ALLEGATION PROGRAM

ANNUAL TRENDS REPORT

Calendar Year 2016

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

CONTENTS

FIGURES

EXECUTIVE SUMMARY

U.S. Nuclear Regulatory Commission (NRC) Management Directive 8.8, "Management of Allegations," dated January 29, 2016, 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 2016 involving the Allegation Program and related policies. The allegation staff continues to facilitate the agency-sponsored preinvestigation (early) Alternative Dispute Resolution process for discrimination allegations. The NRC believes this preinvestigation process is beneficial to the environment for raising concerns. The preinvestigation Alternative Dispute Resolution process gives an individual and his or her employer (or former employer) the opportunity to resolve an allegation of discrimination through mediation, potentially avoiding lengthy litigation and/or an NRC investigation. About 60 percent of the 2016 mediated discrimination concerns reached settlement.

In the 2012 to 2016 timeframe, the NRC has received between 450 and 600 allegations per year[1] concerning reactor licensees, materials licensees, and vendors. The data from 2012 to 2016 shows an overall slightly declining trend in allegations. A 15 percent increase that the NRC observed in 2015 was due in large part to concerns raised about construction site activities associated with new reactors. While those sites continue to generate larger-than-average volumes of allegations in 2016, the total number of allegations received last year concerning all NRC-regulated entities decreased by 13 percent. This decrease in allegation receipt does 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 (i.e., as the number of allegations has increased or decreased, the number of concerns has increased or decreased correspondingly). In 2016, coinciding with the overall decrease in allegations received, the total volume of allegation concerns received decreased as well. More specifically, the number of allegation concerns received in three of the four regional offices decreased. Region I alone received 43 percent fewer allegation concerns in 2016 than it did in 2015. Region II, however, received more allegation concerns in 2016 than the previous year. Region II received over 400 allegation concerns, significantly more than other regions and offices, largely due to concerns raised in regard to the new reactor construction sites and one operating reactor site.

Chilling effect/chilled work environment concerns constituted the largest percentage of nationwide reactor allegations. In 2016, chilling effect/chilled work environment concerns increased by 38 percent from 2015. Similar to trends in 2015, many of the chilled work environment concerns received in 2016 involved reactor sites under construction and most of those were raised by contractor employees. The most often mentioned behaviors alleged by individuals to cause the chilling effect involved a perception that concerns raised were not addressed; retaliation against others for raising concerns; and supervisors who discourage using the corrective action program to document concerns.

[1] 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," January 29, 2016.

Discrimination concerns constituted the second highest percentage of reactor licensee concerns received nationwide in 2016 although fewer were received than the previous year. Contractor employees made 60 percent of the claims in 2016. Workers at reactor sites under construction represented approximately 28 percent of the discrimination concerns raised. The most often mentioned retaliatory adverse action taken was termination; however, there were also a number of complaints alleging unfavorable performance appraisals.

For some in the regulated community, the NRC received allegations in numbers that warranted additional analysis.[2] 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 environment for raising concerns. Because a large volume of allegations from onsite sources could be indicative of a chilled work environment, the staff selected three operating reactor sites and two reactor sites under construction for more in-depth review:

- Watts Bar Units 1 and 2
- Sequoyah Units 1 and 2
- Pilgrim
- Vogtle Units 3 and 4
- Virgil C. Summer Units 2 and 3

This report discusses allegation trends at each of these sites. In summary, the trends for two of the sites did not suggest a concern about the environment for raising concerns. The others, however, did indicate the environment was chilled, including one instance that resulted in the issuance by the NRC of a chilling effect letter. A chilling effect letter is a regulatory tool the NRC uses to notify the licensee of the NRC's concern about the environment for raising concerns and to request corrective actions. The associated employers in each case are taking actions to address the weaknesses, and the NRC is closely monitoring the ongoing activities.

Finally, in 2016, the NRC reviewed the effectiveness of nine Agreement State responses to concerns and concluded that, in all but one case, 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. One State's practices were found to be satisfactory, but in need of improvement.

[2] The total number of allegations received concerning reactor and fuel facility 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. 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 offer 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 a hesitance to raise safety concerns internally. For power reactor facilities, the staff analyzes recent allegation activity in support of the reactor oversight process (ROP) end-of-cycle assessments. In addition, the staff might analyze a particular site or licensee whenever allegations or inspection findings indicate that such an analysis is warranted.

The staff also reviews 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 inform the staff about the effect of external factors, plant events, and industry efforts to improve the SCWE at NRC-licensed facilities. The staff can use national trends to help develop budget and planning assumptions to support future agency and Allegation Program needs.

FIGURE 1 ALLEGATIONS RECEIVED BY CALENDAR YEAR

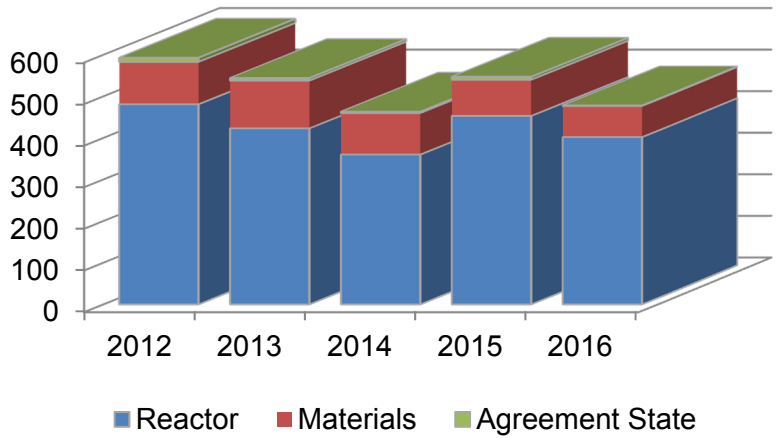


Figure 1 shows that the NRC receives between 400 and 600 allegations each year and that there has been a slightly declining trend in the total number of allegations received from calendar year 2012 through 2016. Although there was a decrease in allegations involving reactor licensees in 2013, allegations involving a number of materials licensees increased. The decrease in allegations involving reactor licensees continued in 2014, and those involving materials decreased as well. Despite the trend of reactor-related allegations reversing itself in 2015, in large part due to concerns raised about construction site activities associated with new reactors, it declined again in 2016. Over this 5-year period, the number of allegations decreased approximately 19 percent, suggesting stronger environments for raising concerns at most regulated entities.

