

ALLEGATION PROGRAM ANNUAL TRENDS REPORT

Calendar Year 2023

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

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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 2023 involving the Allegation Program and related policies. The allegation staff continues to facilitate the agency-sponsored pre-investigation alternative dispute resolution process for discrimination allegations. The NRC believes this pre-investigation process is beneficial to the environment for raising concerns. The pre-investigation alternative dispute resolution process gives an individual and their employer (or former employer) the opportunity to resolve an allegation of discrimination through mediation, potentially avoiding lengthy litigation or an NRC investigation, or both. As of April 30, 2024, 29 percent (or a total of 2) of the 2023 mediated discrimination concerns had been settled using this process.

During the 5-year period from 2019 through 2023, the NRC received between 170 and 270 allegations per year¹ concerning reactor plants, materials facilities, and their vendors. The total number of material and reactor-related allegations in 2023 increased from the previous year, resulting in a volume not seen since 2018. Each allegation can include multiple concerns. Although not always the case, the trend in the total number of concerns has typically 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 2023, the total volume of allegation concerns increased in concert with the increase in allegations.

Chilling effect concerns constituted the highest percentage (namely 13 percent of the total) of reactor-related allegations received nationwide. Chilling effect concerns were received throughout the year at a slightly decreasing trend. Eighteen concerns were received in the first quarter of 2023, 13 in the second and third quarters, and 12 in the last quarter. Nonetheless, the total volume received last year was still 39 percent higher than the number received in 2022. Of the 56 chilling effect concerns received nationwide, 12 different departments were named. Those departments mentioned most often alleged to be chilled, however, were operations, health physics and security. Finally, the most often mentioned cause of the chilling effect was alleged to be management behaviors, such as questioning employees as to why they wrote a condition report, directing that workers discuss concerns with management before writing condition reports or talking to the NRC, or schedule pressures.

Wrongdoing concerns constituted the second highest percentage of reactor-related concerns received nationwide with 12 percent of the total concerns received in 2023. However, when those related to falsification and counterfeit, fraudulent, and suspect items are included, more wrongdoing-related concerns were received in 2023 than any other type of concern. The number of concerns raised were primarily received in the last three quarters of the year. Trends were seen in the operations, security and quality assurance departments involving multiple different sites. The type of concerns raised most often included falsifying records, providing or maintaining incomplete or inaccurate information, and failure to follow procedures or processes.

Discrimination concerns were the third largest percentage received nationwide. The total volume of discrimination concerns received in 2023 was comparable to the volume received in

Management Directive 8.8 defines an allegation as "a declaration, statement, or assertion of impropriety or inadequacy associated with NRC-regulated activities, the validity of which has not been established."

2022 but declined throughout the year. Nationwide trends were noted in the health physics, operations, and security organizations.

Four reactor sites were the subject of 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 might indicate a SCWE that is chilled, the staff selected the Columbia, Watts Bar, River Bend, and Turkey Point sites for a more in-depth review. In summary, several allegation concerns regarding three of the four sites involved the sites' health physics departments, one of which, River Bend's, was observed to be chilled and the licensee has initiated corrective actions. Columbia successfully corrected a previously identified chilled work environment in the health physics department, but in 2023, the operations department was found to be chilled and the licensee has initiated corrective actions. The NRC continues to monitor the licensees' progress at both sites. A review of the data associated with Watts Bar and Turkey Point sites indicates that most workers were not hesitant to raises safety concerns through many of the available reporting avenues.

Finally, in 2022, the NRC reviewed the effectiveness of the allegation programs in eight Agreement State programs and concluded that they consistently took prompt and appropriate action in response to concerns raised, and generally documented the results of their investigations and closeout actions, which included notifying concerned individuals of the outcomes of the investigations. All the Agreement State programs reviewed in 2023 adequately protected the identity of concerned individuals in accordance with Agreement State laws.

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The total number of allegations received concerning reactor and fuel-facility licensees from all sources, as well as other information on 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 that current or former licensee employees, contractor employees, or anonymous sources submitted that may 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 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 NRC's 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.

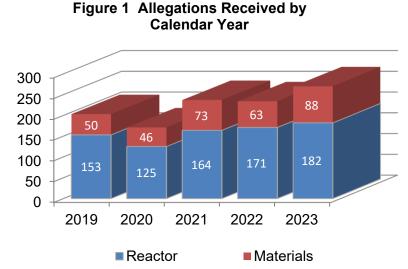
National Trends

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 shows that the NRC received between 170 and 270 allegations in each of the past five years. In 2021, the declining trend that began in 2016 reversed, driven by increases in

allegations associated with both reactor and materials licensees and their vendors. In 2023, allegations continued to increase in each category, resulting in the total volume of allegations increasing to levels last seen in 2018.

