enforcement Policy Changes and Enforcement Guidance Memoranda

The NRC Enforcement Policy is a living document and is periodically revised to reflect regulatory changes, experience, and stakeholder input. On January 25, 2007, the NRC published a notice in the *Federal Register* (72 FR 3429) announcing that the agency was undertaking a major revision of its Enforcement Policy. The purpose of the revision was to add new guidance based on changes in regulations, to add guidance on issues not directly addressed in the current policy, to clarify the use of terms, and to remove or revise outdated guidance. Notices published in the *Federal Register* on September 15, 2008, (73 FR 53286) and October 16, 2008, (73 FR 61442) announced that a draft of the proposed major revision to the Enforcement Policy was available and that the NRC was soliciting written comments from interested parties. The public comment period ended on November 14, 2008.

During the 2008 public comment period the NRC staff received a wide range of comments on the proposed revised policy from external stakeholders. A summary of the comments and the NRC's responses were made available at the NRC's Electronic Reading Room and in ADAMS (Accession No. ML091830260).

Based on comments received during the 2008 comment period, the staff substantially revised the violation examples contained in the proposed revised policy. On June 8, 2009, the NRC published a notice of the availability of the draft and a request for comments regarding the revised violation examples (74 FR 27191). The public comments on the revised violation examples and NRC responses to those comments were made available at the NRC's Electronic Reading Room and in ADAMS (Accession No. ML092650309).

In August 2009, the staff made publicly available a preliminary final draft of the proposed revised policy. This draft reflected changes the staff made to the proposed revised policy as a result of comments received during the 2008 public comment period. (Note: In August 2009 the staff was still evaluating comments on the violation examples received during the June 2009 public comment period; therefore, the violation examples contained in the August 2009 preliminary final draft were those that had been made publicly available for comment in 2008). The preliminary draft of the revised Policy was made available at the NRC's Electronic Reading Room and via ADAMS (Accession No. ML092240160).

In November 2009, the staff made publicly available the latest draft of the proposed revised Enforcement Policy. This draft reflected changes the staff had made to the proposed revised Policy as a result of comments received on the revised violation examples, as well as other edits made since the previous draft was made publicly available in August 2009. The draft revised Policy was made available at NRC's Electronic Reading Room and in ADAMS (Accession No. ML093430119).

On December 30, 2009, the staff forwarded the proposed revised Enforcement Policy to the Commission for review and approval (SECY-09-0190), "Major Revision to NRC Enforcement Policy." On August 27, 2010, the Commission approved the revised Enforcement Policy (Staff Requirements Memorandum (SRM) -SECY-09-0190). This SRM also directed the NRC staff to evaluate specific topics for inclusion in a future Policy revision. Those topics included: (1) guidance for determining when daily civil penalties are appropriate; (2) providing credit to fuel cycle licensees with effective corrective action programs; and (3) re-evaluating the Enforcement Policy related to construction activities, including where discretion may be appropriate.

The revised Policy became effective on September 30, 2010 (75 FR 60485). Some of the significant changes in the 2010 Policy included: (1) increasing from 8 to 14 the violation examples activity areas; (2) adding base civil penalties for Uranium Enrichment Facilities and a High Level Waste Repository; (3) increasing the base civil penalty for Uranium Conversion Facilities; and (4) adding a Glossary of enforcement terms.

OE issues EGMs to provide guidance in the interpretation of specific provisions of the Enforcement Policy. A link to the full text of publicly available EGMs appear in Appendix A to the NRC Enforcement Manual. The office issued two EGMs in CY 2010, which are summarized below:

- June 1, 2010, EGM-10-001, "Dispositioning Violations of Inservice Examination and Testing Requirements for Dynamic Restraints (Snubbers)". The purpose of this EGM is to provide guidance for the disposition of violations of NRC requirements for inservice examination and testing of dynamic restraints (snubbers).

- June 14, 2010, EGM-10-002, "Guidance for Dispositioning Enforcement Issues Associated with Orders Imposing Fingerprinting and Criminal History Records Check Requirements for Unescorted Access to Certain Radioactive Material." The staff will use this EGM in conjunction with EGM 06-003, "Guidance for Dispositioning Enforcement Issues Associated with Orders Imposing Controls for Licensees Authorized to Possess Radioactive Material Quantities of Concern," dated September 28, 2006, for matters of enforcement related to increased control requirements.

B. Knowledge Management

In CY 2010, OE engaged in several knowledge management activities. Some of the ongoing activities being conducted to maintain an adequate knowledge base included supporting training, completing reviews and self assessments, developing additional internal office procedures, and conducting a counterpart meeting.

Enforcement Counterpart Meeting

In March 2010, regional and Headquarters enforcement staff held a counterpart meeting to discuss ways to improve the enforcement process and communications among staff. The meeting resulted in a number of ideas that are improving the handling of casework. Examples included: a decision to consider more efficient, yet as effective, outcomes for specific type cases; initiatives to improve timeliness, particularly those related to investigations; and specific Enforcement Manual updates that would improve the guidance in the future.

Training

OE supported Nuclear Safety Professional Development Program members on rotational assignments to the office. The knowledge gained by those staff members will improve understanding of the Enforcement Program in the field.

Headquarters and regional enforcement staff engaged in outreach opportunities to internal stakeholders on enforcement and ADR processes during the counterpart meeting and other office training sessions. Examples included multiple training sessions provided by OE in both Regions II and IV regarding the revised Enforcement Policy, a Region I winter seminar presentation by OE management, and various ADR-related outreach initiatives such as an improved internal Web page and support for mediator training.

Reviews and Self Assessments

During 2010, OE completed self assessments related to implementation of the Enforcement Program. Implementation of the new Enforcement Action Tracking System, investigation based case timeliness, and delegation of authority guidance were areas audited during the calendar year. In general, these assessments identified that the specific aspects of the Enforcement Program reviewed were being implemented satisfactorily; however, improvements could be made, particularly in the area of timeliness. As such, a working group was established and those results discussed elsewhere in this report. Improvement of this specific area was an ongoing effort during the year.

Development of a much larger assessment of regional implementation of the enforcement program was conducted. With the overall goals of improving knowledge transfer between regions and reviewing the conduct of the regional enforcement programs, these assessments will provide significant programmatic knowledge management opportunities. OE procedures were developed in CY 2010 outlining these expectations. The first assessment was completed in February 2011 at Region III and plans were completed for a second regional assessment in CY 2011.

Development of Office Specific Procedures

OE continued developing and improving internal office procedures providing guidance on accomplishing specific tasks unique to Headquarters enforcement staff. Many of the procedures had been accomplished by on-the-job training and experience.

Procedures for enforcement specialist qualifications, including a specific employee protection qualification card were issued. The most significant example involved development of an electronic feedback form to document and track recommended changes, primarily for the Enforcement Manual, which provides policy implementation guidance. The electronic form and database will improve both efficiency and effectiveness in making improvements to the Enforcement Manual, contributing significantly to a high quality guidance document.

C. Regional Accomplishments

During CY 2010, 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, such as OI.

These assessments included the following reviews:

- reactor and materials program nonescalated enforcement actions
- technical specification limiting conditions for operation (TS LCO) and fitness for duty (FFD) violations
- regional instructions compared to guidance in the Enforcement Policy, Enforcement Manual, management directives, and inspection procedures

Overall, the self-assessments showed that the regions were effectively implementing the Enforcement Program. However, the reviews did identify the need for improved enforcement guidance and instructions, especially in the area of TS LCO and FFD violations.

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

Regional enforcement representatives also provided support for agency enforcement initiatives and activities including the following:

- a Lean Six Sigma Post Investigation ADR project
- an intermediate timeliness goal improvement project
- the Integrated Regulatory Review Service (IRRS) Mission Program
- the January 2010 Commission meeting on the revised Enforcement Policy, the Allegation Program, and the ADR Program
- the public predecisional enforcement conference with the DVA related to the medical events at the DVA medical facility in Philadelphia

Table 3: CY 2010 – Escalated Enforcement Actions by Region and Program Office

Program Office	Escalated NOVs (w/o Civil Penalty)	Civil Penalties	Orders	Orders Imposing Civil Penalty	**TOTAL**
Region I	20	3	3	0	**26**
Region II	17	5	4	1	**27**
Region III	24	12	2	0	**38**
Region IV	17	3	5	0	**25**
NRR	1	0	0	0	**1**
NMSS	2	0	1	0	**3**
NSIR	2	0	0	0	**2**
OIP	1	0	0	0	**1**
OE	0	0	1	0	**1**
TOTAL	**84**	**23**	**16**	**1**	**124**

Table 4: CY 2010 – Escalated Enforcement Actions by Type of Licensee, Nonlicensee, or Individual