The number of allegations that the NRC processed for Agreement State matters continues to be minimal. Under the authority granted in Section 274b of the Atomic Energy Act of 1954, as amended, the NRC may relinquish its authority to regulate certain byproduct material, source material, and limited quantities of special nuclear material to a State Government through a

mutual agreement. A State that has entered into this agreement with the NRC is called an Agreement State. When individuals contact the NRC with concerns about Agreement State licensees, the NRC staff will explain the Agreement State program to the individual. Most of these individuals will then indicate a willingness to contact, and be contacted directly by, Agreement State personnel about the evaluation of their concerns. 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 supply more specific information on the staff effort needed for an appropriate response. Typically, each allegation represents two to three concerns. Over the previous 5 years, the trend in the total number of concerns 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). In 2016, coinciding with the overall decrease in allegations received, the total volume of concerns received decreased as well. More specifically, the number of concerns received in three of the four regional offices, as well as in the Office of New Reactors and Office of Nuclear Security and Incident Response, decreased. Region I alone received 43 percent fewer concerns in 2016 than they did in 2015. Both the Office of Nuclear Reactor Regulation and Region II, however, received more concerns in 2016 than the previous year. Region II received over 400 concerns, significantly more than other regions and offices, largely due to concerns raised in regard to the new reactor construction sites and one operating reactor site. There are no discernible trends in the data to explain NRR's increase. Finally, the Office of Nuclear Material Safety and Safeguards trends remained steady.

Reactor Licensee Trends

To offer 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 2016.[3]

Figure 2 shows that chilling effect/chilled work environment concerns constituted the largest percentage of allegations received nationwide. In 2016, chilling effect/chilled work environment concerns increased by 38 percent compared to 2015. 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. A chilled work environment is a condition where the chilling effect is not isolated (e.g., multiple individuals, functional groups, shift crews, or levels of workers within the organization are affected). A chilled work environment is often referred to as a condition that is the opposite of a safety-conscious work environment. Similar to trends in 2015, last year many of the chilled work environment concerns involved the environment for raising concerns at the new reactor construction sites and most of those were raised by contractor employees involving work environments in the construction and quality assurance departments. The NRC also noted a trend in security departments at operating reactors, and at one licensee

[3] 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 access authorization; chemistry; civil and structural; cyber security; electrical; emergency preparedness; employee concerns programs; engineering; environmental qualifications; fatigue and overtime; fitness-for-duty; heating, ventilation, and air conditioning; instrumentation and control; licensing; mechanical; nondestructive evaluation; procurement; safeguards; and safety culture.

in the operations department. The most often mentioned behaviors alleged by individuals to cause the chilling effect involved a perception that management did not address concerns raised by employees; that management retaliated against others for raising concerns; and that supervisors discouraged using the Corrective Action Program (CAP) to document concerns. About 20 percent of the closed chilled work environment allegation concerns were substantiated in 2016. This represents a slight increase in the substantiation rate compared to 2015, however, those substantiated in 2016 include multiple allegations regarding the same chilled environment in some cases.

FIGURE 2 REACTOR CONCERNS NATIONWIDE 2016

A review of all discrimination concerns received in 2016 found trends in both the source and site variables. Sixty percent of the claims were made by contractor employees, both current and former. Workers at reactor sites under construction represented approximately 28 percent of the discrimination concerns raised. The most often mentioned retaliatory adverse action taken was termination; however, there were also a number of complaints alleging unfavorable performance appraisals. A variety of perceived reasons the adverse action was taken was expressed, including raising concerns to the NRC, to an employee concerns program, and to supervisory or midlevel management. At the time this report was prepared, none of the discrimination concerns raised in 2016 had yet been substantiated; however, 68 percent were still open and either being investigated or within the NRC's early Alternative Dispute Resolution (ADR) process. About 60 percent of the 2016 ADR mediated discrimination concerns reached settlement. Finally, approximately 13 percent of allegers filing a discrimination concern that were offered either early ADR or an investigation withdrew their complaint before a conclusion was reached by the agency.

There were no specific trends identified in the allegations containing quality assurance-related concerns with regard to reactor sites. Similar to last year, contractor employees raised the majority of concerns; however, unlike last year where a significant number of concerns involved contractor activities associated with new reactors under construction, in 2016 quality

assurance-related concerns were raised at multiple operating sites. Twenty-three percent involved procedural noncompliance issues.

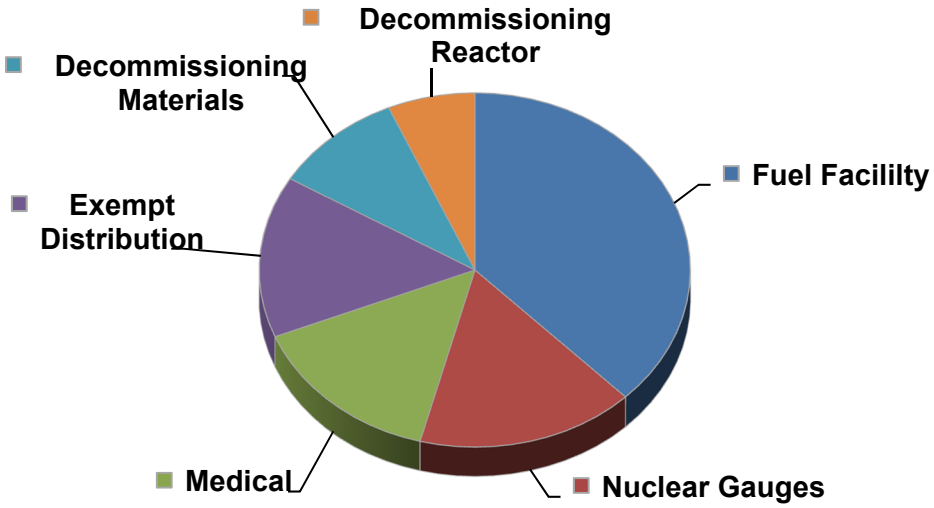
Regarding the wrongdoing-related concerns received in 2016, over 40 percent were brought to the NRC's attention by licensee management. As discussed later in this report regarding the different sources of allegation concerns, a licensee representative, acting in his or her official capacity, will sometimes report to the NRC potential wrongdoing issues they are evaluating. The agency staff assigns an allegation process tracking number to such items so that the evaluation progress related to the alleged wrongdoing issue may be tracked.

The number of security-related concerns decreased by about 43 percent in 2016. The NRC identified no trends in the types of concerns raised. Subject areas included, among other things, procedural noncompliance, inattentiveness, training, and equipment issues.