Because each allegation can include multiple concerns, the staff's efforts to prepare an appropriate response is based on the number of concerns received. Typically, each allegation represents one to three concerns. In most years, including the



previous four of this analysis period, 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 2023 the same was true. While the number of allegations increased by 15 percent over the previous year, the number of concerns increased by 26 percent. More specifically, the number of concerns increased in Regions I and II by 62 percent and 26 percent, respectively, while they declined slightly in Regions III and IV.

The headquarters offices, which address allegations such as those related to decommissioned and operating research and test reactors (RTRs), security Force-on-Force exercises, the inappropriate sale of radioactive material on the internet, and the improper import or export of radioactive material, received approximately 10 percent fewer concerns in 2023.

Reactor Licensee Trends

Figure 2 offers insight into areas in which the NRC is allocating resources for the evaluation of reactor-related allegations. The figure shows the 13 functional areas that represent approximately 80 percent of the allegation issues that the program received nationwide in 2023.³

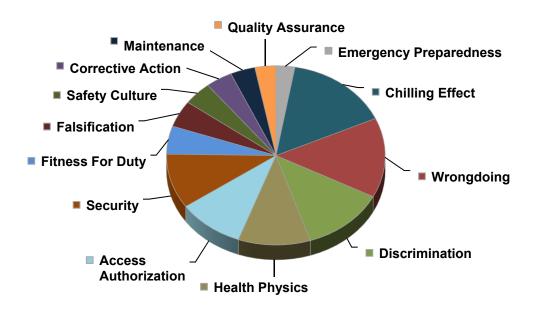


Figure 2 Reactor Concerns Nationwide, 2023

Chilling effect concerns constituted the highest percentage of allegations received nationwide. 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 the NRC is being suppressed or is discouraged. A chilled work environment is a condition in which 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 SCWE.

Chilling effect concerns were received throughout the year at a slightly decreasing trend, but nonetheless, the total volume was 39 percent higher than the number received in 2022. Regarding trends in the data, more chilling effect concerns were raised by workers at the Columbia and Farley plants, than others. The allegations that the Columbia Operations department was chilled were substantiated. Additional details involving the Columbia SCWE are

The agency received a few allegations about concerns in areas not shown in Figure 2, which represent the remaining 20 percent of the issues received. These areas include training & qualifications, fatigue/overtime, engineering, mechanical, electrical, instrumentation/control, operations, licensing, employee concerns program, fire protection, civil/structural, cyber security, chemistry, environmental, in-service testing, other, startup testing, unsupervised radiography.

provided later in the report. The concerns regarding Farley were from a variety of departments, and none were substantiated. Of the 56 chilling effect concerns received nationwide, twelve different departments were named, and most often in the operations, health physics and security organizations. Finally, the most often mentioned cause of the chilling effect was alleged to be management behaviors, such as questioning employees as to why they wrote a condition report, directing that workers discuss concerns with management before writing condition reports or talking to the NRC, or schedule pressures. And the most often reporting avenues allegers mentioned that they were hesitant to use to raise concerns were immediate supervisors and managers.

Wrongdoing is defined as a willful violation of regulatory requirements through deliberate action or a violation resulting from careless disregard of regulatory requirements. Such concerns are unique in two ways. First, unlike other concerns in the program which are raised by individuals external to the NRC, potential wrongdoing concerns are sometimes identified by NRC inspectors and are tracked within the allegation program. Second, usually when an issue is raised to the NRC by licensee management acting in their official capacity, such as a licensee manager discussing operational issues with the NRC resident inspector, they are not considered allegations. An exception is made for potential wrongdoing concerns.

Wrongdoing concerns include those related to falsification and counterfeit, fraudulent, and suspect items. These types of wrongdoing allegations are categorized separately in the NRC's database but for the purpose of this trend analysis were appropriately included. Regarding such concerns raised or identified in 2023, an equal number of concerns were brought to the allegation program by workers at licensed sites as were raised by licensees acting in their official capacity (i.e., licensee-identified concerns). The total volume of wrongdoing-related concerns in 2023 increased compared to 2022, but unlike the previous year, the number of concerns raised increased throughout the year. Trends were seen in the operations, quality assurance and security departments, but those involved multiple sites. The site that received the most wrongdoing concerns, 10 percent, was Watts Bar. The type of concerns raised most often included include falsifying records, providing or maintaining incomplete or inaccurate information and failure to follow procedures or processes.

