



# **ALLEGATION PROGRAM**

## **ANNUAL TRENDS REPORT**

**Calendar Year 2013**

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

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**EXECUTIVE SUMMARY**

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U.S. Nuclear Regulatory Commission (NRC) Management Directive 8.8, "Management of Allegations," dated November 15, 2010, requires the Agency Allegation Advisor to prepare an annual report for the Executive Director for Operations that analyzes allegation trends. This annual report fulfills that commitment by providing national, regional, and site-specific trend analyses. In addition, this report discusses staff activity in calendar year (CY) 2013 involving the Allegation Program and related policies. Lastly, the allegation staff continues to implement the agency-sponsored alternative dispute-resolution (ADR) process for discrimination allegations (early ADR). This pre-investigation process gives an individual and his or her employer (or former employer) the opportunity to resolve an allegation of discrimination through mediation rather than fully litigate the discrimination allegation or have the NRC initiate an investigation. Approximately 43 percent of the CY 2013 mediated discrimination concerns reached settlement.

In the CY 2009 to CY 2013 timeframe, the total number of allegations<sup>1</sup> received from reactor licensees, materials licensees, and vendors has fluctuated above and below 600 allegations per year, with an overall declining trend. While the total number of allegations received in CY 2012 (595) increased by 4 percent over CY 2011 (571), allegations received in CY 2013 (554) decreased by approximately 7 percent compared to CY 2012. The increases and decreases in allegation receipt do not appear to be the result of a general industry issue or other external factor. Rather, the substantive changes in the numbers of allegations received were based on facility-specific or vendor-specific matters.

Each allegation can include multiple concerns. Over the past 5 years, the trend in the total number of concerns has generally paralleled the trend in total allegations (e.g., as the number of allegations has increased or decreased, the number of concerns has increased or decreased correspondingly). In CY 2013, coinciding with the overall decrease in allegations received, the total volume of allegation concerns received decreased in three of the four regional offices and in the Office of Nuclear Material Safety and Safeguards. Region III and the Office of New Reactors (NRO) experienced substantial increases in the number of concerns received. Sixteen percent of the allegations received in Region III in CY 2013 included four or more concerns, and one allegation had more than 30 concerns. However, there were no apparent trends in Region III in terms of allegation concerns coming from particular facilities or types of facilities, or as a result of an event. The increase in allegations and concerns received by NRO was largely attributable to discrimination and safety conscious work environment (SCWE) concerns raised in regard to a particular vendor. The largest percentage of concerns received nationwide was discrimination concerns, which decreased slightly from the number of discrimination concerns received in CY 2012. These concerns involved workers primarily from security and quality assurance functional organizations. Chilling effect concerns comprised the second highest percentage of concerns received nationwide and also decreased slightly in CY 2013 compared to CY 2012. The NRC noted trends in security, quality assurance, and operations organizations. The most often mentioned behaviors perceived by allegers involved supervisors discouraging workers from having a questioning attitude or from reporting or addressing concerns. While the number of security-related concerns also remained high, a gradual decrease in the total number of security concerns received per year over the past

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<sup>1</sup> An allegation is defined as "a declaration, statement, or assertion of impropriety or inadequacy associated with NRC-regulated activities, the validity of which has not been established" in Management Directive 8.8, "Management of Allegations," November 15, 2010.

several years has been noted. Eighteen percent of the security concerns raised in CY 2013 involved a specific site in Region I.

For some reactor licensees, the NRC received allegations in numbers that warranted additional analysis.<sup>2</sup> In preparing this report, the staff reviewed a 5-year history of allegations for reactor and materials licensees and vendors to identify adverse trends. The analysis focused on allegations that originated from onsite sources to help inform the NRC's review of the SCWE. Because a large volume of allegations from onsite sources may be indicative of a SCWE at risk, the staff selected five reactor sites and one vendor site for more in-depth review: Browns Ferry Units 1, 2, and 3; Watts Bar Unit 2; Palisades; Perry; Watts Bar Unit 1; and the Lake Charles Facility. This report discusses allegation trends at each of these sites. In summary, the trends either did not suggest a concern about the environment for raising concerns or may be indicative of a weakening SCWE. In such cases, the NRC has engaged the licensee and is closely monitoring its activities to address weaknesses. Finally, because of NRC conclusions that the SCWE was not conducive to raising concerns, the NRC issued 2 Chilling Effect Letters in CY 2013 requesting actions be taken to improve the SCWE. No materials licensees were the subject of allegations at a level that warranted additional analysis.

Finally, in CY 2013, the NRC reviewed the effectiveness of nine Agreement State Programs' responses to concerns and concluded that the Agreement States continue to address concerns promptly, thoroughly document their investigations and closeout actions, inform the concerned individuals of the outcomes, and protect the concerned individuals' identities.

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<sup>2</sup> The total number of allegations received concerning reactor licensees from all sources, as well as other information concerning the Allegation Program, appears on the NRC's public Web site at <http://www.nrc.gov/about-nrc/regulatory/allegations/statistics.html>.

## TRENDS IN ALLEGATIONS

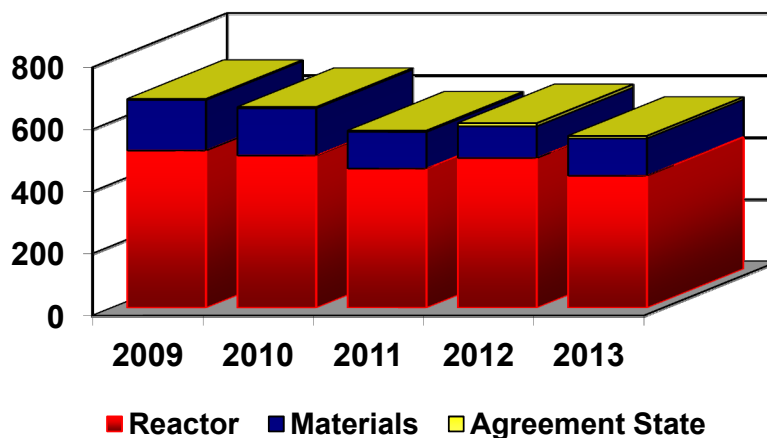
The U.S. Nuclear Regulatory Commission (NRC) monitors allegations to discern trends or marked increases that might prompt the agency to question a licensee about the causes of such changes or trends. In preparing this report, the staff reviewed a 5-year history of allegations received for reactor and materials licensees and vendors. The staff focused on allegations with the potential to provide insights into the environment for raising concerns (i.e., safety conscious work environment (SCWE)) at a given facility. Such allegations include those submitted by current or former licensees, contractor employees, or anonymous sources that indicate an unwillingness or hesitance to raise safety concerns internally. For power reactor facilities, the staff analyzes recent allegation activity twice a year in support of the Reactor Oversight Process (ROP) mid-cycle and end-of-cycle assessments. In addition, the staff may analyze a particular site or licensee whenever allegations or inspection findings indicate that such an analysis is warranted.

The staff also conducts reviews to identify national trends for reactor and materials allegations, shifts in users of the Allegation Program, and the effect that the implementation of the program has on the workload in the NRC regional and program offices. The following section discusses these trends.