Materials Licensee Trends

A comparison of the types of materials 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 offer insights into areas in which the NRC focused its attention on materials-related allegations, Figure 3 shows the six types of materials licensees that accounted for about 80 percent of allegation concerns that the NRC received nationwide.[4]

FIGURE 3 ALLEGATIONS BY TYPE OF MATERIALS LICENSEE NATIONWIDE 2016



The NRC received about 14 percent fewer materials allegations in 2016 compared to the numbers received in the previous year. Since 2004, the number of allegations related to fuel cycle facilities has constituted the highest percentage (30 to 50 percent) of materials allegations. For this reason, overall fluctuations in the receipt rate of materials allegations have primarily

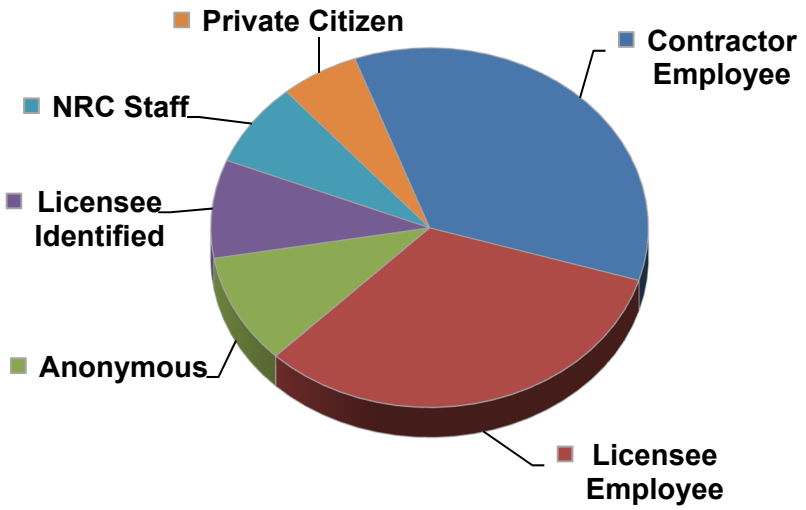
[4] The agency received few concerns about the materials licensee types that are not shown in Figure 3, which represent the remaining 20 percent of the issues received. These licensee types include academic, casks, irradiators, transportation, pharmacies, and well logging.

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 2016 involved allegations in the nuclear gauges area. A nuclear gauge is a tool used to measure thickness, density, or the make-up of a wide variety of material or surfaces. It consists of a radiation source that emits a cloud of particles and a sensor that counts the received particles that are either reflected by the test material or pass through it. By calculating the percentage of particles that return to the sensor, the gauge can be calibrated to measure the density and inner structure of the test material.

Source Trends

Figure 4 shows a breakdown of 98 percent of the sources for reactors and materials allegations received in 2016.[5] The data indicate that the distribution of source categories remained consistent from 2012 to 2016. That is, employees of licensees (or former employees) and contractors (or former contractors) continue to be the primary sources of allegations. Although the number of contractor employees raising allegations decreased by about 14 percent in 2016, they continued be the largest group of allegers coming to the NRC, reflecting the significant contractor numbers at the new reactor construction sites. Persons wishing to remain anonymous continued to be the third largest source of allegations; however, unlike last year, which saw an increase in anonymous allegers, anonymous allegers decreased notably in 2016 by approximately 25 percent. In considering those allegation sources mentioned previously that have the potential to offer 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

FIGURE 4 ALLEGATIONS BY SOURCE CATEGORY NATIONWIDE 2016



annually. Two of the source categories deserve some explanation. The source category “NRC Staff” designates an NRC staff member who suspects that a regulatory requirement has been

[5] The NRC received few concerns from the 2 percent of sources not shown in Figure 4. These sources include news media, special interest groups, and other Federal agencies.

violated deliberately or because of careless disregard, thus prompting the initiation of an investigation by the NRC Office of Investigations. The volume of NRC staff suspected concerns remained steady in 2016. 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 the evaluation progress related to the alleged wrongdoing issue may be tracked. Licensee-identified wrongdoing concerns decreased by approximately 30 percent in 2016.

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 NRC staff uses to monitor the SCWE at reactor sites. The appendix to this report offers statistics on allegations for all operating and nonoperating reactor sites. The NRC received the listed allegations during the 5-year period between January 2012 and December 2016 and includes 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 allegers. 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. And because sites with a larger population of employees and contractors (such as three-unit reactor sites) typically generate more allegations, it is important to normalize the data to help ensure that the NRC does not disproportionally choose larger sites for further analysis. The following algorithm based on the median number of allegations received at operating reactor sites over the calendar year, and that considers the varying workforce size at different sites, determines what sites warranted this additional review:

- 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

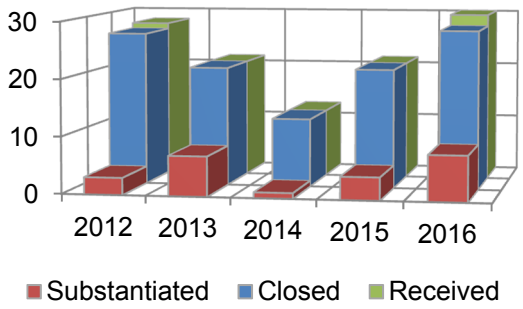
The staff recognizes, and takes into consideration when applying the above criteria, that during times of significant site activity, the site population might increase substantially.

For 2016, the median number of allegations per operating reactor site was three. The following reactor sites met the criteria for additional review: Watts Bar Units 1 and 2 (31), Sequoyah Units 1 and 2 (16), and Pilgrim (10). The NRC also applied the criteria to nonoperating (e.g., preoperating license) sites and found that Vogtle Units 3 and 4 (61) and Virgil C. Summer Units 2 and 3 (13) also met these criteria. The staff's analyses of the SCWE at these reactor sites are discussed below.

Watts Bar Units 1 and 2

In 2016, the number of allegations received by NRC from onsite sources (primarily from licensee employees) regarding Watts Bar Units 1 and 2 increased for the second straight year. However, the rate of receipt throughout the year decreased. The NRC received allegation concerns in a number of diverse disciplines, but noted trends in the operations, maintenance, and security departments. The trend in discrimination concerns mirrored those of other concerns in that the number increased in each of the last two years. In 2016, the NRC received nine discrimination concerns, two of which were still open at the time this report was being prepared. The NRC received more discrimination concerns in the first and third quarters of the year. No discrimination concerns have been substantiated in the past 5 years, although some claims have been successfully meditated and reached settlement using the NRC's early ADR process. Fifteen allegation concerns were received in 2016 in a decreasing rate asserting a chilled work environment or chilling effect.

FIGURE 5 WATTS BAR 1 AND 2 ALLEGATIONS



In late 2015, the NRC inspected a reactor coolant system heat up of Unit 1 that began without the normal source of primary system let down available. The inspection efforts were challenged because of poor operator log keeping and the lack of condition reports initiated by the licensee. The NRC conducted interviews of licensee management and operators to gather information about both the November event and the environment for raising concerns in the operations department. The NRC also conducted a followup inspection in January 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16098A323). In mid-February 2016, the NRC received additional information related to the SCWE and determined that sufficient evidence existed to support the issuance of a chilling effect letter (CEL) on March 23, 2016 (ADAMS Accession No. ML16083A479) concluding that Watts Bar Unit 1 employees in the operations department did not feel free to raise safety concerns using all available avenues without fear of retaliation. The staff's concern was heightened at the time by information that indicated that undue influence and direction of licensed operators from sources external to the control room may have affected operational performance.