Type of Licensee	Escalated NOVs (w/o Civil Penalty)	Civil Penalty	Orders	Orders Imposing Civil Penalty	TOTAL
Operating Reactor	27	1	2	0	**30**
Gauge User	23	4	0	0	**27**
Hospital	13	10	1	0	**24**
Fuel Facility	3	4	3	1	**11**
Radiographer	3	2	2	0	**7**
Unlicensed Individual (Materials)	1	0	5	0	**6**
Licensed Individual (Reactor)	3	0	1	0	**4**
Irradiator	2	0	0	0	**2**
Nonlicensee	1	0	1	0	**2**
Well Logger	0	2	0	0	**2**
Physician	1	0	0	0	**1**
Research Reactor	1	0	0	0	**1**
Unlicensed Individual (Fuel Facility)	1	0	0	0	**1**
Academic	0	0	0	0	**0**
Materials Distributor	0	0	0	0	**0**
Mill	0	0	0	0	**0**
Pharmacy	0	0	0	0	**0**
Radiographer Fabricator	0	0	0	0	**0**
UF Conversion Facility	0	0	0	0	**0**
Unlicensed Individual (Reactor)	0	0	0	0	**0**
Waste Disposal	0	0	0	0	**0**
Other	5	0	1	0	**6**
TOTAL	**84**	**23**	**16**	**1**	**124**

Appendix A: Summary of Cases Involving Civil Penalties*

Civil Penalties Issued To Reactor Licensees

Florida Power and Light Company EA-10-037
Turkey Point Nuclear Plant Unit 3

On June 21, 2010, an NOV and Proposed Imposition of Civil Penalty in the amount of $70,000 was issued to Florida Power and Light Company (FP&L) for two SLIII violations associated with a white finding as a result of inspections at the licensee's Turkey Point Nuclear Plant Unit 3. The white finding involved the licensee's failure to adequately address degradation of Boraflex, a fixed neutron absorber material used in the Turkey Point Unit 3 spent fuel pool. Boraflex degradation resulted in a reduction in the Boron-10 areal density of the spent fuel storage racks such that, when considering the biases and uncertainties identified in Chapter 9 of the Updated Final Safety Analysis Report, the effective neutron multiplication factor would not have been maintained less than 1.0 if the spent fuel pool had been flooded with unborated water. The NRC identified that FP&L had violated 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," which requires that conditions adverse to quality be promptly identified and corrected, and Technical Specification 5.5.1.1.a, which requires that the spent fuel storage racks be maintained with an effective neutron multiplication factor less than 1.0 if flooded with unborated water, when considering the biases and uncertainties described in the Updated Final Safety Analysis Report. The SLIII Notice of Violation with a proposed $70,000 civil penalty involved the licensee's failure to comply with 10 CFR 50.73, which requires, in part, that licensees report any condition prohibited by the plant's Technical Specifications. As discussed, Boraflex degradation led to a condition prohibited by Turkey Point Unit 3 Technical Specifications, but this condition was not reported to the NRC as required by 10 CFR 50.73.

Civil Penalties Issued To Material Licensees

Basin Electric Power Cooperative EA-09-258
Wheatland, WY

On August 26, 2010, an NOV and Proposed Imposition of Civil Penalty in the amount of $24,700 was issued to Basin Electric Power Cooperative for (1) a SLII violation and (2) three SLIII violations. The SLII violation involved the failure of the licensee to limit radiation exposures to members of the public to less than 100 millirem in a year, as required by 10 CFR 20.1301(a)(1). The SLIII violations involved the failure of the licensee to (1) conspicuously post caution signs in areas where nuclear gauges were in use as required by 10 CFR 20.1902(e); (2) notify the NRC within 24 hours after the discovery of an unplanned fire on March 8, 2007, that damaged the integrity of a licensed device as required by10 CFR 30.50(b)(4); and (3) close and lock the nuclear gauge shutters after plant operations had stopped and prior to allowing welders to begin work as required by License Condition 21 of Amendment 10 to NRC Materials License 33-18224-01. These violations resulted in welders being exposed to the direct radiation beam from nuclear gauges and six received doses in excess of 100 millirem.

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

Beta Gamma Nuclear Radiology, Inc. EA-09-147
Guaynabo, Puerto Rico

On January 21, 2010, an Immediately Effective Confirmatory Order containing an NOV for a SLIII violation and a civil penalty in the amount of $5,000 was issued to Beta Gamma Nuclear Radiology, Inc., (BGNR) to confirm commitments made as a result of an ADR mediation session held on October 27, 2009. The SLIII violation involved the failure of the licensee to provide the NRC complete and accurate information as required by 10 CFR 30.9. Specifically, on May 5, 2008, BGNR contested a previously identified SLIV violation and stated that three written directives, administered on September 14, 2005, and February 19 and 26, 2008, were written prior to the administrations, when in fact, the written directives were signed and dated after the administrations. The written directives were required to be maintained by 10 CFR 35.40(a), and were therefore, material to the NRC. As a result of the ADR session, BGNR agreed to: (1) perform quarterly comprehensive radiation safety audits and (2) authorize a new RSO for a two year period.

Superior Well Services, Ltd. EA-10-077
Indiana, PA

On October 21, 2010, an NOV and Proposed Imposition of Civil Penalty in the amount of $34,000 was issued to the Superior Well Services, Ltd. (SWS), for two SLIII problems associated with five SLIII violations. The first problem involved three violations associated with the licensee's failure to: (1) secure a shipment of radioactive materials on a public highway to prevent shifting during normal transportation conditions in accordance with 10 CFR 71.5(a); (2) control and maintain constant surveillance of the licensed material in an unrestricted area as required by 10 CFR 20.1802; and (3) notify the NRC of the missing licensed material in accordance with 10 CFR 20.2201(a). The second problem involved two violations associated with the licensee's (1) failure to conduct required radiological surveys of vehicles before transporting licensed material in accordance with 10 CFR 39.67; and (2) deliberate falsification of survey records for the vehicles. Specifically, on September 20, 2008, while transporting licensed material on a public highway, SWS did not secure a shipment of radioactive materials, and failed to control and maintain constant surveillance of the licensed material for at least ninety minutes, until SWS located and retrieved the sources, and also failed to notify the NRC of the missing licensed material until July 23, 2009, ten months after identifying the event. In addition, on an unspecified number of occasions prior to July 22, 2010, before transporting licensed materials, SWS did not make radiation surveys of the position occupied by each individual in the vehicle and of the exterior of the vehicle used to transport the licensed materials and recorded survey results that were obtained by copying from previous survey records.

U. S. Department of Veteran Affairs EA-09-038
Washington, DC

On March 17, 2010, an NOV and Proposed Imposition of Civil Penalty in the amount of $227,500 was issued to the U.S. Department of Veterans Affairs for violations related to activities at the Philadelphia Veterans Affairs Medical Center (PVAMC). The violations associated with civil penalties were: (1) a SLII violation of 10 CFR 35.41(a)(2) for failure to develop, implement, and maintain written procedures to provide high confidence that each administration is in accordance with the written directive, resulting in a total of 74 prostate brachytherapy treatments where the administered radiation dose was not in accordance with

the written directive; (2) a SLII violation of 10 CFR 35.41(b)(2) for failure to have procedures that addressed verifying that the administration was in accordance with the applicable treatment plan and written directive, resulting in the licensee administering at least 16 prostate brachytherapy treatments without performing post-treatment verifications until a prolonged period of time had passed; (3) a separate SLIII violation of 10 CFR 35.41(b)(2) related to the licensee's failure to identify that the treatment plan for a brachytherapy treatment differed from the written directive, resulting in the wrong seeds being ordered and administered; (4) a SLIII problem associated with two separate violations involving the failure of the licensee to instruct (a) two medical physicists on the requirements for identifying and reporting a medical event as required by 10 CFR 35.2 and 35.3045; and (b) an authorized medical user physician on his responsibility to report promptly to the licensee any condition which may lead to or cause a violation of NRC regulations as required by 10 CFR 19.12(a)(4; and (5) a SLIII violation of 10 CFR 35.3045(c) for failure to report to the NRC Operations Center no later than the next calendar day when they had information that medical events occurred. A separate SLII violation of 10 CFR 35.41(a)(2) was issued but not assessed a civil penalty due to the statute of limitations having expired. In addition, two SLIV violations involving the licensee's failure to; (1) include adequate information in a written directive; and (2) provide accurate and complete information to the NRC were issued not associated with a civil penalty.

U. S. Department of Veteran Affairs EA-10-023
North Little Rock, AR

On June 2, 2010, an NOV and Proposed Imposition of Civil Penalty in the amount of $14,000 was issued to the Department of Veterans Affairs for two SLIII violations identified as a result of a medical event that occurred at the San Diego Healthcare System facility. The medical event occurred when iodine-131 was injected into the wrong port of the gastrostomy feeding tube (g-tube) resulting in an underdose to the patient's thyroid and an unintended dose to the patient's stomach. The first violation involved the licensee's failure to develop and maintain written procedures with directions for administering byproduct material through a g-tube to ensure that the administered dose was in accordance with the written directive as required by 10 CFR 35.41(a)(2). Additionally, two nuclear medicine technologists had not been instructed on administering byproduct material through a g-tube prior to performing the administration in order to ensure that the administered dose was in accordance with the written directive. The second violation involved the licensee's failure to notify the NRC Operations Center no later than the next calendar day after discovery of a medical event as required by 10 CFR 35.3045(c).