### National Trends

National trends provide general information to the staff about the effect of external factors, plant events, and industry efforts to improve the SCWE at NRC-licensed facilities. They can be useful in developing budget and planning assumptions to support future agency and Allegation Program needs. Figure 1 shows that the NRC receives approximately 550 to 600 allegations each year and that there has been an overall declining trend in the total number of allegations received from calendar year (CY) 2009 through CY 2013. In CY 2009, the total number of allegations received increased by about

**FIGURE 1 ALLEGATIONS RECEIVED BY CALENDAR YEAR**



10 percent over the total received in CY 2008, primarily because of substantive increases in allegations received about several reactor facilities and one fuel cycle facility. The decreases in allegations received in CY 2010 and again in CY 2011 were the result of large reductions in allegations received for two reactor facilities that experienced SCWE problems in previous years. As actions were implemented at these facilities in response to the identified SCWE problem, the number of allegations received dropped precipitously in subsequent years. While there was a decrease in allegations involving reactor licensees in CY 2013, allegations involving materials licensees increased. The number of allegations received in CY 2012 increased by more than 5 percent over CY 2011, while CY 2013 saw a decrease in allegations received of

approximately 7 percent compared to CY 2012. The increases and decreases in the number of allegations received over the past 5 years do not appear to be the result of a general industry issue or other external factor. Rather, the substantive changes in the numbers of allegations received find basis in facility-specific or vendor-specific matters (e.g., significant outage activity, construction activity, security activity, work-environment issues, process/program changes, or company restructuring/staffing adjustments).

The number of allegations that the NRC processed for Agreement State matters continues to be minimal. The total number of Agreement States remains at 37. Once the Agreement State Program is explained to individuals who contact the NRC with concerns about Agreement State licensees, most indicate a willingness to contact and be contacted directly by Agreement State personnel about the evaluation of their concern(s). The NRC forwards these matters to the Agreement State and does not process them as allegations. Generally, the NRC only uses the Allegation Program to track the evaluation of concerns about Agreement State licensees when the concerned individual does not want his or her identity to be revealed to the Agreement State.

Because each allegation can include multiple concerns, the number of concerns received can provide more specific information on the staff effort needed for an appropriate response. Over the past decade, the trend in the total number of concerns in all but one year has paralleled the trend in total allegations (i.e., as the number of allegations has increased or decreased, the number of concerns has increased or decreased correspondingly).<sup>3</sup> In CY 2013, coinciding with the overall decrease in allegations received, the total volume of allegation concerns received decreased in three of the four regional offices, as well as in the Office of Nuclear Material Safety and Safeguards. Region III and the Office of New Reactors experienced substantial increases in the number of concerns received. Sixteen percent of the allegations received in Region III in CY 2013 included four or more concerns, and one allegation had more than 30 concerns. However, there were no apparent trends in Region III in terms of allegation concerns coming from particular facilities or types of facilities or resulting from an event. The increase in allegations and concerns received by NRO were largely attributable to discrimination and SCWE concerns raised in regard to a particular vendor.

### Reactor Licensee Trends

To provide further insight into areas in which the NRC is allocating resources for the evaluation of reactor-related allegations, Figure 2 shows the 13 functional areas that represent approximately 80 percent of the issues about which allegations were received nationwide in CY 2013.<sup>4</sup>

Figure 2 indicates that the largest percentage of concerns in allegations received nationwide were discrimination concerns, which increased slightly from the number of discrimination concerns received in CY 2012. A review of all discrimination concerns received in CY 2013 found trends in both the source and site variables. Claims were made by almost twice as many

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<sup>3</sup> Although the total number of allegations in CY 2007 decreased, the number of concerns for reactor facilities actually increased in almost every region and program office.

<sup>4</sup> The agency received few allegations about concerns in areas not shown in Figure 2, which represent the remaining 20 percent of the issues received. These areas include chemistry, civil/structural, construction, criticality safety, electrical, emergency preparedness, Employee Concerns Programs, environmental, environmental qualifications, nondestructive evaluation, fatigue/overtime, fire protection, heating, ventilation, and air conditioning, in-service testing, instrumentation and control, licensing, mechanical, procurement, reciprocity, and safeguards.

contractor employees as licensee employees at a consistent rate throughout the calendar year. Workers at reactor sites and one vendor site in Regions II and III raised more discrimination concerns than workers in Regions I and IV. These concerns involved workers primarily from security and quality assurance functional organizations. There was a concentration of discrimination concerns raised by personnel in security organizations in calendar year 2012 as well.

While the total number of chilling effect concerns in CY 2013 remained high, many of the chilling effect concerns raised involved only a small number of sites, including the vendor site discussed above. The NRC uses the term “chilling effect” to describe a condition that occurs when an event, interaction, decision, or policy change results in a perception that the raising of safety concerns to the employer or to the NRC is being suppressed or is discouraged. Claims were made by an almost equal number of licensee employees as contractor employees. Approximately 40 percent of the concerns were received in the first quarter of the calendar year. Trends were noted in security, quality assurance, and operations organizations and the most often mentioned behaviors perceived by allegers involved supervisors discouraging workers from having a questioning attitude or from reporting and/or addressing concerns.

**FIGURE 2 REACTOR ISSUES NATIONWIDE 2013**



Although the number of security-related concerns also remained high, a gradual decrease in the total number of security concerns received per year over the past several years has been noted. Eighteen percent of the security concerns raised in CY 2013 involved a specific site in Region I. The majority of security-related allegation concerns were received in CY 2013 from licensee employees. As discussed above, a large concentration of discrimination-related concerns involved security staff, and smaller concentrations involved inattentiveness, work schedule, force-on-force drills, and security post issues.

There was a slight increase in the volume of wrongdoing concerns received in CY 2013. The NRC defines “wrongdoing” as the willful violation of regulatory requirements through deliberate

action or a violation resulting from careless disregard of regulatory requirements. Wrongdoing allegation concerns involved a number of disciplines; the largest volume involved the area of security.

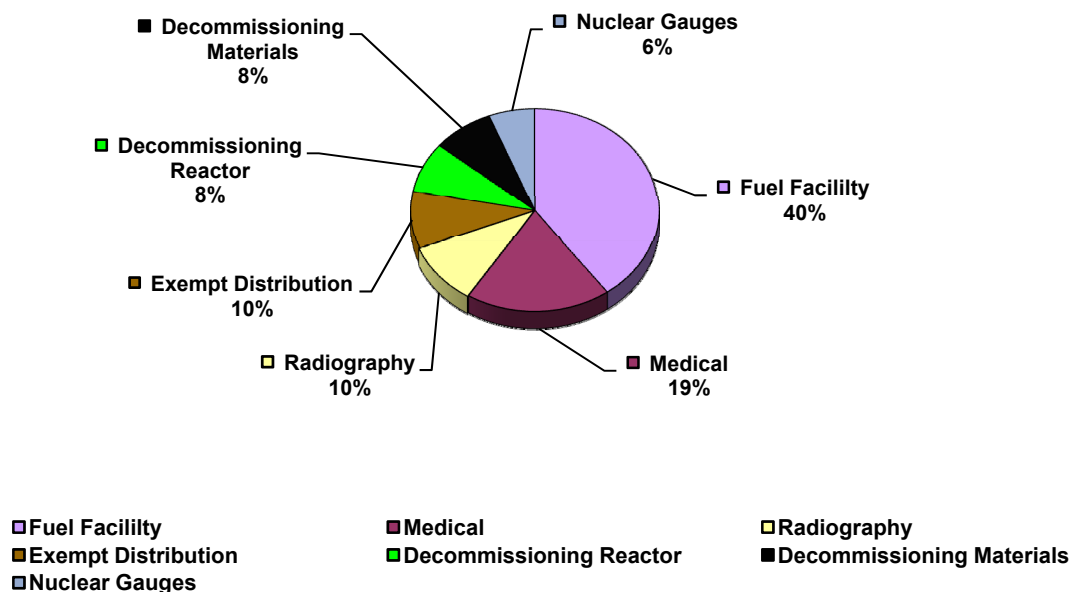
Health Physics concerns decreased in CY 2013 after a spike in the previous year. More than half of the concerns involved just five licensee sites. At 43 percent, the fourth quarter of the calendar year saw more than double the number of allegations in comparison to any other quarter of the year. The most prominent concerns involved the alleged use of improperly calibrated equipment or inadequate procedures and the failure to follow procedures involving radiological controlled areas.