In the fall of 2016, the NRC conducted the biennial problem identification and resolution (PI&R) inspection which included an evaluation of the licensee's SCWE. PI&R inspection activities occurred onsite beginning the week of September 12, 2016 (Part 1) and continued on October 31, 2016 (Part 2). The PI&R Part 1 inspection report (ADAMS Accession No. ML16300A409), focused on the overall status of the Watts Bar work environment and corrective actions taken to improve the SCWE since the issuance of the chilling effect letter. The PI&R Part 2 inspection report (ADAMS Accession No. ML16083A479) included a review of the licensee's evaluation of the root cause of the chilled work environment in operations. The inspection team found that the environment for raising concerns had improved in the operations department, and that employees interviewed in multiple organizations indicated that they were willing to raise nuclear safety concerns and felt free to raise concerns to their direct supervisors without fear of retaliation. However, the insights provided by employees confirmed that there were site-wide challenges to the SCWE at the Watts Bar site, and some of the conditions that prompted the

issuance of the CEL extended beyond the operations department. Most prominent was that although most employees in the assessment indicated that they did not fear retaliation for themselves, nearly half believed retaliation was a potential outcome for others raising concerns. In addition, most employees did not believe that concerns were promptly reviewed or appropriately resolved, either by their management or via the CAP. The team identified weaknesses in the documentation and tracking of corrective actions to improve the SCWE in departments outside of operations. There were also weaknesses in the criteria used to evaluate nuclear safety culture standards, which likely contributed to the missed opportunities to identify and address safety culture concerns prior to the development of the chilled work environment. The NRC also identified an apparent violation for failing to implement actions required by Confirmatory Order Modifying License, dated December 22, 2009 (ADAMS Accession No. ML093510993).

Also in the fall timeframe, the licensee contracted a consulting firm to conduct an assessment of the SCWE at the Watts Bar site. The PI&R inspection team reviewed that report and noted the observations were very similar to the NRC's.

The licensee, Tennessee Valley Authority (TVA), issued a revised root cause analysis (RCA) in October 2016 and continues to work on improving the site's SCWE. For example, one of the findings of the RCA was that the suspension of employee concerns program (ECP) pulsing surveys in the operations department, thought initially by management to be a distraction at a time of high activity, actually resulted in a missed opportunity to detect the declining SCWE. This finding was addressed by revising ECP procedural guidance to conduct regular scheduled pulsings and to prompt the consideration of increasing oversight of key meetings and pulsing of selected departments during increased organizational stressors (e.g., refueling outages, forced outages, organizational changes, NRC Inspections, etc.). The procedure change requires the ECP, not management, to decide if a pulsing survey is required.

TVA's ECP received very few concerns for evaluation in 2016 and experienced an approximate 50 percent decline in general intake activity from the previous year. Similar to the NRC's allegation rate of receipt, the ECP received more concerns in the beginning of 2016 than the end of the year. However, based on reports from TVA ECP personnel, the program saw discipline trends similar to those identified in the NRC allegations. The NRC inspection team reviewed elements of the ECP and confirmed through interviews that some employees question the independence of ECP from site management, which may explain their declining numbers. To address this perception, ECP management is using various communication tools to clarify their corporate versus site reporting structure, and revising their process to allow a concerned individual to contact any ECP representative at any TVA site or the corporate office with their concerns.

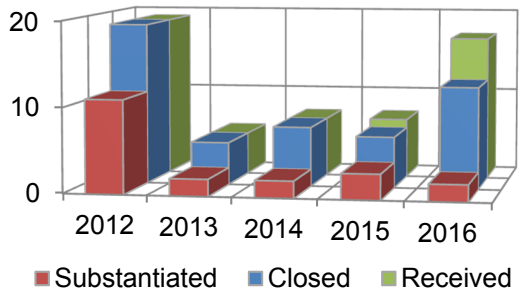
In summary, although there was an increase in allegations at the Watts Bar site in 2016, the receipt rate did decrease throughout the year, despite the issuance of the CEL concerning the operations department in the first quarter. The issuance of a CEL can typically generate more allegations for a period of time. NRC inspection results late in the year indicate an improving environment in operations where management has focused its attention; however, the inspection team concluded that some of the conditions that chilled the operations department were sitewide, and the corrective actions to address the CEL should appropriately be extended sitewide. These included the perceptions that there is a lack of effective problem resolution and beliefs that employees who raise concerns, including nuclear safety concerns are at risk of being retaliated against for doing so. In 2017, the NRC will maintain its oversight of the SCWE

at Watts Bar through CEL-related followup inspection activities. The NRC plans to pay particular attention to the licensee's efforts to produce sustainable improvements to the SCWE sitewide.

Sequoyah Units 1 and 2

In 2016, the number of allegations received by NRC from onsite sources regarding Sequoyah in significantly increased from the number received in the previous year. An analysis of the trends indicates increased activity in both the second and fourth quarters. The fourth quarter increase correlates with the Unit 1 refueling outage, which typically generate allegations due to both the increased size of the workforce and stress resulting from off normal operations. The increase in the second quarter may, in part, be a result of the issuance of the CEL to the licensee regarding the Watts Bar Unit 1 operations department as many of the concerns involve retaliatory behaviors and claims of a chilled work environment, or issues directly related to TVA's actions to address the CEL at its other site. It is also noted that a number of concerns involve operations. Almost all of the allegations were received from licensee employees, either current or former. About 30 percent of the allegation concerns received in 2016 asserted a chilling effect or chilled work environment, but none were substantiated.

FIGURE 6 SEQUOYAH 1 AND 2 ALLEGATIONS



There was an increase in the number of discrimination concerns received by NRC in 2016, as well. Of the six concerns received, three were still open and under investigation at the time this report was prepared. As with other concerns, there were more discrimination concerns received in the second and fourth quarters.

Discussions with the licensee revealed that the Sequoyah site's ECP received no nuclear safety or quality concerns requiring a formal investigation in 2016. Furthermore, other traffic to the ECP, such as informal contacts, decreased slightly in 2016 as compared to the previous year, as well as decreased throughout the year.

While there was a notable increase in allegations in 2016, many of those were received in either the second or fourth quarter of the year and correlate with events that typically can increase allegation traffic to the NRC. It is notable that the ECP received no concerns associated with NRC-regulated activity that required a formal investigation and furthermore, that general intakes declined during the same periods that NRC allegation intake increased. Nonetheless, the licensee is taking action to address the issue, including steps to improve a general perception identified by the NRC's PI&R inspection at Watts Bar, that the ECP is not independent from site management. The NRC will maintain its oversight of the SCWE at the Sequoyah site through normal inspection activities.