The total volume of discrimination concerns received in 2023 was comparable to the volume received in 2022 but declined throughout the year. More concerns were received from workers at the Turkey Point site than others. An analysis of the allegation trends at that site is presented later in this report. Nationwide trends were noted in the health physics, operations, and security organizations. And, is often the case, a large percentage of discrimination allegations involved a monetary adverse action resulting from raising nuclear safety concerns internally. Nonetheless, other adverse actions alleged included written and verbal reprimands, poor performance reviews, and transfers.

As of April 30, 2024, the NRC had not substantiated any of the discrimination concerns raised in 2023; however, most of those warranting investigation were still open and were either being investigated or were in the NRC's pre-investigation alternative dispute resolution (ADR) process. Twenty-nine percent of the 2023 ADR-mediated discrimination concerns reached a successful settlement. Finally, approximately 21 percent of allegers filing a discrimination concern who were offered either ADR or an investigation withdrew their complaint before the agency reached a conclusion.

Technical health physics concerns were the next largest percentage of reactor allegations received nationwide and represented to largest increase when compared to similar concerns

raised in 2022. All of the health physics-related allegations were from onsite sources. Approximately 37 percent concerned Region II plants and more than half of those involved the Turkey Point site. About one-third of the health physics-related concerns involved Region IV plants; and more than half of those involved one site, namely River Bend.

An analysis of access authorization concerns included related concerns received in the security and fitness-for-duty categories as well. Such concerns were received at a steady rate throughout the year and the total number increased significantly from 2022. Allegations involved a number of different licensees and sites, but two licensees received 37 percent of the allegations; namely Entergy and Constellation. Thirty-eight percent of all concerns involved procedural adherence.

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 with great variation in the activities they perform. To offer insights into areas in which the NRC focused its attention on materials-related allegations, Figure 3 presents the eight types of materials licensees that accounted for about 90 percent of allegation concerns that the NRC received nationwide.⁴

The NRC received about 40 percent more materials-related allegations in 2023 than in 2022. For several years, the number of allegations related to fuel cycle facilities has constituted the highest percentage of materials-related allegations. In the past several years, however, the

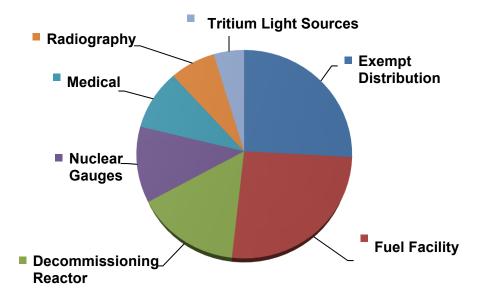


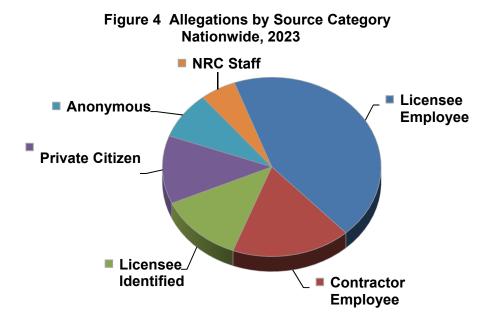
Figure 3 Allegations by Type of Materials Licensee Nationwide, 2023

The agency received a few concerns about the materials licensee types not shown in Figure 3, which represent the remaining 10 percent of the issues received. These licensee types include decommissioning materials, research & development, general licensee, irradiators, nuclear pharmacies, waste disposal, and others.

NRC received more allegations concerning exempt distribution products. Such products include silicon chips, self-illuminous products, gunsights, and smoke detectors. These products are required to be distributed by persons who have a specific license from the Commission authorizing such distribution to persons exempt from the requirements for an NRC license. One reason more exempt distribution concerns were received continues to be consumers' increased focus on the sale of radioactive products on the Internet.

Source Trends

Figure 4 shows a breakdown of 95 percent⁵ of the sources for reactors and materials allegations received in 2023. In considering those allegation sources with the potential to offer insights into the SCWE at a given facility (i.e., allegations that current or former licensee, contractor employees, or anonymous sources submitted), the percentage of allegations from these sources increased slightly in 2023. While the number of allegations from contractor workers and those wishing to remain anonymous did not increase, the number of allegations raised by licensee employees increased approximately 34 percent. Licensee identified concerns also increased.



Along with allegation concerns shared with the NRC by licensee employees and the general public, licensee senior representatives acting in their official capacity often alert the NRC to any ongoing wrongdoing investigations they may be conducting of their staff and management. The agency staff assigns an allegation process tracking number to track the evaluation progress related to the alleged wrongdoing issue. Similarly, the source category "NRC Staff" indicates an NRC staff member who suspects that a regulatory requirement has been willfully violated, thus prompting the NRC Office of Investigations to investigate. The volume of NRC staff concerns increased slightly compared to the previous year.