Lastly, there was a notable increase in the number of concerns related to quality assurance. Thirty-seven percent of those related to quality issues at the vendor site previously noted that also saw a number of chilling effect, wrongdoing, and discrimination concerns.

Materials Licensee Trends

A comparison of the types of issues in received allegations does not produce meaningful results because there are many different types of materials licensees and the activities they perform vary greatly. To provide insights into areas in which the NRC focused its attention on materials-related allegations, Figure 3 shows the seven types of materials licensees that accounted for approximately 80 percent of allegation concerns that the NRC received nationwide.<sup>5</sup>

**FIGURE 3 ALLEGATIONS BY TYPE OF MATERIALS LICENSEE NATIONWIDE 2013**



<sup>5</sup> The agency received few concerns about the materials licensee types that are not shown in Figure 3, which represent the remaining 20 percent of the issues received. These licensee types include academic, uranium recovery, general licensee, high-level waste, irradiators, nuclear pharmacies, special nuclear material, well logging, research and development, and transportation.

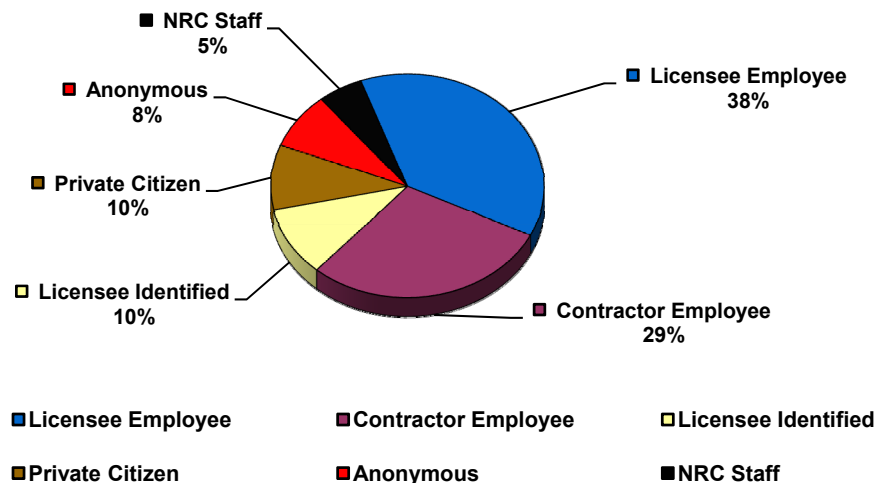


The NRC received slightly more materials allegations in CY 2013 compared to the numbers received in CY 2012 and CY 2011. Since CY 2004, the number of allegations related to fuel cycle facilities has constituted the highest percentage (30 percent to 50 percent) of materials allegations. For this reason, overall fluctuations in the receipt rate of materials allegations have primarily been the result of changes in the receipt rate of allegations involving one or more fuel cycle facilities. The second highest percentage of materials-related allegations in CY 2013 involved allegations in the medical area. Historically, the second highest percentage of material-related allegations has varied among medical licensees, nuclear gauge licensees, and radiography activities.

### Source Trends

Figure 4 provides a breakdown of 99 percent of the sources for reactors and materials allegations received in CY 2013.<sup>6</sup> The data indicate that the distribution of source categories remained consistent from CY 2009 to CY 2013. That is, employees of licensees (or former employees) and contractors (or former contractors) continue to be the primary sources of allegations. Because the total number of allegations received in CY 2013 was approximately 7 percent lower than the number received in CY 2012, it follows that there was a notable decline in the number of allegations raised by licensee employees. However, the number of allegations raised by contractor employees increased slightly compared to the previous calendar year. Persons wishing to remain anonymous continued to be the third largest source of allegations but their numbers decreased somewhat.

**FIGURE 4 ALLEGATIONS BY SOURCE CATEGORY  
NATIONWIDE 2013**



In considering those allegation sources mentioned previously that have the potential to provide insights into the SCWE at a given facility (i.e., allegations submitted by current or former licensee or contractor employees or by anonymous sources), the percentage of allegations from these sources has consistently remained around 75 percent annually. Two of the source categories deserve some explanation. The source category “NRC Staff” designates an NRC

<sup>6</sup> The NRC received few concerns from the 1 percent of sources not shown in Figure 4. These sources include the news media, state/federal agencies, and special interest groups.

staff member who suspects that a regulatory requirement has been violated deliberately or as a result of careless disregard, thus prompting the initiation of an investigation by the NRC Office of Investigations. The source category "Licensee Identified" denotes that a licensee representative, acting in his or her official capacity, has reported potential wrongdoing to the NRC. The agency staff assigns an allegation process tracking number to such items so that evaluation progress related to the alleged wrongdoing issue may be tracked.

### **Allegation Trends for Selected Reactor Sites**

Trending the number and nature of allegations for specific reactor sites, individually and in the aggregate, is one method the NRC staff uses to monitor the SCWE at reactor sites. The appendix to this report provides statistics on allegations for all operating reactor sites. The NRC received the listed allegations during the 5-year period between January 2009 and December 2013 and included only allegations received from onsite sources (i.e., those that might indicate the health of the SCWE). Onsite sources include current or former licensee employees, current or former contractor employees, and anonymous alлегers. For the purpose of this analysis, the NRC assumed that anonymous allegations came from onsite personnel.

Because a large volume of allegations from onsite sources might indicate a SCWE at risk, the staff conducted a more in-depth SCWE review of certain sites with larger numbers of onsite allegations. Before CY 2012, the sites receiving additional review were determined by a simple algorithm based on the median number of allegations received at operating reactors sites over the calendar year (that is, sites exceeding three times the median were chosen for a more in-depth SCWE review). However, because sites with a larger population of employees and contractors (such as 3-Unit reactor sites) typically generate more allegations, normalizing the data helps to ensure that those sites are not disproportionately chosen for further analysis. Based on an NRC Office of Research study conducted in CY 2012, the Agency Allegation Advisor adopted the use of the following criteria to consider the varying workforce size at different sites, for both reactor and materials facilities, and to determine which sites warrant further SCWE evaluation:

- 1-Unit reactor sites (or any site with fewer than 800 persons) with an onsite allegation volume greater than 2.25 times the median
- 2-Unit reactor sites (or any site with 800 to 1,000 persons) with an onsite allegation volume greater than 3 times the median
- 3-Unit reactor sites (or any site with more than 1,000 persons) with an onsite allegation volume greater than 4.5 times the median

The staff recognizes, and takes into consideration when applying the above criteria, that during times of significant site activity, the site population might increase substantially.

For CY 2013, the median number of allegations per operating reactor site was three. Browns Ferry Units 1, 2, and 3 (15), Watts Bar Unit 1 (7), Palisades (11), and Perry (7) are the four operating reactor sites that met these criteria. The criteria were also applied to one non-operating (pre-operating license) site, Watts Bar Unit 2 (14). The sections below discuss the staff's analyses of the SCWE at each of these sites.

Browns Ferry Units 1, 2, and 3

The number of allegations received by the NRC from onsite sources regarding Browns Ferry in CY 2013 decreased slightly from the number received in CY 2012, although the general trend in allegation receipt for Browns Ferry has steadily increased over the past 5 years. Two-thirds of the CY 2013 allegations were received in the first half of the year coinciding with a refueling outage conducted at Browns Ferry Unit 2 in the spring. Allegation sources were spread evenly in CY 2013 among all of the different categories of onsite sources, and were received from varied site departments, with no concentration in a specific department.