U. S. Department of Veteran Affairs EA-10-081
Washington, DC

On August 23, 2010, an NOV and Proposed Imposition of Civil Penalty in the amount of $39,000 was issued to the Department of Veteran Affairs (DVA) for violations related to activities at (1) the DVA Sierra Nevada Health Care System, Reno, Nevada; (2) the G.V. (Sonny) Montgomery DVA Medical Center, Jackson, Mississippi; and (3) the DVA Boston Healthcare System, Boston, Massachusetts. The violations associated with civil penalties were: (1) a SLIII violation involving the licensee's failure to develop and implement written procedures that address verifying that an administration was conducted in accordance with the applicable treatment plan and written directive as required by 10 CFR 35.41(a)(2) and 10 CFR 35.41(b)(2); and (2) the failure to report a medical event as required by 10 CFR

35.3045(c). A separate SLIII violation of 10 CFR 35.41(a)(2) and 35.41(b)(2), related to activities involving five patients at the DVA Boston Healthcare System in 2005, was issued but not assessed a civil penalty due to the statute of limitations having expired. In addition, two SLIV violations were issued not associated with a civil penalty involving the licensee's failure to include adequate information; (1) in a written report to the NRC as required by 10 CFR 35.3045(d); and (2) in a written directive as required by 10 CFR 35.40(b)(6)(ii).

Civil Penalties Issued To Fuel Cycle Licensees

Babcock and Wilcox EA-09-263
Lynchburg, VA

On January 11, 2010, an NOV and Proposed Imposition of a Civil Penalty in the amount of $35,000 was issued to Babcock and Wilcox Nuclear Operations Group, Inc. for a SLIII violation involving the failure of the licensee to declare an Alert in a timely manner as required by Appendix G to their Emergency Plan. Specifically, on July 15, 2009, the licensee failed to declare an Alert for more than 2 hours even though employees were cognizant that during that time, critically controls associated with a band saw reservoir did not exist and that the lost controls could not be immediately reestablished. Although the failure to declare an Alert in a timely manner did not result in any actual consequences in this case, the potential consequences of an untimely emergency declaration could have been significant under different circumstances. In addition, a SLIII problem associated with three procedural violations was identified as a result of this incident. The three violations involved the failure of the licensee (1) to ensure that the band saw's built-in coolant reservoir was disabled and not usable prior to operation of the band saw, (2) to establish controls on the band saw cutting fluid reservoir to prevent process changes which would make a criticality accident possible such as accumulation of cutting fluid or fissile material in the reservoir, and (3) to evaluate an accident scenario or establish appropriate controls preventing the accumulation of high enriched uranium and moderator in the band saw cutting fluid reservoir, an unfavorable geometry vessel. In accordance with the Enforcement Policy, a civil penalty was not proposed for these violations.

Nuclear Fuel Services, Inc. EA-10-086
Erwin, TN

On September 2, 2010, an NOV, Exercise of Enforcement Discretion, and Proposed Imposition of a Civil Penalty in the amount of $140,000 was issued to Nuclear Fuel Services, Inc. (NFS) for a SLIII problem involving three violations associated with an event which occurred on October 13, 2009. The three violations involved; (1) the failure to have adequate engineered or administrative controls for operations of the bowl cleaning station in violation of 10 CFR 70.61(b); (2) the failure to comply with multiple facility operating procedures regarding the facility system change process; and (3) the failure to maintain records necessary to support NFS's determination that specific facility changes did not require prior NRC approval in violation of 10 CFR 70.72. Specifically, during routine facility operations in the uranium-aluminum line of the Blended Low-enriched Uranium Preparation Facility, nitric acid was added into the bowl cleaning stations which contained small particles of high-enriched uranium scrap material, and the resultant solution produced an unexpectedly high exothermic chemical reaction deforming some of the process piping. The temperatures from the reaction created excess nitrogen compound gases which resulted in the evacuation of the building. Although the failure to have adequate engineered or

administrative controls for operations of the bowl cleaning station did not result in any actual personnel exposure consequences in this case, a more significant event could have resulted in a high consequence occupational exposure under different circumstances. In recognition of particularly poor licensee performance and previous escalated enforcement history, the NRC exercised enforcement discretion and doubled the $70,000 Civil Penalty derived from the normal civil penalty assessment process.

Westinghouse Electric Company EA-10-124
Columbia, SC

On November 3, 2010, an NOV and Proposed Imposition of a Civil Penalty in the amount of $17,500 was issued to Westinghouse Electric Company, Commercial Nuclear Fuel Division, for a SLIII problem involving two violations associated with a spill of uranium bearing ammoniated waste water inside the plant on January 25, 2010. Specifically, the violations involved (1) the failure to identify in the Integrated Safety Analysis (ISA) that a spill in the quarantine tank system could lead to an intermediate consequence event as required by 10CFR70.62(c)(1), and (2) the failure to designate items relied on for safety (IROFS) to limit the risk of an intermediate consequence event resulting from an overflow of the quarantine system as required by 10CFR70.61(e). In addition, two SLIV violations involving failure to follow license condition requirements, and a SLIV problem involving three violations associated with failure to follow Site Emergency Plan requirements were issued.

Appendix B: Summary of Escalated Notices of Violation Without Civil Penalties*

Notices Issued To Power Reactor Licensees

Calvert Cliffs Nuclear Power Plant, LLC EA-10-080
Calvert Cliffs Nuclear Power Plant

On August 3, 2010, an NOV was issued to Calvert Cliffs Nuclear Power Plant for a violation of Technical Specification 5.4.1, associated with a white SDP finding. Specifically, subsequent to the approval of Engineering Change Package No. ES200100067, issued in March 2001, the licensee did not replace the relays within the vendor recommended 10-year lifetime, nor establish a performance monitoring program. Consequently, on February 18, 2010, an Agastat E7000 series time delay relay that had a lifetime in excess of 10 years, used in the 2B emergency diesel generator (EDG) protective logic, timed out early and failed to support a demand fast start and run of the 2B EDG. This resulted in the EDG becoming inoperable with the resultant loss of alternating current to the 24 safeguards bus during the dual unit trip that occurred on February 18, 2010.

Carolina Power & Light Company EA-10-192
Brunswick Steam Electric Plant

On December 21, 2010, an NOV was issued to Carolina Power & Light Company for a violation of 10 CFR 50.54(q) associated with a white SDP finding involving the failure to follow and maintain in effect Emergency Plans at the Brunswick Steam Electric Plant which required activation of the Operations Support Center (OSC), Technical Support Center (TSC), and Emergency Operations Facility (EOF) within 60 to 75 minutes following the declaration of an Alert or higher emergency classification. Specifically, on June 6, 2010, the licensee failed to activate the OSC, TSC, and EOF until approximately two and one-half hours after an Alert was declared.

Carolina Power & Light Company EA-10-205
H. B. Robinson Steam Electric Plant

On December 7, 2010, an NOV was issued to Carolina Power and Light Company (doing business as Progress Energy Carolinas Inc (PEC)) for a SLIII violation of 10 CFR 50.9, “Completeness and Accuracy of Information,” and technical specifications associated with a white SDP as a result of inspections at the H.B. Robinson Steam Electric Plant Unit 2. The white finding involved the failure to identify and correct a problem associated with the “B” Emergency Diesel Generator (EDG) output breaker in 2008. Again in 2009, a similar malfunction caused the EDG to be declared inoperable for a period greater than Technical Specifications. The violation of 10 CFR 50.9 involved submitting materially inaccurate information that the breaker was tested in accordance with a maintenance procedure when, in fact, it had not. The NRC determined that they had not conducted full testing in accordance with the procedure, and only completed the instructions for returning the breaker to service.

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

Duke Energy Carolinas EA-10-094
Oconee Nuclear Station

On August 12, 2010, an NOV was issued to Duke Energy Carolinas, LLC. (Duke) for a SLIII violation associated with a yellow and a white SDP finding as a result of inspections at the Oconee Nuclear Station Units 1, 2 and 3. The yellow finding involved the failure to ensure the Standby Shutdown Facility (SSF) Reactor Coolant Makeup (RCM) subsystem for all three units remained operable as required by Technical Specifications. The white finding involved the failure to identify and correct Unit 2 and Unit 3 SSF RCM letdown line degradation in a timely manner after degradation was identified on Unit 1, as required by 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." A 10 CFR 50.9, "Completeness and Accuracy of Information," NOV for a SLIII violation was also assessed to Duke for submitting materially inaccurate information. Duke provided information which described an alternate flow path that could be used to control pressurizer level during an SSF event. However, it was discovered that this flow path was not available due to a closed manual valve inside containment.

Entergy Nuclear Operations, Inc. EA-09-269
Palisades Nuclear Plant

On January 20, 2010, an NOV was issued to Entergy Nuclear Operations, Inc. for a violation associated with a white SDP finding as a result of inspections at the Palisades Nuclear Plant. This white finding involved the licensee's failure to meet the requirements of Technical Specification (TS) for fuel storage in the spent fuel pool. Specifically, the Region I spent fuel pool storage rack neutron absorber had deteriorated over the life of the plant and was less than required by TS. Corrective actions are currently in place for additional controls of the spent fuel pool.