The other 5 percent of the sources for reactors and materials allegations received in 2023 are federal agency, other, news media, special interest group, and state agency.

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 offers statistics on allegations for all operating and nonoperating reactor sites. The NRC received the listed allegations during the 5-year period from January 2019 through December 2023. The list includes only allegations 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 this analysis, the NRC assumed that anonymous allegations were from onsite personnel.

Because a large volume of allegations from onsite sources might indicate a SCWE at risk, the staff conducts a more in-depth SCWE review of any site with larger numbers of onsite allegations. Because sites with a larger population of employees and contractors (such as three-unit reactor sites or sites performing significant engineering projects) typically generate more allegations, the data must be normalized to ensure that the NRC does not disproportionally choose such sites for further analysis. The NRC used the following algorithm, which is based on the median number of allegations received at operating reactor sites over the calendar year, considers the varying workforce size at different sites, and then determines what sites warrant additional review:

- one-unit reactor sites (or any site with fewer than 800 persons) with an onsite allegation volume greater than 2.25 times the median
- two-unit reactor sites (or any site with 800 to 1,000 persons) with an onsite allegation volume greater than 3 times the median
- three-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 2023, the median number of allegations per operating reactor site was three. There were four sites that met the above thresholds for further review: Columbia Generating Station, Watts Bar, River Bend, and Turkey Point.

Columbia Generating Station

As Figure 5 shows, the number of allegations received by NRC from onsite sources regarding Columbia Generating Station in 2023 increased slightly from the number received in the previous year. The rate of receipt stayed steady throughout the year. With one exception, all allegations were received from licensee employees. More concerns were received involving Operations and Security than other

Figure 5 Columbia Generating Station

Allegations

15

10

2019 2020 2021 2022 2023

Substantiated Closed Received

disciplines. The operations-related concerns were received in second and third quarter and the security-related concerns were received in every quarter except the third.

Five concerns were received alleging a chilled work environment. Two involving the Operations organization were substantiated. On September 28, 2023, Region IV completed a problem identification and resolution (PI&R) inspection at the site (ADAMS Accession No. ML 23310A103). The inspection included an assessment of the licensee's programs to establish and maintain a healthy SCWE. The team interviewed approximately 60 individuals in twelve group interviews from across multiple disciplines, including Operations. They also observed operations in the control room. Operations personnel indicated a concern that senior management may take negative actions against them if they dislike the concerns raised, the way the concerns are stated, or the reporting avenue chosen in which to share the concerns. The inspection team shared with licensee management their concern that environment was impeding open communication within the Operations Department. In response to the team's observations that the work environment in Operations was not conducive to raising concerns without fear of retaliation, the licensee developed several corrective actions including assessments, monitoring, training, communications, and process improvements. The NRC planned a follow-up inspection to assess the effectiveness of these actions in second quarter of 2024, the results of which will be publicly available, but were not yet available at the time this report was being prepared.

Unlike the general allegation activity, the site's subset of discrimination allegation concerns did not increase. The NRC received three discrimination concerns in both 2022 and 2023. With respect to the 2023 discrimination concerns, one was withdrawn by the alleger after the prima facie determination during their interview with OI, and one did not make a prima facie showing. For clarification, to consider a matter of potential discrimination under Title 10 of the *Code of Federal Regulations*, an alleger 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 protected activity, and that the protected activity was, in part, a reason for the adverse personnel action. The third discrimination allegation was still open and being investigated at the time this assessment was prepared. Another discrimination concern, raised in the previous year, was also still open and being investigated.

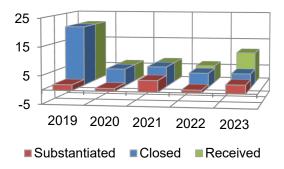
In summary, there was a slight increase in allegations at Columbia Generating Station in 2023. More concerns were received involving the security and operations organization than others, and a chilled work environment concern was substantiated in Operations. The licensee has initiated corrective actions including assessments, monitoring activities, process improvements, communications, and training to address that observation. An NRC follow-up inspection will assess the effectiveness of those licensee

actions and the health of other departments on site.

Watt Bar Units 1 and 2

As Figure 6 shows, the number of allegations the NRC received from onsite sources about this reactor site increased from the number received in 2022. The rate of receipt increased each quarter until decreasing in the fourth. The allegations were received from both contractors and licensee employees at a similar volume. More concerns were received

Figure 6 Watts Bar Allegations



involving Health Physics and Fatigue/Overtime than other disciplines. Three chilled work environment concerns were received during the year. One of them was in the Mechanical Maintenance department and the other two did not specify a department. None were substantiated.