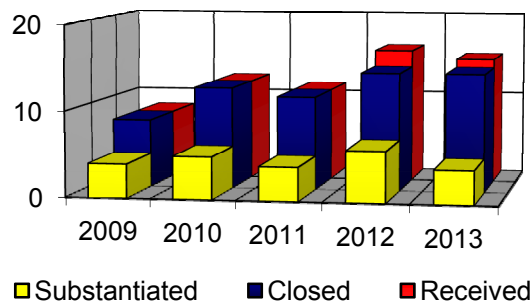
Half of all concerns received from Browns Ferry onsite sources in CY 2013 alleged management ineffectiveness or inappropriate intervention by management in

corrective-action, root-cause, or operability review efforts and many of these concerns were accompanied by an assertion that management's actions had chilled the work environment. Allegation concerns related to work environment or management effectiveness were consistent with employee input obtained during the licensee's evaluations conducted in late 2012 related to a 2010 NRC Red finding ((Agencywide Documents Access and Management System (ADAMS) Accession No. ML111290482). The NRC partially substantiated allegation concerns concluding that although most site personnel were not hesitant to raise safety concerns, some perceived there may be negative consequences should they do so. NRC followup inspection efforts related to the Red finding, in particular the NRC 95003 Supplemental Inspection conducted in CY 2013, addressed these observations.

The 95003 inspection was conducted in three parts. The 95003 Parts 1 and 2 inspections were completed in 2011 and the 95003 Part 3 inspection (which included a review of the licensee's third-party safety culture assessment, an NRC-graded independent safety culture assessment, and reviews of the current status of and licensee corrective actions related to SCWE and the Employee Concerns Program (ECP)) was completed in May 2013 (ADAMS Accession No. ML13234A539). The licensee's post-Red-finding recovery plan, the Integrated Improvement Plan (IIP) (which included causal analyses, action plans, effectiveness review plans, and associated performance metrics) was reviewed in detail by the 95003 inspection team. The 95003 team found that the licensee's recovery actions to address SCWE problem areas were adequate and that there was no indication of a current SCWE problem. The 95003 team did identify areas of the IIP that warranted revision, specifically the areas titled Safety Culture, Procedure Quality, Human Performance Verification Program, and Operations Led Organization. While the 95003 Part 3 inspection results noted improvements overall in safety culture and the lack of a SCWE problem at the Browns Ferry site, the inspection team cautioned that implementation and completion of remaining corrective actions in the IIP were necessary to achieve substantial and sustained improvement.

The most recent NRC problem identification and resolution (PI&R) inspection (ADAMS Accession No. ML12150A219) was completed in mid-2012 and concluded at that time that

**FIGURE 5 BROWNS FERRY 1, 2, and 3 ALLEGATIONS**



employees generally felt free to raise concerns and were aware of different avenues for raising concerns. While it is difficult to correlate the results of the PI&R inspection with current conditions at Browns Ferry because of the time elapsed, the inspection did find that a considerable number of anonymous concerns were being submitted to the corrective-action program (CAP). However, the inspection team could not attribute this to a specific SCWE problem. The PI&R inspection results also noted some workers perceived a lack of confidence in the CAP to correct issues or worker perceptions that there would be retaliation for raising issues.

Also of note are the licensees' commitments established by way of a confirmatory order issued in response to two substantiated discrimination concerns before CY 2009 (ADAMS Accession No. ML093510993). In recognition of actions the licensee agreed to take, the NRC agreed not to propose a civil penalty nor issue a notice of violation or other enforcement action in either case.<sup>7</sup> The commitments, many to be implemented fleet wide, related to the implementation of multiple response activities to confirm the SCWE policy, to conduct SCWE and safety culture assessments, to heighten awareness of avenues for raising safety concerns, to establish a process to review proposed adverse personnel actions for potential negative impact on the SCWE, to monitor and analyze SCWE trends, and to enhance SCWE-related training. Required follow-up actions for many of these commitments extended into CY 2013 and NRC has been consistently monitoring and evaluating the licensee's progress in implementing the related commitments.

While (1) the results of the 2013 NRC 95003 Part 3 inspection, (2) continuing followup activities related to the December 22, 2009, confirmatory order, and (3) a PI&R inspection completed in mid-CY 2012 all identified improvements in safety culture and no indication of an overall SCWE problem at Browns Ferry, all noted that perceptions of SCWE problems continue to be raised by some workers. Thus, the aggressive implementation and completion of related corrective actions is necessary to achieve substantial and sustained improvement in both safety culture and SCWE. The number and nature of allegations received by the NRC from onsite sources regarding Browns Ferry in CY 2013 similarly indicate that perceptions of a potential work environment problem persist with some workers at the facility. A substantive number of the allegation concerns in CY 2013 alleged management ineffectiveness or inappropriate intervention by management in corrective-action, root-cause, or operability review efforts. Issues related to management actions impacting the SCWE also surfaced during the 95003 followup activities and in the 2012 PI&R inspection. For example, the third-party safety culture assessment conducted as a result of Browns Ferry 1 entering Column 4 of the ROP Action Matrix and the December 2009 confirmatory order identified concerns about management not getting staff input before making changes to the station, as well as examples of unwillingness to report or inform supervisors of unwillingness to raise concerns. The 95003 team review of the licensee's Apparent Cause Evaluation (ACE) related to the SCWE area noted findings that management did not effectively establish a trusting relationship with employees and that management did not effectively use CAP to resolve issues when indicators and precursors of a chilled work environment were identified.

All of these indications reinforce the need for aggressive implementation and continued monitoring by the licensee of the IIP corrective actions and other corrective actions it has

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<sup>7</sup> The ADR process uses a neutral mediator with no decisionmaking authority to assist the NRC and its license holders in resolving differences regarding enforcement actions. Often, the ADR process is more effective than traditional enforcement in developing broad, long-term corrective actions, thus producing a greater benefit for employee and public safety than a one-time fine or other enforcement action.

committed to that relate to the areas of safety culture and SCWE. The NRC will continue to monitor the licensee's progress in completing, monitoring, and sustaining performance related to these corrective actions.

### Watts Bar Unit 2

The volume of onsite allegations received concerning the Watts Bar Unit 2 site represents the highest for non-operating reactor sites in CY 2013 and is a significant increase over the number received in CY 2012; however, it is noted that the concerns were received at a declining rate throughout the calendar year. An

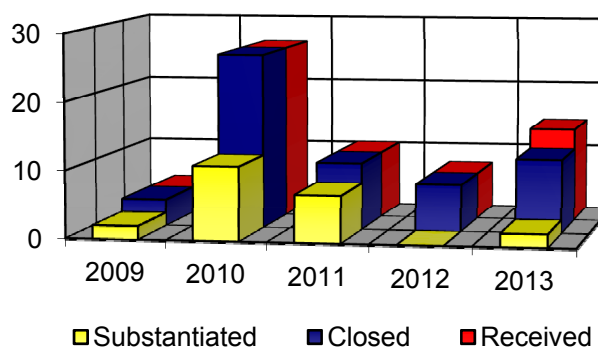
analysis of the sources and subject matter of the allegations received in CY 2013 indicates, not surprisingly, that the majority of concerns came from current and former contractors and primarily involved rigging, piping, and other construction-related concerns. Three allegations of a chilled work environment were raised, one of which, for a specific department, was substantiated by the licensee in the fourth quarter. The licensee's corrective actions,

including personnel changes, appear to have been appropriate. There was an increasing trend in discrimination allegations as well. Of those allegations raised in CY 2013, one remains open and the remaining were not pursued by NRC because a prima-facie showing of potential discrimination was not established. For clarification, to consider a matter of potential discrimination under Title 10 of the *Code of Federal Regulations* (10 CFR) 50.7, "Employee Protection," an allogger must present a certain pattern of facts, called a prima facie showing. Specifically, the allegation must initially establish that an employee has engaged in a protected activity, that an adverse personnel action was taken against the employee, that management knew that the employee had engaged in the protect activity, and that the protected activity was, in part, a reason for the adverse personnel action.

Based on discussions with the licensee, the number of employee concerns raised internally also increased substantially in CY 2013. A spike in concerns was noted in the second and third quarter of the year. To increase familiarity with the program, and in response to findings that many on site were unsure who the ECP representative was, the ECP representative took the pulse of the work environment by conducting approximately 500 small face-to-face surveys in CY 2013.