Entergy Nuclear Operations, Inc. EA-09-018
Waterford Steam Electric Station

On January 14, 2010, an NOV was issued to Entergy Operations, Inc. for a violation of Technical Specification 6.8.1.a, "Procedures and Programs," at Waterford Steam Electric Station Unit 3. The violation, which is associated with a white SDP finding, involved the failure to properly follow all procedural steps during replacement of the safety-related Train B 125 Vdc battery in May 2008. Specifically, following replacement of the battery, the licensee did not: (1) adequately torque all of the affected intercell connections, (2) obtain the required quality control inspector verification that all affected connections were properly tightened, (3) ensure that all the necessary intercell resistance checks were performed, and (4) obtain quality control verification that the intercell resistance checks met Technical Specification limits. As a result, an intercell connection on the battery loosened over time and on September 2, 2008, the battery was found to be inoperable during testing.

Exelon Generation Company, LLC EA-09-259
Braidwood Nuclear Power Station

On February 25, 2010, an NOV was issued to Exelon Generation Company, LLC, for a violation associated with a white SDP finding as a result of inspections at the Braidwood Nuclear Power Station. This finding involved a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," which requires, in part, that measures be established for the selection and review for suitability of application of materials, parts, equipment, and processes that are essential to the safety-related functions of the structures, systems, and components. Specifically, on June 24, 2009, a safety-related valve failed to stroke full open during a surveillance testing procedure. Following the test failure, the licensee determined that water entered the valve actuator through conduit penetration and caused corrosion to the valve internals, which caused the valve not to fully open.

FirstEnergy Nuclear Operating Company EA-09-283
Davis-Besse Nuclear Power Station

On February 25, 2010, an NOV was issued to FirstEnergy Nuclear Operating Company for a violation associated with a white SDP finding as a result of inspections at the Davis-Besse Nuclear Power Station. This finding involved a violation of 10 CFR 50.54(q) which requires, in part, that a holder of an operating license shall follow emergency plans which meet the standards in 10 CFR 50.47(b). 10 CFR 50.47(b) requires, in part, that the licensee have a standard emergency classification and action level scheme in use. The Davis-Besse Emergency Plan requires, in part, that the Shift Manager shall verify the indication of an off-normal event and classify the situation. Specifically, on June 25, 2009, the Shift Manager failed to verify the indications of an off-normal event or reported sighting, assess the information available from valid indications or reports of an explosion, and classify the situation as an Alert in accordance with the Emergency Action Level Conditions during an actual event.

FirstEnergy Nuclear Operating Company. EA-09-332
Davis-Besse Nuclear Power Station

On April 30, 2010, an NOV was issued to FirstEnergy Nuclear Operating Company for a SLIII problem for the failure to implement: (1) 10 CFR 50.71 "Maintenance of records, making of reports" and (2) 10 CFR 50, Appendix B, Criterion III, "Design control." In July 1999, the licensee submitted a license amendment request to eliminate as found testing criteria by using the past data for double O ring data and was approved by the NRC. However, the licensee staff did not update this fact in their updated final safety analysis report. The licensee also changed from the double O ring design to a flat gasket design which did not have the same reliable history as the double O ring and failed to translate this fact into the licensing basis at time of installation.

Florida Power and Light Company EA-09-321
St. Lucie Nuclear Plant

On April 19, 2010, an NOV was issued to Florida Power & Light Company for a violation associated with a yellow SDP finding as a result of inspections at the St. Lucie Nuclear Plant. The yellow finding involved the licensee's failure to meet the requirements of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." In 2008, the licensee experienced an air in-leakage event into the closed cooling water (CCW) system which affected the system's ability to supply adequate cooling to essential equipment. Their troubleshooting and corrective actions failed to identify the source of the air in-leakage, which resulted in a similar event in 2009.

Omaha Public Power District EA-10-084
Fort Calhoun Station

On October 6, 2010, an NOV was issued to Omaha Public Power District for a violation of Technical Specification 5.8.1.a, "Procedures," at Fort Calhoun Station. This violation, which is associated with a yellow SDP finding, involved the licensee's failure to develop an adequate procedure for protecting vital facilities and equipment from external flooding events to the level described in the Updated Final Safety Analysis Report. Specifically, the inspectors identified that the licensee's strategy of using sandbags stacked on top of floodgates would not be effective in protecting the auxiliary building, intake structure, and turbine building basement because the tops of the floodgates were too small to support the necessary number of sandbags. This could have resulted in flooding impacting multiple, redundant trains of equipment required for safe shutdown of the plant.

PPL Susquehanna, LLC EA-09-248
Susquehanna Steam Electric Plant

On January 28, 2010, an NOV for a SLIII violation was issued to PPL Susquehanna, LLC involving a violation of 10 CFR Part 55.21 which requires, in part, that the licensed operator receives a medical examination by a physician every two years and meets the requirements of 10 CFR 55.33(a)(1). Specifically, on three separate occasions in 2009, a PPL licensed operator did not meet a certain medical prerequisite for performing NRC-licensed activities and performed duties, even though a change in his license condition existed, as found by a medical examination.

Southern Nuclear Operating Company, Inc. EA-10-009
Edwin I. Hatch Nuclear Plant

On May 12, 2010, an NOV was issued to Southern Nuclear Operating Company, Inc. for a violation associated with a white SDP finding as a result of inspections at the Edwin I. Hatch Nuclear Plant. The white finding involved the licensee's failure to meet Technical Specifications. From 1988 to 2009 the licensee failed to establish and perform preventative maintenance activities on components having a specific lifetime. This resulted in a capacitor failure on a circuit card, during a surveillance test of an emergency diesel generator (EDG) and caused the EDG to be declared inoperable.

Tennessee Valley Authority EA-09-307
Browns Ferry Nuclear Plant

On April 19, 2010, an NOV was issued to Tennessee Valley Authority (TVA) for violations associated with yellow and white SDP findings as a result of inspections at the Browns Ferry Nuclear Plant. The yellow finding involved the licensee's failure to meet the requirements of 10 CFR 50, Appendix R, III.G, fire protection of safe shutdown capability. There were multiple examples of the licensee not providing fire protection features capable of limiting fire damage and failing to ensure one train of systems or components was free of fire damage by approved methods. Compensatory measures are currently in place and long term corrective actions will be implemented. The white finding involved the licensee's failure to meet the requirements of a Technical Specification. This involved the inappropriate revision to a procedure which could have delayed proper operator response to a major disabling fire event. The procedure has been revised to prevent such an issue from occurring.

Notice Issued To Research Reactor Licensee

Kansas State University EA-10-234
Research Reactor Facility

On November 22, 2010, an NOV was issued to Kansas State University for a SLIII violation involving 10 CFR 20.1101(a). Specifically, on or prior to September 22, 2010, the licensee did not implement a radiation protection program commensurate with the scope and extent of licensed activities that was sufficient to ensure compliance with the provisions of the regulations in Part 20. Examples include: (1) On or prior to September 22, 2010, the licensee did not make surveys as required by 10 CFR 20.1501 when the licensee failed to determine the magnitude and extent of radiation levels that would be caused by irradiating oil samples on September 21, 2010 that subsequently resulted, on September 22, 2010, in an unexpected high shallow-dose equivalent of 12.5 rem to the skin of the extremities (hands) of the operator handling the experiment and an unexpected change in the restricted area dose rates that exceeded 50 rem per hour on September 22, 2010; (2) On September 22, 2010, the licensee failed to supply and require the use of extremity monitoring devices to personnel who were likely to receive in 1 year, from sources external to the body, a dose in excess of 10 percent of the limits in 20.1201(a) in that, a person handling oil samples and a sample holder, which read in excess of 50 rem per hour, was not wearing, and had not been issued, extremity monitoring; (3) On or prior to September 22, 2010, the licensee did not have an adequate procedure as required by Technical Specification Section 6.3 to assure the safety of personnel within the Laboratory for conducting sample irradiations, in that, Experiment Procedure 1, "Isotope Production," did not require extremity dosimetry – finger rings – for those handling samples, it did not have a maximum sample withdrawal rate, and it did not specify threshold exposure/dose rates (hold points) to clearly indicate at what dose rate a sample should not be withdrawn from the pool.

Notices Issued To Material Licensees

Allegiance Health EA-09-266
Jackson, MI

On January 6, 2010, an NOV was issued to Allegiance Health for a SLIII violation involving the failure to develop written procedures to provide high confidence that the administration was in accordance with the written directive as required by 10 CFR 35.41. Specifically, on April 16, 2009, the licensee's procedures did not contain any steps to ensure that no changes had occurred in the patients' prostate volume between the time the treatment plan was prepared and the administration of the treatment and no other method was provided to ensure that the administration was in accordance with the written directive.

Analytical Bio-Chemistry Laboratories, Inc. EA-10-135
Columbia, MO

On October 13, 2010, an NOV was issued to Analytical Bio-Chemistry Laboratories, Inc., for a SLIII problem involving two violations. The first violation involved the failure to notify the NRC in writing within 60 days of the decision to permanently cease principal activities in any separate building that contains residual radioactivity and is unsuitable for release as required by 10 CFR 30.36(d)(2). Specifically, as of February 2010, the licensee decided to permanently cease principal activities in two buildings that contained residual radioactivity, and the NRC was not notified until June 30, 2010, and July 14, 2010. The second violation involved the failure to submit a decommissioning plan and receive NRC approval of procedures used in aggressive remediation activities as required by 10 CFR 30.36(g). Specifically, on June 22, 2010, the licensee demolished and removed contaminated countertops, floors, and fume hoods with associated ventilation ducts. These types of activities involved techniques not routinely applied during cleanup or maintenance operations such that there was the potential for health and safety impacts to the workers.