Pilgrim Unit 1

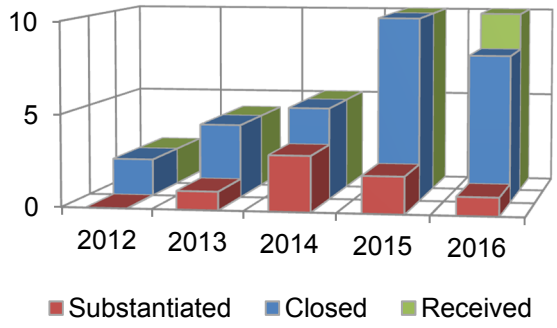
The number of allegations received at the Pilgrim plant in 2016 is consistent with the number received the previous year. The majority of the allegations concerns received in 2016 were

security related. Allegation receipt was spread evenly throughout the year, with a slight increase in the second quarter, corresponding to an April 2016 announcement by the licensee that they plan to permanently shut down the reactor in May 2019.

Two concerns were raised in 2016 asserting a chilled work environment. Neither was of sufficient detail to allow an effective evaluation nor was indicative of a widespread concern within a group or department onsite. There were four discrimination concerns submitted to NRC regarding Pilgrim in 2016, all in the last third of the year. None have been substantiated, however, one remains open and under investigation. In the 4 years prior to 2016, there were five total discrimination concerns raised regarding Pilgrim, none of which were substantiated.

In 2016 and continuing in 2017, the NRC conducted an inspection called the 95003 entitled, "Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs or One Red Input" to evaluate, among other things, persistent weaknesses in the licensee's CAP. The NRC conducted the inspection was in three phases. The phase A inspection reviewed long-standing open corrective actions, corrective actions associated with a sample of NRC violations, and a classification of adverse versus nonadverse condition reports. The phase B inspection reviewed overall corrective action performance since the last biennial PI&R inspection in August 2015. The phase C inspection focused on the CAP and safety culture, human performance, procedure quality, and equipment performance. Phase A of the 95003 inspection determined that there were no long-standing, risk-significant issues documented in the CAP that were not addressed or assigned appropriate corrective actions and due dates (ADAMS Accession No. ML16060A018). Additionally, appropriate actions were developed to correct past NRC violations and condition reports were appropriately classified as adverse or nonadverse. Phase B of the 95003 inspection determined that problems were generally identified, entered into the CAP, properly prioritized, and evaluated commensurate with their safety significance (ADAMS Accession No. ML16144A027). The NRC completed the phase C inspection in early 2017. Based on the team's observations, there does not appear to be a reluctance by Pilgrim employees to raise safety concerns. The final inspection report is not expected to be issued until May 2017.

FIGURE 7 PILGRIM ALLEGATIONS



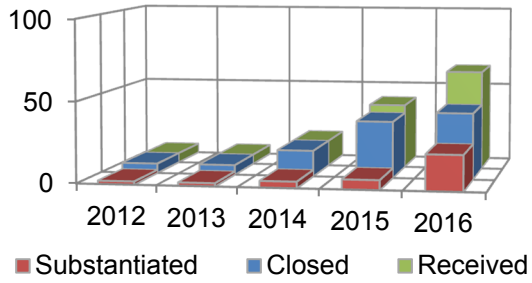
Similar to NRC, the Pilgrim ECP also received most of its 2016 concerns in the security area. Based on discussions with licensee personnel, the majority of the issues processed by the ECP were management related and were resolved without the need for a formal investigation. No discrimination concerns were raised to the ECP in 2016. The results of the most recent sitewide safety culture survey, conducted in the first two quarters of 2016, indicate improvement in some organizations previously identified as needing management attention to improve weaknesses. The security organization showed little improvement. Actions are ongoing to address weaknesses, including outreach by the ECP to groups that had shown a reluctance to use the reporting avenue.

In summary, the number and nature of allegations received from onsite sources at Pilgrim in 2016 does not appear to indicate a work environment problem. Pilgrim is currently in the Repetitive Degraded Cornerstone Column of the ROP Action Matrix. While currently available information does not indicate a SCWE problem at Pilgrim, sustained poor performance can ultimately manifest itself in problems with the SCWE and other safety culture attributes if improvements are not made. The agency's current assessment of Pilgrim performance is that the plant continues to operate safely. If at any time the NRC determines that Pilgrim's performance has declined to an unacceptable level, the NRC will take additional regulatory action up to and including the issuance of a shutdown order. The NRC is monitoring plant performance, including the environment for raising concerns, as part of the 95003 followup quarterly performance reviews.

Vogtle Units 3 and 4

The number of allegations received by NRC from onsite sources regarding Vogtle Units 3 & 4 in 2016 increased significantly from the number received in 2015 and 2014 continuing an upward trend over the past 3 years. The rate of receipt, however, declined throughout the year. Allegation sources, not surprisingly, were concentrated in the contractor and former contractor categories. Concerns related to a chilling effect or the safety culture and discrimination constituted more than half of all concerns. Like all concerns, the number of discrimination concerns increased compared to 2015 numbers. The majority of the chilling effect and safety culture concerns were raised in the middle two quarters of the year. Many of the same concerns came in from multiple allegers.

FIGURE 8 VOGTLE 3 AND 4 ALLEGATIONS



The NRC completed its annual inspection of the licensee's CAP and SCWE in late July 2016 (ADAMS Accession No. ML16245A895). The NRC inspection team found that the implementation of the CAP and overall performance related to identifying, evaluating, and resolving problems at the Vogtle Electric Generating Plant Units 3 and 4 was effective. Licensee- and contractor-identified problems were entered into the CAP at an appropriate threshold. Vogtle also effectively prioritized and evaluated problems commensurate with the safety significance of the problems. Vogtle implemented corrective actions in a timely manner commensurate with their importance to safety and addressed the identified causes of problems. Vogtle effectively reviewed and applied lessons learned from industry construction experience when appropriate. Vogtle generally used audits and self-assessments to identify problems and appropriate actions. The inspectors did not identify any trends that were not already being addressed in the CAP.

With respect to the SCWE inspection scope and results, the NRC inspectors reviewed the effectiveness of the licensee's and contractor's ECP, and evaluated management oversight of the corrective action process including anonymous CAP entries. NRC inspectors used these reviews to help determine if licensee and contractor personnel were reluctant to report safety issues through the different avenues available. Additionally, NRC inspectors

conducted interviews with randomly selected licensee and contractor employees. Although the majority of those interviewed felt free to raise safety concerns without fear of retaliation, the NRC inspection team did note several observations from the interviews: (1) the majority of those interviewed did not fully understand the distinction between industrial and nuclear safety, (2) some of those interviewed indicated that they did not receive adequate feedback on identified issues, and (3) there was a general lack of knowledge of the ECP. These observations are consistent with items previously identified as areas needing improvement by the site. The team was briefed on the Vogtle Nuclear Safety Recovery Plan which includes actions to address these and other areas needing improvement. Despite these positive general observations, several chilled work environment allegations concerning three different areas of the plant were substantiated in the second half of the year following the NRC's inspection.