As discussed above in relation to the Browns Ferry site, in late 2009 the NRC reached a settlement with the licensee in two cases involving apparent violations of the NRC's employee-protection rule at the utility's Browns Ferry Nuclear Plant. The confirmatory order that outlined the settlement agreement is applicable to both the licensee's operating fleet and Watts Bar Unit 2. The NRC continues to inspect the licensee's compliance with the confirmatory order.

**FIGURE 6 WATTS BAR 2 ALLEGATIONS**

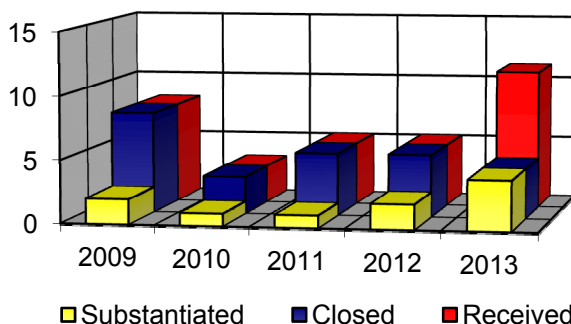


In summary, there was a significant increase in allegations in 2013, including an increase in discrimination concerns. However, the licensee saw a corresponding increase in concerns reported to their ECPs. Both the NRC and licensee saw the numbers decline by the fourth quarter. Although one chilled work environment allegation was substantiated, the licensee's actions were comprehensive and appear to have been effective. The NRC will maintain its oversight of the SCWE at Watts Bar Unit 2 through normal inspection activities, with particular focus on the licensee's efforts to complete the actions required by the 2009 confirmatory order, to assess impacts on the SCWE and safety culture at Watts Bar Unit 2.

### Palisades

The number of allegations received by NRC from onsite sources regarding Palisades in CY 2013 increased significantly from the number received the previous year. The majority of the concerns involved the security department and included technical, wrongdoing, falsification, training and qualifications, chilling effect, and discrimination concerns within the security organization. Discrimination concerns also significantly increased, and four remain open. One discrimination concern was withdrawn by the alleged and two concerned third-party allegations of discrimination which the NRC does not pursue because it is necessary to have the cooperation of the individual allegedly retaliated against in order to effectively investigate the issue.

**FIGURE 7 PALISADES ALLEGATIONS**



Four of the allegations included chilling effect concerns. Two associated with one department were substantiated mid-year and the licensee's actions, including personnel changes, appear to have been effective. As a result of a fleet-wide reorganization initiative, two security supervisors were terminated late in the year, and this event generated a number of allegation concerns, including a chilling effect concern. In February 2014, the NRC completed an inspection that included focus group interviews in a number of organizations, management interviews, and document reviews (ADAMS Accession No. ML14064A569). The inspection team concluded that all of the organizations but one had a healthy SCWE. Specifically, the inspection team noted that the security organization was chilled in that the security officers perceived that (a) recent actions to terminate the employment of two supervisors was retaliation for their having raised concerns, (b) the CAP was ineffective at addressing their concerns, (c) security management was unresponsive to employees' concerns, and (d) the ECP could not be trusted to maintain employees' confidentiality.

Based on discussions with the licensee, all but one of the employee concerns raised internally were from the security organization, and most of those involved the termination of the two supervisors discussed above. Although the terminations were previously reviewed by the licensee to ensure they did not represent a violation of the NRC's employee-protection regulations, in response to the new concerns raised by a number of security officers, the licensee hired an independent investigator to review their actions again. The independent investigator confirmed that the actions taken against the supervisors were not discriminatory.

Nonetheless, in response to the NRC's observations, the licensee has developed an action plan to further address the perceptions of the workforce. The plan includes initiatives in the areas of communications, training, process improvements, and monitoring activities.

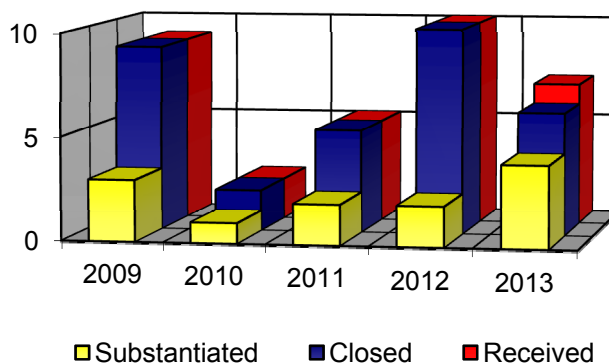
The allegation data and regional inspection observations indicate a chilled work environment in the security organization resulting, primarily, from the termination of the above discussed security supervisors and the perception by the workforce that the terminations were retaliation for the supervisors raising concerns. Although it appears the licensee did not recognize the breadth of the condition of the weakening work environment until the NRC brought it to their attention, they had independently engaged the above discussed third-party investigator to reevaluate their actions with regard to the terminations and communicated the results of that effort to several concerned individuals. The licensee has been taking actions to address the NRC's observations but the effectiveness of these actions has not yet been determined. Based on these actions, the NRC will maintain its oversight of the SCWE at Palisades through normal inspection activities, with a particular focus on licensee efforts to ensure that the corrective actions being taken in response to the chilling effect concern in the security department are completed and are effective at improving the SCWE.

### Perry

Allegations from onsite sources regarding Perry in CY 2013 were primarily raised by licensee employees and were received from varied site departments, with no concentration in a specific department. Most of those raised were received between late March and early June 2013, coinciding with the timeframe of the spring 2013 refueling outage. Only 1 concern involved an alleged chilled work environment and it was not substantiated. No discrimination concerns about Perry were received in CY 2013.

An NRC supplemental 95002 inspection completed in June 2013 (ADAMS Accession No. ML13224A382) was conducted to (1) assess the extent of condition and extent of cause of Yellow and White inputs, (2) provide assurance that these were identified, and (3) provide assurance that the root and contributing causes of a more recently opened parallel White performance indicator (PI) inspection finding were understood. This supplemental 95002 inspection also included a review to determine whether safety culture components caused or significantly contributed to the parallel White PI inspection finding. The 95002 team found that root-cause evaluations performed by Perry had identified a number of safety culture components that contributed to the risk-significant issues that were the subject of the inspection. The 95002 supplemental inspection also widened the review of departmental safety culture beyond Radiation Protection, which had been the focus of previous White findings. Participants in focus groups conducted

**FIGURE 8 PERRY ALLEGATIONS**





during the 95002 supplemental inspection expressed a common theme of satisfaction with site management's current safety focus and noted recent senior management changes and program/process changes as evidence of a safety commitment. Focus group participants indicated that they were comfortable raising concerns without fear of retaliation and were aware of the various avenues by which concerns could be raised, including the ECP. Radiation protection workers specifically provided positive comments about new management in the department who were promoting the raising of concerns and improved communications within the department.

The most recent NRC look at SCWE at the Perry site was accomplished through the biennial PI&R inspection completed in late November 2013 (ADAMS Accession No. ML14003A186). The PI&R team inspectors conducted impromptu interviews with plant personnel as a follow-on to the results of the 95002 supplemental inspection. The interview results reinforced the conclusion from the 95002 inspection that workers at Perry feel free to raise concerns without fear of retaliation. Individuals interviewed were aware that in addition to the corrective-action program, concerns could be raised to their supervisor, the ECP, or the NRC. Several comments also noted improved communication from senior leadership at Perry.

In summary, the number and nature of allegations received regarding the site in CY 2013 do not indicate a SCWE problem at the site. The NRC will maintain its oversight of the SCWE at Perry through normal inspection activities.