Anthony and Edward Consultants EA-10-068
Matawan, NJ

On June 25, 2010, an NOV was issued to Anthony & Edwards Consultants (A&E) for a SLIII problem involving three violations. The first violation involved a failure to comply with the conditions of the NRC Order Revoking License, issued on July 28, 2009. Specifically, the licensee did not pay fees within 30 days or transfer the licensed material to an authorized recipient within 60 days from the date of the order. The second violation involved a failure to afford the NRC an opportunity to inspect the A&E facility, as required by 10 CFR 19.14(a). Specifically between February 18, 2009 and September 17, 2009, the NRC made several attempts to contact the licensee to visit the facility and to schedule an inspection of licensed activities, but the licensee did not respond to these requests. The third violation involved a failure to confine storage of licensed material to a location specified on the license, as required by 10 CFR 30.34(c). Specifically, from September 5, 2008 through at least September 30, 2009, the licensee stored the licensed material at a location not authorized by the license.

ArcelorMittal USA, Inc., EA-10-044
East Chicago, IN

On June 2, 2010, an NOV was issued to ArcelorMittal USA, Inc., for a SLIII violation involving the failure to ensure that only persons who have completed the licensee's training program, the gauge manufacturer's training course, or those persons specifically authorized by the Commission or an Agreement State remove gauges from service as required by license condition, Item 9. Specifically, on November 20, 2009, two individuals removed a gauge from service and neither individual had completed the licensee's training program or the gauge manufacturer's training course. In addition, on April 15, 2009, two other individuals removed a gauge from service, and one of those two individuals was not trained. None of the three individuals was authorized by the Commission or an Agreement State to remove gauges from service.

Bryan LGH Medical Center EA-10-066
Lincoln, NE

On August 18, 2010, an NOV was issued to Bryan LGH Medical Center dba Bryan LGH Heart Institute (Bryan Heart), for a SLIII violation involving the failure to file NRC Form 241 "Report of Proposed Activities in Non-Agreement States," at least three days prior to engaging in licensed activities within NRC jurisdiction, as required by 10 CFR 150.20. Specifically, as of December 16, 2009, Bryan Heart, a holder of Nebraska State license, provided mobile nuclear medicine services at a temporary job site in the State of Missouri, a non-Agreement State, without filing a reciprocity submittal for calendar year 2009 with the NRC.

Chicago Testing Laboratory, Inc. EA-10-113
Warrenville, IL

On August 24, 2010, an NOV was issued to Chicago Testing Laboratory, Inc. (CTL), for a SLIII violation involving the failure to possess and use byproduct material with a specific or general license authorization. Specifically, on multiple occasions between July 6, 2006, and August 30, 2009, CTL, an Agreement State licensee, possessed and used devices containing sealed sources in a non-Agreement State, and was not authorized by either a specific or general license.

Christiana Care Health Services EA-10-141
Newark, DE

On August 24, 2010, an NOV was issued to the Christiana Care Health Services (CCHS), for a SLIII violation involving the failure to develop and maintain written procedures to provide high confidence that each administration requiring a written directive was performed in accordance with the written directive as required by 10 CFR 35.41. Specifically, CCHS's written procedures for high dose rate remote afterloader (HDR) treatments did not: (i) include a quality assurance process to test and evaluate proper functioning of all measurement tools used to determine treatment parameters; and, (ii) specify how personnel should respond when unknown and questionable treatment distances were encountered during HDR simulation measurements. As a result of these inadequacies, a medical event occurred, in which the patient received a dose to unintended tissue and did not receive the prescribed dose to the intended tissue during an HDR treatment conducted between January 18 and January 22, 2010.

City of South Bend EA-10-014
South Bend, IN

On March 10, 2010, an NOV was issued to the City of South Bend for a SLIII violation involving the failure to comply with Condition 11.B of the facility's license which authorized a specifically named individual to fulfill the responsibilities of the Radiation Protection Officer. Specifically, as of January 19, 2010, the named individual was no longer employed by the company. The licensee failed to appoint a new Radiation Protection Officer and had not amended the license.

CJW Medical Center-Johnston-Willis Campus EA-09-040
Richmond, VA

On January 21, 2010, an NOV was issued to CJW Medical Center - Johnston-Willis Campus for a SLIII violation involving the failure to develop, implement, and maintain written procedures to provide high confidence that each administration is in accordance with written directives as required by 10 CFR 35.41(a)(2). Specifically, as of December 16, 2008, the licensee's procedures did not require verification of the treatment site nor resolution of any inconsistencies in the written directive prior to administration of the dose. This resulted in a patient receiving treatment to the left trigeminal nerve instead of to the originally-intended site (right trigeminal nerve).

Earth Engineering, Inc. EA-10-062
Cheshire, CT

On June 28, 2010, an NOV was issued to Earth Engineering Inc. (EEI) for a SLIII problem involving two violations. The first violation involved a failure to comply with the conditions of the NRC Order Revoking License, issued on June 4, 2009. Specifically, the licensee did not pay fees within 30 days or transfer the licensed material to an authorized recipient within 60 days from the date of the Order. The second violation involved a failure to afford the NRC an opportunity to inspect the EEI facility, as required by 10 CFR 19.14(a). Specifically, on October 7, 2009, the licensee did not provide access to the nuclear portable gauge to inspect the condition of the gauge; and, between November 2, 2009 and January 27, 2010, the NRC made several attempts to contact the licensee, but the licensee did not provide access to the EEI facility.

Gamma Knife Center of the Pacific EA-09-289
Honolulu, HI

On February 23, 2010, an NOV was issued to Gamma Knife Center of the Pacific for a SLIII violation of 10 CFR 35.41(b). Specifically, as of July 2, 2009, the licensee failed to develop, implement, and maintain written procedures to provide high confidence that each medical administration is in accordance with the written directive in that the procedures did not require explicit verification that the administration was in accordance with the treatment plan and written directive. Consequently, the treatment plan and written directive were not followed to ensure that the collimator was used in the treatment of a patient.

GE-Hitachi Nuclear Energy Americas EA-10-096
Sunol, CA

On December 16, 2010, an NOV was issued to GE-Hitachi Nuclear Energy Americas for two SLIII violations involving the failure to implement Special Nuclear License SNM-960, Condition S-9 and 10 CFR 20.1501. Specifically, on February 16, 2010, one worker identified contamination on his wrist at 240-260 corrected counts per minute, but failed to log the personnel contamination as required by licensee procedure; and on February 16, 2010, the licensee did not make or cause to be made surveys that were reasonable under the circumstances to evaluate the concentrations or quantities of radioactive material.

Great Falls Clinic EA-09-290
Great Falls, MT

On January 21, 2010, an NOV was issued to Great Falls Clinic for a SLIII problem associated with two violations involving the failure to: (1) secure from unauthorized removal or access licensed materials that are stored in controlled or unrestricted areas, as required by 10 CFR 20.1801 and (2) secure the unit, console, console keys and the treatment room when not in use or unattended, as required by 10 CFR 35.610 (a)(1). Specifically, the licensee stored a high dose-rate remote afterloader unit in a designated controlled area and did not secure the radioactive material from unauthorized removal or access. The console and unit were found in the unattended and not secured, designated controlled area. The console was found with its key inserted.

Kanawha Scales and Systems, Inc. EA-09-312
Columbus, OH

On February 18, 2010, an NOV was issued to Kanawha Scales & Systems, Inc., a licensee of the State of Ohio, for a SLIII violation of 10 CFR 150.20. Specifically, on November 2, 2009, Kanawha Scales & Systems, Inc. used sealed sources in a non-agreement state without filing an NRC Form 241 at least three days prior to engaging in licensed activities in areas of exclusive Federal jurisdiction.

Laboratory Testing Services, LLC EA-10-069
Bridgeport, CT

On July 6, 2010, an NOV was issued to Laboratory Testing Services, LLC (LTS) for a SLIII problem involving three violations. The first violation involved a failure to confine possession and use of byproduct material to the location authorized by the license, as required by 10 CFR 30.34(c). Specifically, the licensee possessed and used portable gauges at a location not authorized by the license. The second violation involved a failure to have an individual named on the license as a Radiation Safety Officer (RSO), as required by the license. Specially, the RSO named in the license left the company in June 2008, and the licensee failed to have a replacement RSO approved by the NRC. The third violation involved a failure to obtain written consent from the NRC before transferring ownership of LTS to HAKS Material Testing Company (HAKS), as required by 10 CFR 30.34(b). Specifically, on January 14, 2010, LTS transferred ownership control of the license to HAKS without the Commission's written consent.

Nanticoke Memorial Hospital EA-09-335
Seaford, DE

On February 2, 2010, an NOV was issued to Nanticoke Memorial Hospital for a SLIII violation involving the failure to notify the NRC Operations Center by telephone no later than the next calendar day after discovery of the medical event as required by 10 CFR 35.3045(c). Specifically, Nanticoke Memorial Hospital became aware that a medical event had occurred on June 26, 2009, but the NRC was not notified until July 15, 2009.