As with the general allegation activity, the site's subset of discrimination allegation concerns also increased in 2023. The NRC received three discrimination concerns; two of which involved the Mechanical Maintenance department. One concern was still open and under investigation at the time this report was prepared and the other two were not substantiated.

On October 24, 2023, the NRC completed a Problem Identification and Resolution inspection at TVA (ADAMS Accession No. ML23296A024. The inspection included an assessment of the SCWE and discussions with the ECP manager, including work environment assessments. The team interviewed 30 individuals from across multiple disciplines and determined that the licensee had a safety conscious work environment where individuals felt free to raise concerns without fear of retaliation. During the calendar year, another SCWE assessment was conducted to review the corrective actions taken following identification of SCWE concerns in the Watts Bar Chemistry Department as observed in NRC Inspection Report 05000390, 391/2022003 (ADAMS Accession No ML23128A275). The team found that the corrective actions put into place to correct previously identified work environment issues in this department appeared to have been effective. TVA staff engaged by the inspection team reported willingness to raise safety concerns through multiple avenues without fear of retaliation including willingness to use employee concerns and corrective action programs.

In summary, there was an increase in allegations at Watts Bar site in 2023. This site has had a higher-than-average number of allegations in recent years. No specific department or discipline trends were identified, but there was a 28 percent increase in concerns received from contractor employees. The NRC will continue monitoring the SCWE at the site through baseline inspections.

River Bend Station

As Figure 7 shows, the number of allegations received by NRC from onsite sources regarding River Bend in 2023 increased significantly from the number received in 2022. The rate of receipt declined after the first quarter of the year, in which there was a planned outage. Allegations were received from both contractors and licensee employees at a similar volume and more concerns were received involving the Health Physics organization than other disciplines. Both

technical and chilling effect concerns were raised about work on a main condenser tube replacement project being performed by a contactor. The technical health physics concerns were not substantiated; however, the three chilling effect concerns were. Corrective actions were taken by both the licensee and contractor. One additional chilling effect concern was received later in the year for another department but was not substantiated. Five concerns were received involving access authorization, most of which were centered on one issue involving the licensee's failure to terminate site

Figure 7 River Bend Station
Allegations

10
2019 2020 2021 2022 2023

Substantiated Closed Received

access after a small group of workers transferred from one contractor to another. Those concerns were substantiated.

Contrary to the general allegation activity, the site's subset of discrimination allegation concerns remained small. Only one discrimination concern was received in 2023 and is still open and in the ADR program.

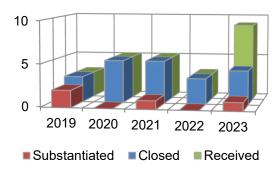
On November 3, 2023, the NRC completed a Problem Identification and Resolution inspection at River Bend Station (ADAMS Accession No. ML23334A081). The inspection included an assessment of the SCWE and ECP activities, including work environment assessments. The team interviewed 54 individuals from across multiple disciplines and determined that the licensee had a safety conscious work environment where individuals felt free to raise concerns without fear of retaliation. All individuals interviewed by the team indicated that they would not hesitate to raise safety concerns through normal onsite avenues. However, based on feedback from the interviews, the team identified that the station should consider enhancing communications with plant personnel about the availability of avenues for employees to use anonymously and how such concerns are processed. In addition, since Entergy recently transitioned to a new corrective action program software application used for writing and tracking condition reports, several employees expressed frustration that insufficient training was received during the release of the program. As a result, the team identified that employees feel less comfortable writing new condition reports and it could impact employees' willingness to use the corrective action program.

In summary, there was a notable increase in allegations at River Bend in 2023, especially involving health physics and chilling effect concerns, reflecting the difficulties surrounding the condenser tube replacement project. The licensee substantiated a chilled work environment in the contractor group and implemented corrective actions. The number of allegations trended down in the last two quarters of the year indicating a more stable environment for raising concerns.

Turkey Point Units 3 and 4

As Figure 8 shows, the number of allegations the NRC received from onsite sources about this reactor site increased from the number received in the previous year. With regard to the rate of receipt, most of the allegations were received in the first half of the year and then decreased. Allegations were received primarily from licensee employees, with only one contractor employee coming to the NRC with a concern. More concerns were received involving health physics than other disciplines, including technical, chilled work environment, discrimination, training, and wrongdoing concerns.

Figure 8 Turkey Point Allegations



The NRC received four allegations asserting a chilled work environment at the Turkey Point site. Two of the four, raised in the first half of the year, were related to the Health Physics organization. Another raised in the second quarter was raised anonymously and the information provided did not specify what work or department was involved. One other chilled work

environment concern, raised late in the year, involved the I&C organization. None of these allegation concerns were substantiated.