As with allegations in general, Vogtle's subset of discrimination allegation concerns also trended upward as compared to the previous year, but the rate of receipt declined in the second half of the year. Of the 38 discrimination concerns submitted to the NRC in 2016, 15 were still open and either under investigation or in the alternative dispute resolution process at the time this report was prepared. No discrimination concerns have been substantiated by the NRC in the past 5 years.

Based on discussions with the licensee and contractor ECP representatives, there were over 8000 workers on the Vogtle 3 & 4 site during this review period. Both the licensee and contractor maintained an ECP onsite and received over 900 concerns requiring an investigation, rapid response, or referral, representing approximately a 10 percent increase as compared to 2015. Trends in the organizations reporting concerns to the ECP mirrored those found in the NRC's allegation program. Several discrimination and chilled work environment concerns were investigated and a number of them substantiated.

An independent contracted nuclear safety culture assessment was conducted in the summer of 2016 with 77 percent of the workforce responding. The assessment team identified no strengths, no positive observations, eight weaknesses, three negative observations, and one general observation. Notably, the assessment team's overall conclusion was that very little improvement in workforce perceptions was found.

In January 2017, the site leadership team completed a root cause analysis to address the decline in the "respectful work environment" and "environment for raising concerns" nuclear safety culture traits. The root cause analysis identified both root and contributing causes. The licensee has taken several corrective actions related to communications, processes, training, and monitoring tools to sustain improvement.

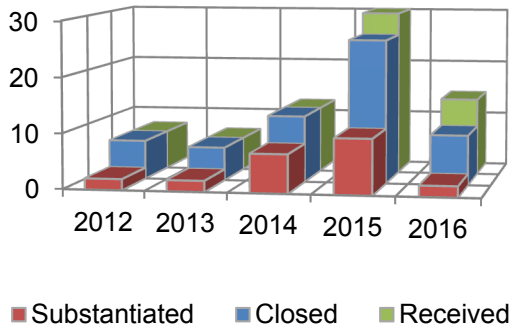
In summary, there was a sharp increase in allegations at the Vogtle construction site in 2016 and many of those were chilled work environment and discrimination concerns. A number of chilled work environment allegations were substantiated by both the licensee and the NRC which, together with negative results from the safety culture survey, prompted the licensee to conduct a root cause analysis. The NRC will maintain its oversight of the SCWE at Vogtle Units 3 and 4 through normal inspection activities and monitor the effectiveness of corrective actions taken to address SCWE weaknesses to ensure sustained performance improvement.

Virgil C. Summer Units 2 and 3

The number of allegations received by NRC from onsite sources regarding VC Summer Units 2 and 3 in 2016 decreased significantly from the number received in 2015, reversing an upward trend over the past 5 years. The number of allegations received by quarter indicates a declining trend the last three quarters. Allegation sources, not surprisingly, continue to be concentrated in the contractor and former contractor category. No allegations were provided anonymously. There were only 24 concerns spread over the 13 allegations. The concerns did not show any distinct grouping or patterns with respect to a specific organization.

The largest group of concerns involved discrimination concerns. As with allegations in general for 2016, the site's subset of discrimination allegations also trended significantly downward as compared to the previous year. Of the six discrimination concerns submitted to the NRC in 2016, only one discrimination case remains open. No discrimination concerns have been substantiated in the past 5 years.

FIGURE 9 VC SUMMER 2 AND 3 ALLEGATIONS



The number of chilled work environment concerns received 2016 is significantly lower than the number received in the previous year. Four such concerns were received, one of which was substantiated, and actions taken to address weaknesses in the environment.

The NRC's completed its annual inspection of the licensee's CAP and SCWE in late October 2016 (ADAMS Accession No. ML16293A152). The NRC inspection team found the implementation of the CAP and overall performance related to identifying, evaluating, and resolving problems at Virgil C. Summer Nuclear Station Units 2 and 3 was adequate. Licensee- and contractor-identified problems were entered into the CAP at an appropriate threshold. Problems were prioritized and evaluated commensurate with the safety significance of the problems. Corrective actions were effectively implemented in a timely manner commensurate with their importance to safety and addressed the identified causes of problems. The inspectors did not identify issues that were not already addressed by a licensee audit or condition report. Lessons learned from industry construction experience were effectively reviewed and applied when appropriate. Audits and self-assessments were generally used to identify problems and appropriate actions.

With respect to the portion of the inspection associated to the SCWE, the NRC inspectors reviewed the effectiveness of the licensee's and contractor's ECP, and evaluated management oversight of the corrective action process, including anonymous CAP entries. Additionally, the NRC conducted interviews with randomly selected construction employees from both VC Summer Units 2 and 3. The NRC conducted the Interviews to determine if workers understood how to raise safety concerns, if they felt free to raise such concerns without fear of retaliation, and if they were aware of alternate avenues for reporting safety concerns.

The NRC inspectors concluded that the foundation for a healthy SCWE existed at the VC Summer site. The ECP for both the licensee and its contractor was effective in evaluating concerns. Anonymous CAP entries were properly investigated and dispositioned. Weaknesses were noted during the interview process, such as understanding the difference between the terms industrial safety and nuclear safety; awareness of the different avenues to report concerns outside the immediate chain of command; awareness of the location of the ECP offices; and familiarity in the new CAP electronic data base. These weaknesses were being addressed by both the licensee and contractor. The inspection team found that increased leadership emphasis, from both the licensee and contractor, was in place to enhance the nuclear safety culture at the site.

There were over 5000 workers on the VC Summer Units 2 and 3 site during this review period. The contractor as well as the licensee maintained their own ECP. Based on discussions with the licensee and contractor, over 200 formal and informal concerns were received in 2016, which represents a declining trend from the approximately 300 received in 2015. However, the subset of formal concerns increased. More than half of these formal concerns involved discrimination or chilled work environments. A number of chilled work environment concerns were substantiated and two discrimination concerns by the ECPs in 2016.

The VC Summer site conducted two nuclear safety culture surveys in 2016. In June 2016, the site conducted the first survey, which was of the major contractors and subcontractors. In October 2016, the site conducted the second survey, which was of licensee employees. The June survey identified no strengths, no positive observations, eight weaknesses, and three negative observations. One noteworthy observation indicated that most issues identified in an earlier assessment still exist onsite. The October survey that was strictly of licensee employees had a somewhat different tone, noting that the staff supports all of the traits of a healthy nuclear safety culture, has a healthy respect for nuclear safety and assures that nuclear safety is not compromised by production priorities. The results included one weakness and one negative observation.