St. Francis Hospital and Medical Center EA-10-171
Hartford, CT

On November 10, 2010, an NOV was issued to St. Francis Hospital and Medical Center (St. Francis) for a SLIII violation involving the failure to meet the physical presence requirements of 10 CFR 35.615(f)(2) during high dose radiation (HDR) treatments. Specifically, on July 1, 2010 and other occasions prior to that date, a St. Francis authorized medical physicist was not physically present during initiation and continuation of patient treatments involving the HDR unit.

St. Louis Testing Laboratories, Inc. EA-10-085
St. Louis, MO

On August 31, 2010, an NOV was issued to St. Louis Testing Laboratories, Inc., for a SLIII violation involving the failure to ensure each individual who acts as a radiographer or a radiographer's assistant wears a direct reading dosimeter, an operating alarm rate meter, and a personal dosimeter at all times during radiographic operations as required by 10 CFR 34.47(a). Specifically, on October 22, 2009, a radiographer inadvertently left his personal dosimeter in a tool bag inside a permanent radiographic cell while performing radiographic shots.

Southern Earth Sciences, Inc. EA-10-110
Panama City, FL

On July 19, 2010, an NOV was issued to Southern Earth Sciences, Inc (SES), for a SLIII violation involving the failure to file NRC Form 241 “Report of Proposed Activities in Non-Agreement States,” at least three days prior to engaging in licensed activities within NRC jurisdiction, as required by 10 CFR 150.20. Specifically, between January 2008 and April 2009, SES, a holder of a Florida license, stored or used portable gauges in an area of exclusive federal jurisdiction without a specific license issued by the NRC, nor had SES filed a Form-241 with the NRC.

SSM St. Clare Health Center EA-10-025
Fenton, MO

On April 19, 2010, an NOV was issued to SSM St. Clare Health Center for a SLIII violation involving the failure to implement written procedures to provide high confidence that each administration was in accordance with the written directive as required by 10 CFR 35.41. Specifically, between November 19, 2008, and September 23, 2009, the licensee failed to follow its procedures which required the preparation of final computerized treatment plans for two patients whose prostates had been implanted with radioactive seeds. The seeds were implanted on October 22, 2008, and their computed tomography studies were performed on November 19, 2008. However, the licensee still had not prepared the final treatment plans for these patients at the time of the inspection.

Troxler Electronic Laboratories, Inc. EA-09-082
Research Triangle Park, NC

On March 9, 2010, an NOV was issued to Troxler Electronic Laboratories, Inc for a SLIII violation of 10 CFR 110.20(a)(2) and 10 CFR 110.41(a)(9). Specifically, on November 21, 2008, Troxler Electronic Laboratories, Inc., failed to apply for a specific license and exported byproduct material listed in Appendix L (a moisture density gauge containing Am-241) to an embargoed country listed in 10 CFR 110.28 (Iraq). Further, this failure to apply for a specific export license prevented an Executive Branch review of the export activity as required by 10 CFR 110.41(a)(9).

Universal Engineering Services, Inc. EA-10-138
Orlando, FL

On August 27, 2010, an NOV was issued to Universal Engineering Sciences, Inc. (UES), for a SLIII violation involving the failure to file NRC Form 241 “Report of Proposed Activities in Non-Agreement States,” at least three days prior to engaging in licensed activities within NRC jurisdiction, as required by 10 CFR 150.20. Specifically, UES used portable gauges containing sealed sources, at numerous areas of exclusive federal jurisdiction within the States of Florida and Georgia, without obtaining a specific license issued by the NRC or filing NRC Form-241 with the NRC, as required.

Walter Reed Army Medical Center EA-10-140
Washington, DC

On October 25, 2010, an NOV was issued to the Walter Reed Army Medical Center (WRAMC), for a SLIII problem involving two violations. The first violation involved the licensee’s failure to control and maintain constant surveillance of licensed material in an unrestricted area as required by 10 CFR 20.1802. The second violation involved the licensee’s failure to conduct operations so that the dose in any unrestricted area from external sources did not exceed 0.002 rem (0.02 millisievert) in any one hour. Specifically, between May 1 and 3, 2010, WRAMC did not control and maintain constant surveillance of packages containing licensed radioactive materials, which were improperly stored by WRAMC personnel in an unrestricted area under a counter in the concierge workstation, resulting in a dose greater than 0.002 rem in any one hour within the first floor lobby of the WRAMC.

Yale-New Haven Hospital EA-10-063
New Haven, CT

On May 21, 2010, an NOV was issued to Yale-New Haven Hospital (YNHH) for a SLIII violation involving the failure to develop and maintain written procedures to provide high confidence that each administration requiring a written directive was performed in accordance with the written directive as required by 10 CFR 35.41. Specifically, YNHH's written procedures did not require a physical verification of the automatic position system coordinates against the electronic coordinates prior to initiation of gamma stereotactic radiosurgery (GSR) treatment and did not specify how hospital personnel should respond to unexpected GSR treatment console errors. These procedural inadequacies resulted in a medical event, when YNHH personnel did not verify that the automatic position system coordinates were in accordance with the written directive, during the treatment of a patient undergoing GSR on August 5, 2009.

Notices Issued To Fuel Cycle Licensees

Global Nuclear Fuels – Americas, LLC EA-09-268
Wilmington, NC

On June 9, 2010, an NOV and Exercise of Enforcement Discretion was issued to Global Nuclear Fuels – Americas, LLC (GNF-A). This action was based on a SLIII problem involving three violations of regulatory requirements. Specifically, the licensee failed to (1) identify credible accident scenarios as required by the license; (2) characterize criticality accident scenarios in the integrated safety analysis (ISA) as high consequence events as required by the license; and (3) designate engineered or administrative controls as items relied on for safety (IROFS) when necessary to comply with the performance requirements of 10 CFR 70.61(b) – (d), as required by 10 CFR 70.61(e). Because, in part, the NRC staff and the licensee did not share a common understanding of GNF-A's application of its ISA methodology to scenario evaluation and IROFS identification during the ISA summary review and related inspection activities, the NRC concluded that enforcement discretion to forego proposing a civil penalty was appropriate in this case. No actual consequences resulted from these violations because there were no incidents and no existing safety controls were identified as degraded.

Appendix C: Summary of Orders*

Orders Issued To Reactor Licensees

Duke Energy Carolinas EA-09-252
William B. McGuire Nuclear Station

On June 2, 2010, an Immediately Effective Confirmatory Order was issued to Duke Energy Carolinas, LLC. (Duke Energy), to confirm commitments made as a result of an ADR mediation session held on March 29, 2010. This enforcement action is based on two violations of NRC requirements at the McGuire Nuclear Station, which included a contract employee introducing and using marijuana inside the Protected Area and a contract employee failing to immediately report the event to Duke Energy management. Duke Energy agreed to take the following actions: (1) develop a summary of lessons learned from the facts and circumstances surrounding the apparent violations and communicate this summary to its fleet wide employees; (2) perform a self-assessment of the adequacy of the programs and processes in place to detect and deter the introduction of illegal drugs and alcohol into the Protected Area of Duke Energy's nuclear stations and implement appropriate enhancements in accordance with Duke Energy's corrective action program; and (3) prior to December 31, 2010, perform an effectiveness review of the corrective actions identified in (1) and (2) above. This is in addition to several other corrective actions already completed by Duke Energy. In consideration of these commitments, and the corrective actions already completed by Duke Energy, the NRC agreed that the non-compliances will be characterized as a violation of 10 CFR Part 26, with a significance of SLIV.

Orders Issued To Material Licensees

CAN USA, Inc. EA-08-184
Harvey, LA

On April 16, 2010, an Immediately Effective Confirmatory Order was issued to CAN USA, Inc. to formalize commitments made as a result of an ADR mediation session. The commitments were made by CAN USA, Inc. as part of a settlement agreement between CAN USA, Inc. and the NRC regarding apparent willful violations of NRC requirements by a radiographer and radiographer's assistant. The agreement resolves the apparent violations involving the CAN USA failures, which were identified during NRC inspection and investigation by the NRC Office of Investigations, and include the following areas: (1) failure to have a radiographer and at least one other individual qualified pursuant to 34.43(c); (2) failure to have a radiographer supervise and maintain direct observation of the assistant during use of a radiographic device; and (3) failure to control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and not in storage. CAN USA, Inc. agreed to a number of corrective actions, including the following: new and specific changes to operating procedures; activities related to training on new and/or revised operating procedures; interim training until the procedures are completed; unannounced audits; additional oversight of radiography crews; and specific written agreements with clients that address radiographic operations. In consideration of these commitments, the NRC agreed to limit the civil penalty amount to $7,000 and not to pursue any further enforcement action in connection with the inspection.