In response to a Request for Information related to an allegation of a chilled work environment in the Health Physics organization, the licensee provided the results of a comprehensive assessment, which included an anonymous survey, interviews with 97 percent of the department, training documentation, and Employee Concerns Program investigations involving the department. As part of the Problem Identification and Resolution inspection, completed mid-August 2023 (ADAMS Accession No. ML23267A002), the inspection team conducted multiple interviews with effected department personnel, as well, and concluded the work environment was healthy.

As with the general allegation activity, the site's subset of discrimination allegation concerns also increased significantly. Six discrimination concerns were received by the NRC in 2023 involving various departments. Two were still open and under investigation at the time this report was prepared, while the others were either withdrawn by the alleger or did not make a prima facie showing.

In summary, there was an increase in allegations at the Turkey Point site in 2023 and more concerns involving the health physics organization than other departments. A comprehensive assessment of that department's safety conscious work environment was conducted by the licensee and the NRC, and it was concluded that the environment was healthy, and workers were comfortable raising concerns without fear of retaliation. No additional allegations from that department were received after the NRC's PI&R inspection. The agency will continue to monitor the SCWE through normal oversight activities.

Allegation Trends for Selected Materials Licensees

The NRC posts allegation statistics for certain fuel cycle facilities on its public Web site (see the appendix to this report). Because of the small number of allegations and the smaller workforce sizes associated with most materials licensees, a licensee or contractor has a higher chance of identifying an alleger. Therefore, this report does not include statistics on allegations about materials licensees other than fuel cycle facilities. None of the fuel cycle facilities received enough allegations to discern a trend or pattern to provide insights into the SCWE. Therefore, this report does not include more in-depth reviews of specific fuel cycle facilities.

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 selected materials licensees. None of the vendors received enough 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

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 explains the Agreement State program to the individual. Most of these individuals are

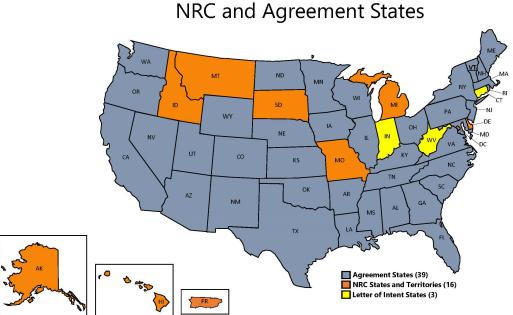
willing to contact, and be contacted directly by, Agreement State personnel about their concerns. The NRC staff does not process the concern as an allegation but rather provides the concern to the Regional State Agreements Officer for referral to the Agreement State. If an individual wishes to remain anonymous to the Agreement State, the NRC staff still refers the concern to the Agreement State in accordance with the agreement, but without divulging the concerned individual's identity. The NRC Office of Nuclear Material Safety and Safeguards addresses concerns about Agreement State program oversight outside of the Allegation Program.

Before becoming Agreement States, States must first demonstrate that their regulatory programs are adequate to protect public health and safety and are compatible with the NRC's program, and the NRC has a statutory responsibility to periodically review the actions of the Agreement States to ensure that they adequately maintain their programs. The NRC uses the Integrated Materials Performance Evaluation Program (IMPEP) to satisfy this 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 9 shows the 39 Agreement States.

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Figure 9



In calendar year 2023, the NRC and its Agreement State partners completed routine IMPEP reviews of eight Agreement State programs. During the year, these eight Agreement State programs received a total of 61 allegations. The IMPEP review teams evaluated the effectiveness of the Agreement State programs' responses to concerns by reviewing the casework for, and documentation of, 53 of the 61 cases received by the Agreement State programs. The IMPEP teams concluded that the Agreement State programs consistently took prompt and appropriate action in response to concerns raised. The review teams noted that the

States generally 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 IMPEP review teams determined that all the Agreement State programs reviewed in 2023 adequately protected the identity of concerned individuals, in accordance with Agreement State laws. In general, the results of the 2023 IMPEP reviews demonstrate that the Agreement State programs continue to treat responses to concerns from external sources as a high priority in protecting public health and safety.

OVERVIEW OF PROGRAM ACTIVITIES

The sections below discuss activities that took place in calendar year 2023 in areas closely related to the Allegation Program and SCWE policy, including statistics associated with the agency-sponsored pre-investigation ADR program. The staff gathers insights of the SCWE at a particular site in several ways (e.g., by reviewing the number and nature of allegations concerning a particular site and through documented observations based on interviews with the licensees' workers 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) or there is a finding of discrimination that has the potential to chill the work environment, the NRC may request information about the licensee's SCWE.