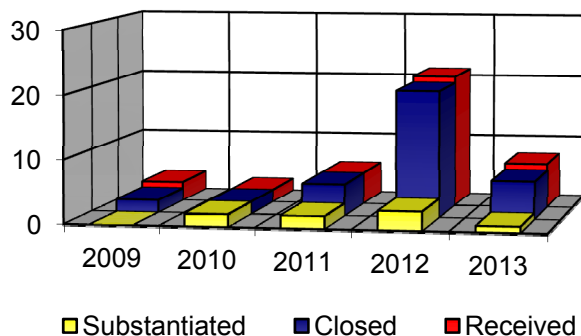
#### Watts Bar Unit 1

The number of allegations received by the NRC from onsite sources regarding Watts Bar Unit 1 in CY 2013 decreased significantly from the number received in the previous year. An analysis of the data indicates no strong trends with regard to functional organizations; however, it is noted that almost half the allegations included chilling effect concerns in two different departments. One was substantiated and one is still open.

Regarding the substantiated chilling effect concern, in a response to the NRC's request for information, the licensee conducted an evaluation of the work environment in the security organization and concluded, in the first half of the calendar year, that employees were not free to raise nuclear safety/security concerns without fear of retaliation. The licensee initiated corrective actions, including communicating the results of their evaluation to the affected workers; increasing senior management presence in the field and at shift meetings, and coaching security management.

The allegation receipt rate declined throughout the calendar year. The allegations were received primarily from licensee employees. There were a number of allegations from anonymous sources, however, one of which was the chilling effect concern that was substantiated. The number of discrimination concerns received by NRC decreased in 2013 as

**FIGURE 9 WATTS BAR 1 ALLEGATIONS**





well. Only one was received and it was not investigated by the NRC because a prima-facie showing of potential discrimination was not established.

The last biennial PI&R inspection at Watts Bar Unit 1 was completed in February 2013 (ADAMS Accession No. ML13098B025). The inspection found that (1) licensee management emphasized to their employees the importance of reporting concerns, (2) reporting avenues are readily accessible, and (3) the workforce was willing to raise nuclear safety concerns.

According to discussions with the licensee management, employee concerns raised internally increased in the second half of the year. This increase corresponds to the placement of a permanent Employee Concerns Program representative onsite in June 2013. The total number of nuclear safety and quality concerns were fairly representative of a number of functional areas. According to the licensee, 3 concerns were raised about chilled work environments, each of them was partially substantiated, and corrective actions were taken. In 2012, after the licensee conducted an analysis which showed that allegation numbers had increased while Employee Concerns Program concerns had decreased for three consecutive years, the licensee took actions to improve the effectiveness of that program. The increasing use of the program at Watts Bar Unit 1 (and a corresponding decrease in allegations to the NRC) seems to indicate that those actions were successful to some degree.

As previously discussed, in relation to the Browns Ferry and Watts Bar Unit 2 sites, in late 2009 the NRC reached a settlement with the licensee in two cases involving apparent violations of the NRC's employee-protection rule at the utility's Browns Ferry Nuclear Plant. The confirmatory order that outlined the settlement agreement is applicable to Watts Bar Unit 1 as well. The NRC continues to inspect the licensee's compliance with the confirmatory order.

In summary, allegations significantly declined in 2013, including allegations with discrimination concerns. Although a number of the allegations included chilling effect concerns, the only one substantiated to date was effectively addressed by the licensee. The work-environment concerns in the security department were addressed in the first half of the calendar year; since then, few allegations have been received concerning Watts Bar Unit 1, while the licensee's employee concerns trended up throughout the year. The NRC will maintain its oversight of the SCWE at Watts Bar Unit 1 through normal inspection activities, with a particular focus on verifying that the licensee continues to take the actions required of it by the 2009 confirmatory order.

### **Allegation Trends for Selected Materials Licensees**

The NRC Web site posts allegation statistics for certain fuel cycle facilities (see the appendix to this report). Because of the small number of allegations and the smaller workforce sizes associated with the overwhelming majority of other smaller materials licensees, the potential for a licensee or contractor to identify an allegor is increased. For this reason, tables of statistics on allegations about materials licensees other than fuel cycle facilities have not been provided publicly or included in this report. None of the materials licensees or fuel cycle facilities received a sufficient number of allegations to discern a trend or pattern or to provide insights into the SCWE. Therefore, this report does not include more in-depth reviews of specific materials licensees.

## Allegation Trends for Selected Vendors

Neither this report nor the NRC Web site provides statistics by contractor or vendor for reasons similar to those outlined above for materials licensees. Nonetheless, the allegation trends of one vendor warrant discussion in this report.

### Lake Charles Facility

The number of allegations received by the NRC from onsite sources regarding the Chicago Bridge and Iron (CB&I) Fabrication Lake Charles facility (formerly known as, Shaw Modular Solutions (SMS)) in CY 2013 increased significantly from the number received in CY 2012. The allegations were roughly spread throughout the quality assurance and operations areas. There were 11 chilling effect allegation concerns received in the quality assurance and operations areas and 20 discrimination allegation concerns received in CY 2013. Of these discrimination concerns, 11 remain open either as part of the ADR process or an OI investigation.

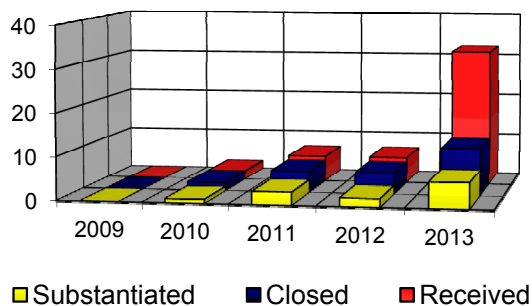
On April 18, 2013, the NRC issued a Chilling Effect Letter (ADAMS Accession No. ML13092A077) notifying the vendor that the NRC had concluded, based on inspection observations and investigations into allegations received in CY 2012 and the first quarter of CY 2013, that portions of the Lake Charles facility workforce, especially employees with nuclear and quality control backgrounds, perceived that they were not free to raise safety concerns, that they believed they would be retaliated against for raising such concerns, and that management had not been effective in assuring employees that they could raise safety issues without fear of retaliation.

Furthermore, the NRC issued a confirmatory order to Chicago Bridge and Iron on September 16, 2013, as a result of a successful

post-investigation ADR session with the agency (ADAMS Accession No. ML13231A271). The confirmatory order represents a settlement agreement between the NRC and the vendor concerning a Notice of Violation and Proposed Imposition of Civil Penalties issued by the NRC on April 18, 2013 (ADAMS Accession No. ML13050A597). The violation involved employment discrimination in violation of 10 CFR 52.5, "Employee Protection."

In response to both the Chilling Effect Letter and confirmatory order, Chicago Bridge and Iron committed to taking a number of actions, including reinforcing through communications its strategy and commitment to improve its nuclear safety culture and SCWE; updating its related policies to ensure their consistency with NRC and industry guidance; developing and revising the company's employee-protection, safety culture, and SCWE training; improving or developing a number of safety culture processes, such as the Employee Concerns Program and safety culture monitoring tools; and performing comprehensive nuclear safety culture assessments of all CB&I nuclear business entities.

**FIGURE 10 LAKE CHARLES FACILITY ALLEGATIONS**





The NRC has statutory responsibility to periodically review the actions of the Agreement States to ensure that they maintain programs that are adequate to protect public health and safety and are compatible with the agency's program. This authority is granted under Section 274j of the Act. The NRC uses the Integrated Materials Performance Evaluation Program (IMPEP) to satisfy its statutory responsibility. More information on the NRC's Agreement State Program and IMPEP is available on the Web site for NRC's Office of Federal and State Materials and Environmental Management Programs at <http://nrc-stp.ornl.gov/>.