In summary, allegations in the aggregate, allegations associated with discrimination, and allegations associated with chilled work environments have all decreased significantly. There appears to be no significant grouping of allegation type, point of origin, or time of origin. However, despite evidence from NRC observations that the licensee and contractors have made progress in improving the SCWE, third-party safety culture survey results indicate continued challenges remain in this area. The NRC will maintain its oversight of the SCWE at the VC Summer 2 and 3 site through normal inspection activities with a focus on the contractor's actions to address the weaknesses identified.

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 alleger is increased. For this reason, tables of statistics on allegations about materials licensees, other than fuel cycle facilities, have not been offered publicly or included in this report. None of the materials licensees, fuel cycle facilities or otherwise, 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

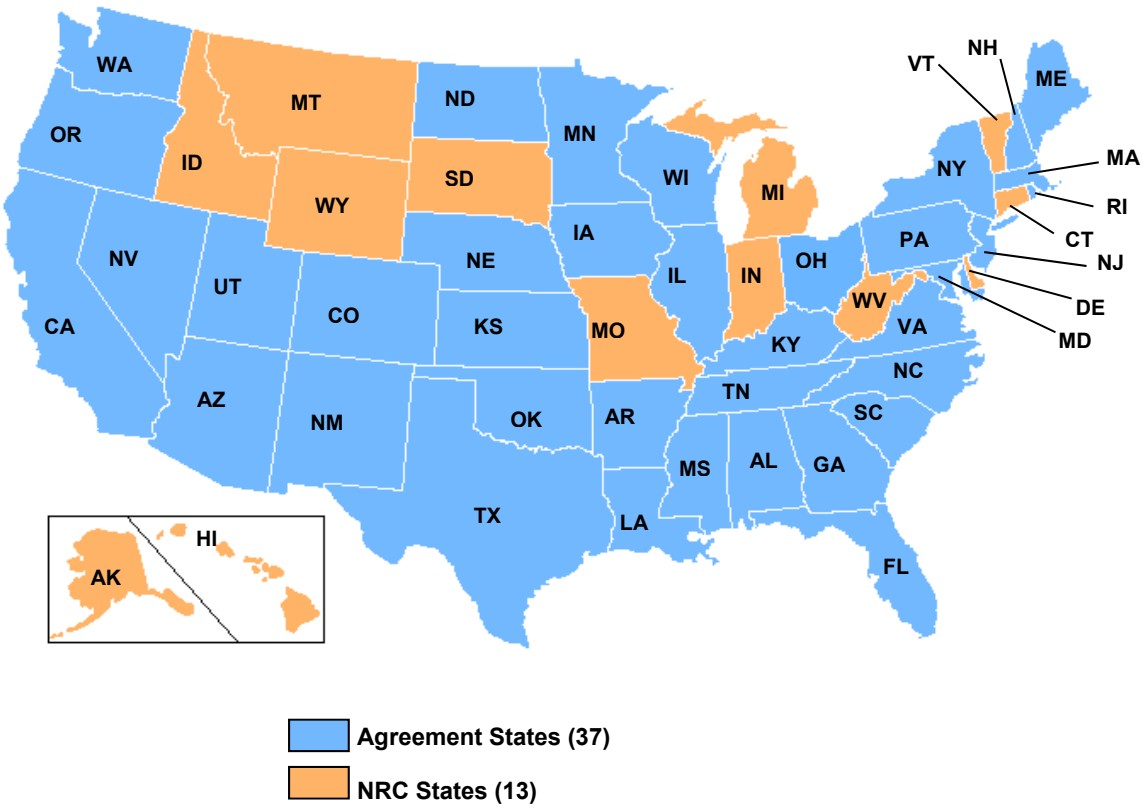
Neither this report nor the NRC Web site offers statistics by contractor or vendor for reasons similar to those outlined above for materials licensees. None of the vendors received a sufficient number of allegations to discern a trend or pattern or to provide insights into the SCWE. Therefore, this report does not include more in-depth reviews of specific vendors.

Trends in the Agreement States

As explained earlier in this report, the NRC may relinquish its authority to regulate certain byproduct material, source material, and limited quantities of special nuclear material to a State Government through a mutual agreement. A State that has entered into this agreement with the NRC is called an Agreement State. Before entering into this agreement, States must first demonstrate that their regulatory programs are adequate to protect public health and safety and are compatible with the NRC's program. Figure 14 shows the 37 Agreement States.

The NRC has statutory responsibility to review periodically 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. 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 the NRC's Office of Nuclear Material Safety and Safeguards at https://scp.nrc.gov.

FIGURE 10 AGREEMENT STATES



In 2016, the NRC completed routine IMPEP reviews of nine 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 35 cases cumulatively received by all of the programs reviewed. The NRC referred 8 of the 35 cases reviewed to the Agreement State programs; the States received the other concerns directly from concerned individuals. In all but one case, the review teams concluded that the States consistently took prompt and appropriate action in response to concerns raised. In all but one case, 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 2016 adequately protected the identity of any concerned individual who requested anonymity. In general, the results of the 2016 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. In the one case referred to above, the State's practices were found to be satisfactory, but in need of improvement. The NRC will follow up on actions being taken by the State.

OVERVIEW OF PROGRAM ACTIVITIES

Activities in 2016 in areas closely related to the Allegation Program and SCWE policy are discussed below, including statistics associated with the agency-sponsored early ADR program. 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' workers and the review of pertinent documents during the baseline PI&R 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.

Requests for Information Regarding Discrimination Findings

The Department of Labor (DOL) or another Federal authority other than the NRC (e.g., U. S. Circuit Court) periodically substantiates a discrimination concern under Section 211 of the Energy Reorganization Act of 1974, on which NRC's employee protection regulations are based. In such cases, while NRC enforcement action is being considered, NRC staff typically will issue 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, including any actions that have been taken or are planned to assess and mitigate the potential chilling effect that might be caused by the finding. It also informs the workforce of the NRC's interest in the state of the environment for raising concerns at the site. At the time such letters are issued, the NRC has confirmed neither that enforcement is necessary nor that the work environment is chilled. Rather, information is sought to help inform the NRC's potential evaluation efforts going forward. The NRC issued one request of this nature in 2016 regarding a DOL Occupational Safety and Health Administration (OSHA) finding associated with the Palisades Nuclear Plant. The NRC had previously investigated and not substantiated the same discriminination complaint and had been closely monitoring the work environment at Palisades through routine and special inspections since 2013, including the licensee's actions to maintain an environment conducive to raising safety concerns. In response to the agency's request, the licensee described actions taken to mitigate the potential effect that may have resulted from the publication of OSHA's finding.