Requests for Information about Discrimination Findings

The U.S. Department of Labor (DOL) or a 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 the NRC's employee protection regulations are based. In such cases, while the NRC is considering enforcement action, the staff may issue a request for additional information to the regulated entity. Such requests 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 the finding might cause. If the finding is widely known, such as being discussed in press publications, a public letter requesting such information from the licensee also informs the workforce of the NRC's interest in the state of the environment for raising concerns at the site. At the time that the NRC issues such requests, the NRC normally has neither confirmed that enforcement is necessary nor that the work environment is chilled. Rather, information is acknowledged or, if necessary, sought to help inform the NRC's potential evaluation efforts going forward. No such letters of this nature were issued in 2023.

Chilling Effect Letters

When the NRC concludes that a licensee or contractor's work environment is chilled and corrective actions are warranted, the agency will typically issue a Chilling Effect Letter (CEL). A CEL is intended 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. No CELs were issued in 2023.

Pre-investigation Alternative Dispute Resolution Process

The NRC's ADR program includes the opportunity to use voluntary dispute resolution early in the allegation process for cases of alleged discrimination before the NRC investigates the allegation. Pre-investigation 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 pre-investigation 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. If, however, the parties reach a settlement during ADR, the staff will not pursue an investigation of or subsequent enforcement for a discrimination finding. The NRC also considers settlements resulting from licensee-initiated mediation as equivalent to settlements reached under the pre-investigation ADR program.

As of April 30, 2024, seven of the pre-investigation ADR offers the NRC made in association with discrimination allegations raised in 2023 resulted in agreements to mediate. Of those seven cases, two resulted in the parties reaching a mutually agreeable settlement. One remaining case is still being mediated and four did not reach settlement and exited the process. An investigation is on-going for two of the four, one alleger withdrew their complaint and one lost prima facie at the beginning of the investigation.

CONCLUSIONS

The number of allegations has been trending down for many years, but the trend slowed in 2020 and reversed in 2021. Furthermore, the numbers stayed high and increased in 2023 to levels not seen since 2018. The analysis of allegations provided insights into the SCWE at the Columbia Generating Station, Watts Bar, River Bend, and Turkey Point sites. At all four sites the number of allegations increased in 2023. In summary, a review of the number and nature of the allegations associated with these sites in 2023 and inspection observations indicates that most workers were not hesitant to raises safety concerns through many of the available reporting avenues or where a chilled environment was identified, actions were being taken to address the problem.

To date, the agency's pre-investigation ADR process has resulted in a number of discrimination allegations being settled between the parties before the start of an NRC investigation. Typically, between 50 and 75 percent of cases mediated reach settlement. In 2023, less than 30 percent had reached settlement as of April 30, 2024. The staff believes that voluntary dispute resolution by the parties, using the communication opportunities afforded by pre-investigation ADR, can stem the inherent damage such disputes can inflict on the SCWE more quickly than an investigation could.

The agency's and licensees' focus on the SCWE is likely contributing to the maintenance and improvement of the industry's environments for raising concerns and should continue.

APPENDIX

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

OPERATING REACTOR ALLEGATIONS RECEIVED FROM ONSITE SOURCES

| Site | 2019 | 2020 | 2021 | 2022 | 2023 |
|-----------------------|------|------|------|------|------|
| ARKANSAS 1 & 2 | 4 | 2 | 4 | 5 | 7 |
| BEAVER VALLEY 1 & 2 | | | 2 | 2 | 2 |
| BRAIDWOOD 1 & 2 | | 1 | 2 | 2 | 2 |
| BROWNS FERRY 1, 2 & 3 | 19 | 4 | 3 | 1 | |
| BRUNSWICK 1 & 2 | 1 | 4 | | | 4 |
| BYRON 1 & 2 | 2 | 1 | | 1 | 1 |
| CALLAWAY | 1 | 1 | 1 | 2 | 3 |
| CALVERT CLIFFS 1 & 2 | 3 | | 2 | | |
| CATAWBA 1 & 2 | 1 | 5 | 2 | | 3 |
| CLINTON | 1 | 2 | 1 | 2 | 2 |
| COLUMBIA PLANT | 1 | | 3 | 11 | 13 |
| COMANCHE PEAK 1 & 2 | 1 | | 2 | 1 | 2 |
| COOK 1 & 2 | | | 1 | 3 | |
| COOPER | 1 | | | 2 | 2 |
| DAVIS-BESSE | | 2 | | 3 | 2 |
| DIABLO CANYON 1 & 2 | 4 | | 2 | 3 | 6 |
| DRESDEN 2 & 3 | 3 | 1 | 1 | 1 | |
| FARLEY 1 & 2 | | 2 | 3 | 1 | 5 |
| FERMI | | 3 | 1 | 2 | 5 |
| FITZPATRICK | 1 | | 1 | 1 | 3 |
| GINNA | | 1 | | 3 | |
| GRAND GULF | 2 | 1 | 2 | 3 | 4 |
| HARRIS | 2 | 1 | | 1 | 5 |
| HATCH 1 & 2 | 3 | 4 | 3 | 2 | 2 |
| LASALLE 1 & 2 | | 1 | 1 | | |
| LIMERICK 1 & 2 | | | 1 | | 4 |
| MCGUIRE 1 & 2 | 1 | | 1 | | 4 |
| MILLSTONE 2 & 3 | 2 | 3 | 4 | 3 | 1 |
| MONTICELLO | | 2 | 1 | | 2 |
| NINE MILE POINT 1 & 2 | 1 | 1 | | 1 | 2 |
| NORTH ANNA 1 & 2 | 3 | 1 | | 1 | |
| OCONEE 1, 2, & 3 | 1 | 5 | 1 | 3 | 3 |
| PALISADES | 2 | 2 | | 1 | |
| PALO VERDE 1, 2, & 3 | 3 | 1 | 3 | 7 | 4 |
| PEACH BOTTOM 2 & 3 | 1 | 1 | | | 2 |
| PERRY | 2 | | 1 | 1 | 3 |