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

Mattingly Testing Services, Inc. EA-10-100
Molt, MT

On September 2, 2010, an Order Revoking License (Immediately Effective) was issued to Mattingly Testing Services, Inc., for multiple violations of NRC requirements. Specifically, (1) on various dates beginning on May 3, 2009, the licensee, in part deliberately, failed to implement specified actions required by Confirmatory Order (EA-08-271) involving: (i) conducting an assessment of the radiation safety program, (ii) providing initial safety training to the licensee staff, (iii) ensuring that an independent consultant's recommended program improvements were provided within 30 days of completing the required reviews, (iv) providing the independent consultant's 2009 annual audit results to the NRC, (v) conducting the initial field audit of radiography operations by the independent consultant by May 3, 2009, and (vi) submitting a required license amendment request by May 3, 2009; (2) from May 13, 2006 through September 9, 2009, the licensee deliberately failed to establish and maintain a prearranged response plan with the Local Law Enforcement Agency (LLEA) in accordance with Increased Controls Order (EA-05-090), Attachment B, Section IC-2(b); (3) on March 6, 2007, the licensee president deliberately failed to provide complete and accurate information to an NRC inspector in accordance 10 CFR 30.9, regarding the licensee's effort to establish a prearranged response plan with the LLEA; (4) on October 22, 2009, while under oath, the licensee president deliberately failed to provide complete and accurate information to an NRC investigator in accordance with 10 CFR 30.9 regarding the licensee's effort to establish a prearranged response plan with the LLEA; (5) on July 4, 16, and August 29-30, 2009, the licensee failed to maintain a dependable means to detect, assess, and respond to unauthorized access to radioactive materials in accordance with Increased Controls Order (EA-05-090) Appendix B, Section IC-2(c); (6) on June 22, 2009, the licensee failed to properly secure a radiographic exposure device for transport with proper blocking and bracing to prevent loss during transit in accordance with 10 CFR 20.1802, 10 CFR 34.35(d), and 10 CFR 71.5 that led to the device being lost in the public domain; and, (7) on June 22, 2009, the licensee willfully failed to immediately notify the NRC about the lost radiographic exposure device in accordance with 10 CFR 20.2201.

National Institute of Standards and Technology EA-09-142
Gaithersburg, MD

On March 1, 2010, an Immediately Effective Confirmatory Order was issued to the U.S. Department of Commerce's National Institute of Standards and Technology (NIST or licensee) to confirm commitments made as a result of an ADR mediation session held on January 5, 2010. This enforcement action is based on ten apparent violations of NRC requirements at NIST's facility in Boulder, Colorado, which were identified during NRC inspection and investigation activities conducted in response to a June 9, 2008 plutonium spill. The apparent violations involved the licensee's failure to conduct the radiation safety program at NIST-Boulder in accordance with NRC requirements and the conditions of the NIST-Boulder license. The licensee agreed to take the following actions: (1) complete an independent assessment of the radiation safety program at NIST-Boulder; (2) submit copies of the required annual radiation safety audit to the NRC; (3) develop and implement a procedure for training new employees on radiation safety policies and procedures; (4) upgrade initial and refresher training for employees who work with radioactive materials, including a review of lessons learned from the plutonium spill and the associated apparent violations; (5) submit a license amendment request for deletion of the radionuclides on the NIST-Boulder license that NIST no longer plans to use; (6) develop a formal radiation

hazards analysis process; (7) revise the NIST Ionizing Radiation Safety Committee charter to require additional review of NRC submittals; (8) revise the NIST radiation safety program policy to indicate that all individuals interacting with the NRC are required to provide complete and accurate information; (9) develop a clearly defined process for acquiring radioactive materials; and (10) pay a civil penalty of $10,000. In consideration of these commitments, and other actions already completed by NIST, the NRC agreed not to pursue any additional enforcement actions for the apparent violations or count this matter as previous enforcement for the purposes of assessing potential future enforcement actions in accordance with Section VI.C of the Enforcement Policy.

Orders Issued To Fuel Cycle Licensees

AREVA NP, Inc. EA-10-041
Richland, WA

On December 2, 2010, an NOV and a Confirmatory Order were issued to AREVA NP, Inc., (AREVA) as a result of an ADR mediation session associated with a apparent violation of 10 CFR 71.5(a) and 49 CFR 172.204(a) involving inaccurate transportation records for several export shipments of special nuclear material (SNM). Specifically, on December 9, 2009, and March 11 and 18, 2009, an AREVA employee deliberately altered (falsified) the reference and date stamp on three documents entitled “Approval to Transit a UK [United Kingdom] Port” associated with the export of SNM from the United States to Germany by AREVA.

AREVA NP, Inc. EA-09-272
Aiken, SC

On April 26, 2010, an Immediately Effective Confirmatory Order was issued to AREVA NP – Richland, Inc. (AREVA) to formalize commitments reached as part of an ADR mediation session involving a violation of a facility procedure by an employee who willfully defeated the function of an Item Relied On For Safety (IROFS) on April 21, 2009. Specifically, an electronic eye sensor known as the vacuum wand interlock was deliberately bypassed by an employee and made to work by using tape. As a result, IROFS 1111 was not available and reliable as required by 10 CFR 70.61(e). Although the vacuum wand interlock was disabled, sufficient system IROFS remained in service to perform the intended safety function for identified accident scenarios and protect the health and safety of the public. As part of the settlement agreement, AREVA agreed to take a number of actions in addition to those already completed. These additional actions include: (1) incorporating lessons learned from this incident, including enhanced safety conscious work environment training, into General Employee training for new employees and annual refresher training for all Richland employees; (2) implementing a management observation program for the purpose of reinforcing task performance standards and work practices; (3) performing a survey to determine the results of efforts to increase supervisor availability in the work area; and (4) developing a presentation on the incident and lessons learned with regard to work practices for a future industry forum. In recognition of these actions, the NRC agreed to refrain from proposing a civil penalty and issuing an NOV or other enforcement action.

Nuclear Fuel Services, Inc. EA-10-076
Erwin, TN

On November 16, 2010, an Immediately Effective Confirmatory Order and an NOV (NOV) were issued to Nuclear Fuel Services, Inc. (NFS) to confirm commitments made as a result of an ADR mediation sessions held on October 4, 2010. This enforcement action is based on the failure of NFS to provide complete and accurate information to the NRC, as required by 10 CFR 70.9(a), on two occasions. Specifically, (1) on November 25, 2008, NFS submitted a response to a previously issued NOV stating that all fire dampers in Procedure NFS-GH-22 were inspected in September 2008 and all passed the inspection, when 12 of the fire dampers had not been inspected; and (2) in August 2009, during an inspection to verify the corrective actions as documented in the response to the previously issued NOV, a former NFS employee created and provided a document to an NRC inspector that indicated that all but one of the dampers had been fully inspected in 2008, when in fact more than one of the dampers had not been fully inspected. The NRC concluded that these actions were willful and associated with the same former employee. As a result of the ADR agreement, the licensee agreed to a number of actions, including: (1) issuance of a NOV as part of the Confirmatory Order; (2) conducting an effectiveness review within one year of each corrective action to the NOV; (3) performing an assessment of the effectiveness of its corrective actions by an independent group to assure adequacy and accuracy of information submitted to the NRC; (4) developing and implementing an appropriate safety culture improvement plan and conducting periodic integrated safety culture assessments; and (5) assessing its current corrective action program (CAP) against NQA-1-2008 and submitting a license amendment request within nine months incorporating the CAP into its license. In recognition of these actions, the NRC agreed to refrain from proposing a civil penalty for this matter.

Orders Issued To Individuals

Mark M. Ficek IA-10-028

On September 2, 2010, an Immediately Effective Confirmatory Order Prohibiting Involvement in NRC Activities was issued to Mr. Mark M. Ficek for multiple deliberate violations of NRC requirements and a violation of Confirmatory Order (IA-08-055). The order specified that Mr. Ficek is prohibited involvement from all NRC-licensed activities for a period of 7 years, and that Mr. Ficek is required to notify the NRC upon initial involvement in NRC-licensed activities for an additional two years after the 7 year prohibition period expires. Specifically, the NRC found that Mr. Ficek, president of Mattingly Testing Services, Inc., (1) deliberately failed to implement the requirements of Confirmatory Order (EA-08-271), which dispositioned a number of willful violations through alternative dispute resolution in 2009, including conducting an assessment of the licensee's safety programs and providing safety training to the licensee's staff; (2) deliberately failed to establish and maintain a prearranged response plan with the Local Law Enforcement Agency (LLEA), as required by Increased Controls Order (EA-05-090), Appendix B, Section IC-2(b); (3) deliberately provided material false information to an NRC inspector during a site visit on March 6, 2007, in violation of 10 CFR 30.10(a)(2), regarding the licensee's effort to establish a prearranged response plan with the LLEA; (4) deliberately provided material false information to an NRC investigator while under oath on October 22, 2009, in violation of 10 CFR 30.10(a)(2), regarding the licensee's effort to establish a prearranged response plan with the LLEA; and, (5) violated the provisions of Confirmatory Order (IA-08-055) Section

V.1 which specified that Mr. Ficek was prohibited for 2 years from the date of the order (March 6, 2009) from engaging in NRC-licensed activities since during the 2 year period Mr. Ficek (i) directed the activities of an NRC-required independent consultant, (ii) assumed the duties of the Radiation Safety Officer to determine the reporting requirements of an event involving a lost radiographic exposure device, (iii) applied, on behalf of the licensee, for reciprocity to use radioactive materials in an Agreement State pursuant to Mattingly's NRC license, and (iv) continued to answer employees' questions about radiation safety issue and to purchase radiographic exposure devices.