In CY 2013, the NRC conducted routine IMPEP reviews of 9 Agreement State Programs. The review teams evaluated the effectiveness of the Agreement State Programs' responses to concerns from external sources by reviewing the casework and documentation for 66 cases cumulatively received by all of the programs reviewed. The NRC referred 23 of the 66 cases reviewed to the Agreement State Programs; the States received the other concerns directly from concerned individuals. In all cases, the review teams concluded that the States consistently took prompt and appropriate action in response to concerns raised. In all cases, the review teams noted that the States documented the results of their investigations and closeout actions, which included notifying concerned individuals of the outcomes of the investigations when the individuals' identities were known. The review team determined that the States reviewed in CY 2013 adequately protected the identity of any concerned individual who requested anonymity. In general, the results of the CY 2013 IMPEP reviews demonstrate that the Agreement States continue to treat response to concerns from external sources as a high priority in protecting public health and safety.

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## OVERVIEW OF PROGRAM ACTIVITIES

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Activities in CY 2013 in areas closely related to the Allegation Program are discussed below. The NRC issued four Chilling Effect Letters in CY 2013 related to either a finding of discrimination or NRC observations about the SCWE at regulated entities. At the time this report was prepared, approximately 16 percent of the discrimination cases offered agency-sponsored alternative dispute resolution (early ADR) in CY 2013 reached settlement. The sections below discuss these areas in more detail.

### Chilling Effect Letters and Requests for Information Regarding Discrimination Findings

The staff gathers insights into the SCWE at a particular site in several ways (e.g., by reviewing the number and nature of allegations concerning that site and through documented observations based on interviews with the licensees' employees and the review of pertinent documents during the baseline problem identification and resolution inspections). If the staff discerns that a work environment is "chilled" (i.e., not conducive to raising safety concerns internally) or there is a finding of discrimination that has the potential to chill the work environment, the NRC may request, in writing, information about the licensee's SCWE. Such letters have historically been referred to as Chilling Effect Letters (CELs).

In early CY 2014, the NRC revised its guidance to the staff concerning one historical type of CEL. When an initial U.S. Department of Labor (DOL) investigation related to a discrimination concern raised under Section 211 of the Energy Reorganization Act of 1974 (ERA) is substantiated, the NRC staff considers how the DOL finding will affect the SCWE. In particular, the staff needs to ensure that awareness in the workplace of DOL's discrimination finding has not created a chilling effect (i.e., has not discouraged other employees and contractors from raising safety concerns). To that end, the staff issues a request for information to the regulated entity. Such letters inform the licensee or contractor of the NRC's knowledge of the finding and interest in understanding the licensee's or contractor's position and any actions that have been taken or planned to assess and mitigate the potential chilling effect. It also informs the workforce of the NRC's interest in the state of the environment for raising concerns at the site or facility. At the time such letters are issued, the NRC has confirmed neither that enforcement is necessary nor that the work environment is chilled. Rather, the information is sought to help inform the NRC's potential evaluation efforts going forward. The NRC Enforcement Manual provides detailed guidance on considering the issuance of such requests for information in these circumstances. (The NRC Enforcement Manual appears on the agency's public Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/guidance.html#manual>.) Changes in early CY 2014 were made to this guidance and these types of letters are no longer referred to as CELs to more clearly distinguish them from letters informing the licensee or contractor of the NRC's conclusion that the work environment is chilled.

For situations involving indications of a chilled work environment that do not involve a finding of discrimination, such as when inspection observations or allegation insights result in the NRC's conclusion that a licensee or contractor's work environment is chilled and corrective actions are warranted, staff guidance can be found in Allegation Guidance Memorandum 2012-001, "NRC Chilling Effect Letters," dated March 9, 2012 (ADAMS Accession No. ML12025A055). This guidance outlines the factors that are considered when deciding to issue a CEL, the process used to make that determination, the contents of the CEL, the evaluation of a CEL response, and the closure of the CEL.

In April 2013, a CEL was issued to Chicago Bridge and Iron (Shaw Modular Solutions) citing the NRC's conclusion that the SCWE at the Lake Charles, LA, site was chilled and requesting information regarding the vendor's plans to address those concerns (ADAMS Accession No. ML13092A077). In July 2013, a request for information was issued to Public Service Electric and Gas (PSEG) Nuclear when NRC became aware, from a newspaper article, of a jury verdict in U.S. District Court in Camden, NJ, in favor of a contractor employee at the Salem and Hope Creek Nuclear Generating Stations (ADAMS Accession No. ML13207A078). While the complaint was not filed with DOL under ERA Section 211 or with the NRC, the federal court verdict was of concern to the NRC because the retaliatory action might have had a chilling effect on the willingness of PSEG employees and its contractors to raise safety concerns to PSEG, its contractors, or the NRC. CELs were also issued in August 2013 to a licensee and its contractor (Wolf Creek Nuclear Operating Company and Enercon) after a positive DOL discrimination finding (ADAMS Accession Nos. ML13233A208 and ML13233A212, respectively). The letter to the licensee also included the NRC's concerns related to inspection observations that identified a hesitance to raise safety concerns among Quality Assurance personnel at the facility. The July 2013 letter to PSEG and the August 2013 letter to Enercon were requests for information about the discrimination findings and did not represent NRC's conclusions with regard to the health of the SCWE. Based on the revised guidance in the Enforcement Manual, such letters would not be referred to as CELs in the future.

### **Alternative Dispute Resolution Process**

The NRC's ADR Program includes the opportunity to use ADR early in the allegation process for cases of alleged discrimination before the NRC investigates the allegation. Early ADR provides parties additional opportunities to resolve their differences outside the normal regulatory framework, and it uses a neutral third party to facilitate discussions and the timely settlement of the discrimination concern. The NRC believes that voluntary dispute resolution by the parties, using the communication opportunities that the early ADR process provides, can stem the inherent damage such disputes can inflict on the SCWE more quickly than an investigation. At any time, either party can exit the ADR process, at which point an NRC investigation remains an option if the alleger is still interested in pursuing the discrimination matter. Should such an investigation and resulting enforcement panel conclude that enforcement is warranted, the NRC and licensee may engage in what the agency refers to as "Post-Investigation ADR." Additional information on that process can be found by going to <http://www.nrc.gov/about-nrc/regulatory/enforcement/adr/post-investigation.html> on the NRC's public Web site. If during early ADR, however, the parties reach a settlement, the staff will not pursue an investigation or subsequent enforcement regarding the discrimination finding. The NRC also considers settlements resulting from licensee-initiated mediation as equivalent to settlements reached under the Early ADR Program.

At the time this report was prepared, 30 of the early ADR offers made by the NRC in association with discrimination allegations raised in CY 2013 resulted in agreements to mediate. Of those 30 cases, 13 (43 percent) mediated discrimination concerns resulted in the parties reaching a mutually agreeable settlement. The remaining 17 cases were either still being mediated at the time of this report or failed to result in a settlement and the alleger requested an NRC investigation. At the time this report was prepared, 1 investigation has been closed as unsubstantiated and 34 are still continuing.

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**CONCLUSIONS**

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There has been an overall declining trend in the total number of allegations received from CY 2009 through CY 2013. The decreases do not appear to be the result of a general industry issue or other external factor, because the reasons for the substantive changes in the numbers of allegations received regarding these facilities were based on plant-specific matters. In CY 2013, coinciding with the overall decrease in allegations received, the total volume of allegation concerns received decreased in three of the four regional offices, as well as in the Office of Nuclear Material Safety and Safeguards. Region III and the Office of New Reactors experienced substantial increases in the number of concerns received. Sixteen percent of the allegations received in Region III in CY 2013 included four or more concerns, and one allegation contained more than 30 concerns. However, there were no apparent trends in Region III in terms of allegation concerns coming from particular facilities or types of facilities or resulting from an event. The increases in allegations and concerns received by NRO were largely attributable to discrimination and SCWE concerns raised in regard to a particular vendor. The largest percentage of concerns received nationwide were discrimination concerns, which increased slightly from the number of discrimination concerns received in CY 2012. Chilling effect concerns comprised the second highest percentage of concerns received nationwide and decreased slightly in CY 2013 compared to CY 2012. While the number of security-related concerns also remained high, a gradual decrease in the total number of security concerns received per year over the past several years has been noted. More than 18 percent of the security concerns raised in CY 2013 involved a specific site in Region I.