| Site | 2019 | 2020 | 2021 | 2022 | 2023 |
|----------------------|------|------|------|------|------|
| POINT BEACH 1 & 2 | | | | 1 | 1 |
| PRAIRIE ISLAND 1 & 2 | 1 | | | 1 | |
| QUAD CITIES 1 & 2 | | 1 | 2 | 1 | 4 |
| RIVER BEND | 2 | 2 | 2 | 1 | 10 |
| ROBINSON | 1 | 3 | | | 1 |
| SALEM/HOPE CREEK | 5 | 1 | 9 | 4 | 5 |
| SEABROOK | | | 1 | | |
| SEQUOYAH 1 & 2 | 9 | 1 | | 3 | 4 |
| SOUTH TEXAS 1 & 2 | 3 | | 6 | 15 | 3 |
| ST LUCIE 1 & 2 | 5 | 3 | 2 | 5 | 4 |
| SUMMER | 5 | | 2 | 3 | 2 |
| SURRY 1 & 2 | 1 | | 2 | 1 | 3 |
| SUSQUEHANNA 1 & 2 | 1 | 1 | 3 | 4 | 3 |
| TURKEY POINT 3 & 4 | 3 | 5 | 5 | 3 | 9 |
| VOGTLE 1 & 2 | 3 | 2 | 1 | 7 | |
| VOGTLE 3 & 4 | 13 | 24 | 38 | 28 | 5 |
| WATERFORD | 1 | 2 | 1 | 3 | 4 |
| WATTS BAR 1 & 2 | 21 | 6 | 7 | 6 | 11 |
| WOLF CREEK | 2 | 3 | 1 | 3 | 2 |

NONOPERATING REACTOR ALLEGATIONS RECEIVED FROM ONSITE SOURCES

| Site | 2019 | 2020 | 2021 | 2022 | 2023 |
|-------------------------|------|------|------|------|------|
| CRYSTAL RIVER | | | 2 | 1 | 4 |
| FORT CALHOUN | | | | 2 | 2 |
| INDIAN POINT 1, 2 & 3 | 9 | 10 | | | 9 |
| OYSTER CREEK | | 4 | 3 | | |
| PILGRIM | | 2 | | 1 | 2 |
| SAN ONOFRE 1, 2 & 3 | 2 | | | 1 | 1 |
| SUMMER 2 & 3 | | | | | 5 |
| THREE MILE ISLAND 1 & 2 | 1 | | | | 3 |
| YANKEE-ROWE | 1 | | | 1 | |

FUEL CYCLE FACILITY ALLEGATIONS RECEIVED FROM ONSITE SOURCES

| Site | 2019 | 2020 | 2021 | 2022 | 2023 |
|---------------------------|------|------|------|------|------|
| AREVA RICHLAND | | 2 | | | 1 |
| BWXT | 1 | 1 | 1 | | 2 |
| GLOBAL NUCLEAR FUEL | | 1 | 1 | | 3 |
| HONEYWELL | | | | 1 | 2 |
| LOUISIANA ENERGY SERVICES | 1 | | 2 | 2 | 3 |
| NUCLEAR FUEL SERVICES | 2 | 1 | 4 | 4 | 4 |
| WESTINGHOUSE | 4 | | | | |