Chilling Effect Letters

When NRC 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, the NRC will issue what is referred to as a chilling effect letter. A CEL is meant to ensure that the licensee is taking appropriate actions to foster a workplace environment that encourages employees and contractors to raise safety concerns and to feel free to do so without fear of retaliation. The NRC issued one chilling effect letter in 2016 concerning the Watts Bar Unit 1 site. This letter is discussed in a previous section of this report. The NRC's followup to this issue is ongoing.

Early 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 gives parties extra 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 supplies, 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 enforcement ADR, formally referred to as post-investigation ADR. More information on that process can be found at 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 about 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, 20 of the early ADR offers made by the NRC in association with discrimination allegations raised in 2016 resulted in agreements to mediate. Of those 20 cases, 12 resulted in the parties reaching a mutually agreeable settlement. The remaining eight cases are either still being processed or were referred to the NRC's Office of Investigations because the parties did not reach a settlement.

CONCLUSIONS

The total number of allegations received from 2012 through 2016 declined slightly over the 5-year period. Although facility- or vendor-specific matters do play a significant role in allegation trends, anecdotal information suggests that the overall decline may be the result of increased efforts by the NRC and nuclear industry to focus attention on developing and maintaining stronger environments for raising concerns at regulated entities. New reactor sites continue to generate a significant number of allegations. In 2016, coinciding with the overall decrease in allegations received, the total volume of allegation concerns received decreased as well.

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

To date, the agency's early ADR process resulted in 12 cases of discrimination allegations being settled 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 stem such damage.

APPENDIX

ALLEGATION STATISTICS FOR OPERATING REACTORS, NONOPERATING REACTORS, AND FUEL CYCLE FACILITIES

OPERATING REACTOR ALLEGATIONS RECEIVED FROM ONSITE SOURCES

Site	2012	2013	2014	2015	2016
ARKANSAS 1 & 2	6	1	2	10	7
BEAVER VALLEY 1 & 2	1	1	5	1	0
BRAIDWOOD 1 & 2	2	2	0	2	2
BROWNS FERRY 1, 2, & 3	16	15	11	6	10
BRUNSWICK 1 & 2	6	1	0	2	1
BYRON 1 & 2	3	0	0	2	1
CALLAWAY	5	6	3	5	2
CALVERT CLIFFS 1 & 2	1	3	2	1	0
CATAWBA 1 & 2	3	1	5	3	0
CLINTON	1	1	0	1	0
COLUMBIA PLANT	1	5	1	3	4
COMANCHE PEAK 1 & 2	2	3	5	3	5
COOK 1 & 2	0	5	4	5	2
COOPER	3	4	2	1	1
DAVIS-BESSE	0	5	5	1	3
DIABLO CANYON 1 & 2	5	6	1	4	3
DRESDEN 2 & 3	0	2	7	3	2
DUANE ARNOLD	2	3	4	1	1
FARLEY 1 & 2	9	6	3	2	4
FERMI	1	1	0	9	2
FITZPATRICK	2	0	1	1	0
FORT CALHOUN	3	5	4	6	3
GINNA	4	0	1	0	2
GRAND GULF	10	2	0	4	6
HARRIS	6	2	2	6	2
HATCH 1 & 2	5	3	5	5	4
INDIAN POINT 2 & 3	17	13	6	2	6
LASALLE 1 & 2	0	2	1	1	3
LIMERICK 1 & 2	5	1	3	1	0
MCGUIRE 1 & 2	1	3	1	5	1
MILLSTONE 2 & 3	9	4	6	4	8
MONTICELLO	2	1	3	0	0
NINE MILE POINT 1 & 2	2	0	1	0	2
NORTH ANNA 1 & 2	1	1	0	3	0
OCONEE 1, 2, & 3	6	3	5	7	5

Site	2012	2013	2014	2015	2016
OYSTER CREEK	3	1	2	3	1
PALISADES	5	11	8	3	1
PALO VERDE 1, 2, & 3	7	10	12	15	12
PEACH BOTTOM 2 & 3	1	7	2	2	1
PERRY	10	7	1	2	0
PILGRIM	2	4	5	10	10
POINT BEACH 1 & 2	4	3	4	2	2
PRAIRIE ISLAND 1 & 2	9	11	8	2	2
QUAD CITIES 1 & 2	1	3	1	4	2
RIVER BEND	0	3	2	3	4
ROBINSON	4	4	0	0	2
SALEM/HOPE CREEK	5	12	8	14	9
SEABROOK	5	5	2	1	1
SEQUOYAH 1 & 2	19	5	7	7	17
SOUTH TEXAS 1 & 2	8	5	4	7	8
ST LUCIE 1 & 2	7	8	4	6	4
SUMMER	1	0	4	4	3
SURRY 1 & 2	1	1	1	2	1
SUSQUEHANNA 1 & 2	21	9	14	3	2
THREE MILE ISLAND	0	0	3	0	0
TURKEY POINT 3 & 4	17	6	2	8	8
VOGTLE 1 & 2	5	2	3	5	3
WATERFORD	4	4	3	2	6
WATTS BAR 1 & 2	27	21	12	19	31
WOLF CREEK	5	6	9	12	7

NONOPERATING REACTOR ALLEGATIONS RECEIVED FROM ONSITE SOURCES

Site	2012	2013	2014	2015	2016
BELLEFONTE 1	1	0	0	0	0
BELLEFONTE 3 & 4	1	0	0	0	0
CRYSTAL RIVER	1	1	0	0	0
HUMBOLDT BAY	2	0	0	1	0
KEWAUNEE	1	0	0	0	0
LA CROSSE	1	1	0	0	1
SAN ONOFRE 1	1	0	0	0	0
SAN ONOFRE 2 & 3	29	9	3	0	0
SUMMER 2 & 3	10	6	12	30	14
VERMONT YANKEE	0	1	1	0	1
VOGTLE 3 & 4	6	6	16	40	62
ZION	1	2	1	0	0

FUEL CYCLE FACILITY ALLEGATIONS RECEIVED FROM ONSITE SOURCES

Site	2012	2013	2014	2015	2016
AMERICAN CENTRIFUGE PLANT	1	0	0	0	0
BWX TECH.	0	1	2	0	3
FRAMATONE-RICH.	1	0	1	0	0
GE-HITACHI GLE	1	0	0	0	0
GLOBAL NUCLEAR	5	2	1	3	4
HONEYWELL	6	6	10	5	4
LOUISIANA ENERGY SVCS.	2	9	5	4	1
NUCLEAR FUEL SVCS.	8	6	4	3	2
PADUCAH	2	2	1	0	0
SHAW AREVA MOX	10	4	1	2	3
WESTINGHOUSE	0	0	0	1	1