The analyses of allegations have provided insights into the SCWE at several facilities. The staff has taken action to engage licensees about their work environment when this has been warranted and will continue to monitor these sites with interest.

The agency's Early ADR process resulted in 13 cases of discrimination allegations being settled successfully between the parties before the start of an NRC investigation. The staff believes that voluntary dispute resolution by the parties using the communication opportunities afforded in Early ADR can stem the inherent damage such disputes can have on the SCWE more quickly than an investigation could.

## APPENDIX

ALLEGATION STATISTICS FOR  
OPERATING REACTORS AND FUEL CYCLE FACILITIES

## OPERATING REACTOR ALLEGATIONS RECEIVED FROM ONSITE SOURCES

| Site                   | 2009 | 2010 | 2011 | 2012 | 2013 |
|------------------------|------|------|------|------|------|
| ARKANSAS 1 & 2         | 3    | 4    | 3    | 6    | 1    |
| BEAVER VALLEY 1 & 2    | 1    | 2    | 1    | 1    | 1    |
| BRAIDWOOD 1 & 2        | 3    | 4    | 2    | 2    | 2    |
| BROWNS FERRY 1, 2, & 3 | 8    | 12   | 11   | 16   | 15   |
| BRUNSWICK 1 & 2        | 5    | 1    | 3    | 6    | 1    |
| BYRON 1 & 2            | 9    | 6    | 3    | 3    | 0    |
| CALLAWAY               | 2    | 3    | 1    | 5    | 6    |
| CALVERT CLIFFS 1 & 2   |      | 3    | 1    | 1    | 3    |
| CATAWBA 1 & 2          | 2    | 2    | 3    | 3    | 1    |
| CLINTON                | 4    | 4    | 1    | 1    | 1    |
| COLUMBIA PLANT         | 9    | 4    | 5    | 1    | 5    |
| COMANCHE PEAK 1 & 2    | 1    | 2    | 3    | 2    | 3    |
| COOK 1 & 2             | 5    | 3    | 5    | 0    | 5    |
| COOPER                 | 2    | 5    | 5    | 3    | 4    |
| DAVIS-BESSE            | 0    | 2    | 4    | 0    | 5    |
| DIABLO CANYON 1 & 2    | 15   | 12   | 9    | 5    | 6    |
| DRESDEN 2 & 3          | 5    | 1    | 2    | 0    | 2    |
| DUANE ARNOLD           | 1    | 1    | 1    | 2    | 2    |
| FARLEY 1 & 2           | 6    | 7    | 12   | 9    | 6    |
| FERMI                  | 3    | 3    | 3    | 1    | 0    |
| FITZPATRICK            | 3    | 2    | 2    | 2    | 0    |
| FORT CALHOUN           | 4    | 5    | 4    | 3    | 5    |
| GINNA                  | 2    | 4    | 10   | 4    | 0    |
| GRAND GULF             | 2    | 5    | 3    | 10   | 2    |
| HARRIS                 | 2    | 5    | 3    | 6    | 2    |
| HATCH 1 & 2            | 5    | 8    | 4    | 5    | 3    |
| INDIAN POINT 2 & 3     | 11   | 6    | 15   | 17   | 13   |
| LASALLE 1 & 2          | 0    | 1    | 1    | 0    | 2    |
| LIMERICK 1 & 2         | 14   | 2    | 3    | 5    | 1    |
| MCGUIRE 1 & 2          | 3    | 6    | 5    | 1    | 3    |
| MILLSTONE 2 & 3        | 5    | 4    | 11   | 9    | 4    |
| MONTICELLO             | 2    | 0    | 3    | 2    | 1    |
| NINE MILE POINT 1 & 2  | 0    | 1    | 5    | 2    | 0    |
| NORTH ANNA 1 & 2       | 1    | 2    | 1    | 1    | 1    |
| OCONEE 1, 2, & 3       | 1    | 11   | 4    | 6    | 3    |
| OYSTER CREEK           | 14   | 4    | 0    | 3    | 1    |
| PALISADES              | 8    | 3    | 5    | 5    | 11   |
| PALO VERDE 1, 2, & 3   | 15   | 16   | 8    | 7    | 10   |
| PEACH BOTTOM 2 & 3     | 8    | 4    | 3    | 1    | 7    |
| PERRY                  | 9    | 2    | 5    | 10   | 7    |



| Site                 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------------|------|------|------|------|------|
| PILGRIM              | 1    | 5    | 5    | 2    | 4    |
| POINT BEACH 1 & 2    | 4    | 8    | 6    | 4    | 2    |
| PRAIRIE ISLAND 1 & 2 | 14   | 8    | 7    | 9    | 11   |
| QUAD CITIES 1 & 2    | 2    | 0    | 1    | 1    | 3    |
| RIVER BEND           | 5    | 7    | 0    | 0    | 3    |
| ROBINSON             | 0    | 4    | 6    | 4    | 4    |
| SALEM/HOPE CREEK     | 7    | 6    | 4    | 5    | 12   |
| SEABROOK             | 2    | 1    | 7    | 5    | 4    |
| SEQUOYAH 1 & 2       | 6    | 6    | 0    | 19   | 5    |
| SOUTH TEXAS 1 & 2    | 12   | 5    | 5    | 8    | 5    |
| ST. LUCIE 1 & 2      | 15   | 12   | 16   | 7    | 7    |
| SUMMER               | 3    | 1    | 4    | 1    | 0    |
| SURRY 1 & 2          | 2    | 6    | 4    | 1    | 1    |
| SUSQUEHANNA 1 & 2    | 15   | 12   | 22   | 21   | 9    |
| THREE MILE ISLAND    | 9    | 1    | 3    | 0    | 0    |
| TURKEY POINT 3 & 4   | 14   | 15   | 17   | 17   | 5    |
| VERMONT YANKEE       | 2    | 3    | 2    | 0    | 1    |
| VOGTLE 1 & 2         | 2    | 4    | 12   | 5    | 3    |
| WATERFORD            | 3    | 4    | 2    | 4    | 4    |
| WATTS BAR 1          | 3    | 2    | 5    | 21   | 7    |
| WOLF CREEK           | 6    | 2    | 4    | 5    | 6    |

**FUEL CYCLE FACILITY ALLEGATIONS RECEIVED FROM ONSITE SOURCES**

| <b>Site</b>                  | <b>2009</b> | <b>2010</b> | <b>2011</b> | <b>2012</b> | <b>2013</b> |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| AMERICAN CENTRIFUGE PLANT    | 0           | 0           | 1           | 1           | 0           |
| BWX TECHNOLOGIES, INC.       | 2           | 1           | 0           | 0           | 1           |
| FRAMATOME - RICHLAND         | 0           | 0           | 0           | 1           | 0           |
| GE-HITACHI GLOBAL LASER ENR. | 1           | 0           | 0           | 1           | 0           |
| GLOBAL NUCLEAR FUEL          | 6           | 6           | 5           | 5           | 2           |
| HONEYWELL                    | 7           | 17          | 3           | 6           | 6           |
| LOUISIANA ENERGY SERVICES    | 29          | 12          | 6           | 2           | 8           |
| NUCLEAR FUEL SERVICES, INC.  | 5           | 10          | 4           | 8           | 6           |
| PADUCAH                      | 4           | 4           | 6           | 2           | 2           |
| SHAW AREVA MOX SERVICES      | 1           | 0           | 4           | 11          | 4           |
| WESTINGHOUSE                 | 2           | 0           | 1           | 0           | 0           |
| YUCCA MOUNTAIN               | 5           | 2           | 0           | 0           | 0           |