Mary K. Files IA-09-075

On June 2, 2010, a Confirmatory Order Prohibiting Involvement in NRC activities was issued to Ms. Mary K. Files, a contractor working at McGuire Nuclear Station, prohibiting her involvement in NRC-licensed activities for a period of five years. This enforcement action is based on Ms. Files' deliberate failure to adhere to Duke Energy Carolinas, LLC, fitness-for-duty requirements. Specifically, on October 20, 2008, Ms. Files introduced and used marijuana inside the Protected Area at McGuire Nuclear Station.

Lawrence Grimm IA-09-068

On March 1, 2010, a Confirmatory Order Prohibiting Involvement in NRC activities was issued to Mr. Lawrence Grimm, a former radiation safety officer at the U.S. Department of Commerce's National Institute of Standards and Technology facility in Boulder, Colorado (NIST-Boulder), prohibiting his involvement in NRC-licensed activities for a period of one year. This enforcement action is based on Mr. Grimm's deliberate failure to provide complete and accurate information to the NRC in a February 15, 2007 license amendment application requesting authorization for NIST-Boulder to possess and use source and special nuclear material, including plutonium. Specifically, Mr. Grimm stated that the doors to the laboratory where the sources were to be stored were equipped with a key-card locking system when, in fact, the laboratory had no key-card locking system, was considered an open laboratory, and was typically not locked. Mr. Grimm also provided inaccurate information regarding internal monitoring of occupationally exposed workers and the use of dosimetry for frequent users of the laboratory, who didn't actually work with the material but who worked in the same laboratories where the materials were stored and used. This represents a violation of 10 CFR 30.10(a)(2), which, in part, prohibits licensee employees from deliberately submitting information to the NRC that the person knows to be incomplete or inaccurate in some material respect.

Dr. Juan E. Perez Monte IA-09-041

On January 21, 2010, an Immediately Effective Confirmatory Order and an NOV were issued to Dr. Perez Monté, former Radiation Safety Officer for Beta Gamma Nuclear Radiology, Inc., (BGNR) to confirm commitments made as a result of an ADR mediation session held on October 27, 2009. This enforcement action is based on an apparent deliberate violation of 10 CFR 30.10, which requires, in part, that an employee of a licensee may not deliberately submit to the NRC information that the person submitting the information knows to be incomplete or inaccurate in some respect material to the NRC. Contrary to this requirement, Dr. Perez Monté submitted information known to be inaccurate in some respect material to the NRC, in violation of 10 CFR 30.10(a)(2); and as a result, caused BGNR to maintain inaccurate information contrary to 10 CFR 30.9, in violation of 10

CFR 30.10(a)(1). Dr. Perez Monté agreed to: (1) not serve as RSO at BGNR or other licensed facilities for at least two years and (2) provide outreach to the nuclear medicine community to help deter others from violating NRC regulations. In recognition of these commitments, the NRC agreed to not issue Dr. Perez Monté an order prohibiting involvement in NRC-licensed activities other than the two year restriction on serving as RSO, and also issued him an NOV containing a SLIII violation of 10 CFR 30.10.

Orders Imposing a Civil Penalty

Babcock and Wilcox EA-08-204
Lynchburg, VA

On June 15, 2010, an Order Imposing a Civil Monetary Penalty in the amount of $32,500 was issued, to Babcock and Wilcox Nuclear Operations Group, Inc. (B&W) (formerly BWX Technologies (BWXT), Inc) for a SLIII violation (ML101580256). On July 27, 2010, in accordance with the order issued on June 15, 2010, and 10 CFR 2.205, B&W requested a hearing before the ASLB (ML102080611). See Section II.B and the discussion below for further details regarding this hearing request. In accordance with the order issued by the ASLB, this "Order Imposing a Civil Penalty" was withdrawn.

Actions Involving the Atomic Safety and Licensing Board

Babcock and Wilcox
Lynchburg, VA

On August 11, 2010, the ASLB granted B&W its request for a hearing. On August 13, 2010, the licensee and the NRC staff jointly submitted a motion asking the ASLB to hold this administrative enforcement proceeding in abeyance pending the outcome of proposed settlement negotiations. On October 12, 2010, the ASLB approved a settlement agreement successfully negotiated by the NRC staff and the licensee and issued an order stipulating a number of agreed to actions. In accordance with the Order, the NRC agreed (1) to withdraw the June 15, 2010, Order Imposing a Monetary Civil Penalty in the amount of $32,500; and, (2) to recategorize the violation issued on February 23, 2010, from a SLIII violation to a violation with no SL. In accordance with the Order, B&W agreed to (1) not challenge the existence of a violation of NRC requirements related to the hydrofluoric acid spill and will withdraw its request for hearing; (2) pay a settlement fee of $32,500 in lieu of the withdrawn civil penalty; (3) perform one quarterly emergency drill within a twelve-month period related to a chemical exposure event; and, (4) give a presentation addressing lessons learned at the 2011 Fuel Cycle Information Exchange. The complete order can be viewed in ADAMS at ML102850179.

Appendix D: Summary of Escalated Enforcement Actions Against Individuals*

Orders

Four orders were issued to individuals during 2010 and are discussed in Appendix C.

Notices of Violation

Dusty Bolman IA-09-076

On June 2, 2010, an NOV was issued to Mr. Dusty Bolman for a SLIII violation of 10 CFR 50.5, "Deliberate Misconduct." While working as a contract welder at the McGuire Nuclear Station, Mr. Bolman became aware of the potential use of marijuana inside the Protected Area, but deliberately failed to immediately report the event to management as required by station procedure.

Robert B. Hilton IA-10-037

On October 20, 2010, an NOV was issued to Mr. Robert B. Hilton, formerly a licensed operator at the Edwin I. Hatch Nuclear Plant, Unit Nos. 1 and 2, for a SLIII violation of 10 CFR 55.53(j). Specifically, on July 19, 2010, Mr. Hilton participated in Southern Nuclear Operating Company's random fitness for duty testing program and subsequently tested positive for marijuana.

Richard Montgomery IA-10-026

On December 2, 2010, an NOV was issued to Mr. Richard Montgomery, formerly a criticality engineer for AREVA NP, Inc., for a Severity Level III violation of10 CFR 71.8, "Deliberate Misconduct", Section (b)(2). Specifically, on December 9, 2009, and March 11 and 18, 2009, Mr. Richard Montgomery deliberately altered (falsified) three transportation documents entitled "Approval to Transit a UK [United Kingdom] Port, associated with an export shipment of special nuclear material from the United States to Germany by Areva NP, Inc."

Emery Plaza IA-10-035

On May 14, 2010, an NOV was issued to Mr. Emery Plaza, formerly a security officer at Peach Bottom Nuclear Power Station, for a SLIII violation of 10 CFR 50.5(a)(1) and 10 CFR 50.5(a)(2). Mr. Plaza deliberately submitted a substituted urine sample, which he certified to be his own, in an effort to subvert the fitness-for-duty test to avoid detection of illegal drug usage.

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

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

Confirmatory Order

Stone and Webster Construction, Inc. EA-10-054
Baton Rouge, LA

On September 10, 2010, an Immediately Effective Confirmatory Order was issued to Stone & Webster Construction, Inc. (S&W) to confirm commitments made as a result of an ADR mediation session held on August 24, 2010. By letter dated June 2, 2010, the NRC identified an apparent violation of 10 CFR 50.7 based on the United States Department of Labor (DOL) Administrative Review Board's (ARB) September 24, 2009 Final Decision and Order of Remand (ARB Case No. 06-041). That ARB decision reversed a January 9, 2006 DOL Administrative Law Judge's (ALJ) recommended decision where the ALJ issued a Proposed Decision and Order (ALJ Case No. 2005-ERA-6), concluding that S&W had not retaliated against a former painter foreman at the Browns Ferry Nuclear Power Plant.

As part of the settlement agreement, S&W agreed to take a number of actions, including: (1) issuing a written communication from a senior S&W Power executive to reiterate, among others, the company's policy on safety conscious work environment (SCWE) at all S&W nuclear construction and maintenance sites; (2) ensuring that an Executive Review Board reviews certain proposed adverse actions for compliance with applicable employee protection requirements and to assess and mitigate the potential chilling effect at all S&W nuclear maintenance sites; (3) revising the company's SpeakUp program brochure to explicitly identify safety concerns as within the scope of the program; (4) conducting SCWE surveys of its employees, including craft, at all of its nuclear maintenance sites; (5) ensuring that SCWE training is provided to all of its nuclear maintenance supervisors and above; and (6) collecting, reviewing and assessing data collected through the company's various programs for SCWE trends. In exchange for these actions, the NRC agreed not to pursue further action relating to this matter.

Notice of Violation

McConnell Dowell (American Samoa), Ltd. EA-10-174
Pago Pago, American Samoa

On October 6, 2010, an NOV was issued to McConnell Dowell (American Samoa), Ltd., for a SLIII violation involving the receipt, possession, and usage of byproduct material without authorization from a specific or general license as required by 10 CFR 30.3(a). Specifically, as early as 2008 to July 25, 2010, the licensee received, possessed and used two portable nuclear gauges in American Samoa, an area of exclusive Federal jurisdiction, without a specific license issued by the NRC.

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