U.S. Nuclear Regulatory Commission

ANNUAL REPORT

FY 2005

OFFICE OF INVESTIGATIONS

U.S. Nuclear Regulatory Commission

ANNUAL REPORT

FY 2005

OFFICE OF INVESTIGATIONS

Issued February 2006

EXECUTIVE SUMMARY

This report provides the Commission with the results of cases completed by the Nuclear Regulatory Commission's (NRC's) Office of Investigations (OI) during fiscal year (FY) 2005 (reference SRM COMJC-89-8, dated June 30, 1989). This is the 17th OI annual report.

As stated in the NRC's Strategic Plan for FY 2004–FY 2009, the NRC's mission is to license and regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment. The NRC's vision is excellence in regulating the safe and secure use and management of radioactive materials for the public good. The mission and vision provide the framework for the agency's strategies and goals, which in turn guide the allocation of resources across the agency. OI aligns with the agency's regulatory programs and supports its strategic objective to enable the use and management of radioactive materials and nuclear fuels for beneficial civilian purposes in a manner that protects public health and safety and the environment, promotes the security of our Nation, and ensures that regulatory actions are open, effective, efficient, realistic, and timely.

OI conducts investigations of alleged wrongdoing by individuals or organizations that are NRC licensees or certificate holders, applicants for NRC licenses or certificates, or vendors or contractors thereto. Additionally, during the course of an investigation, OI may discover potentially safety-significant issues that are not related to wrongdoing. OI forwards this information to the technical staff in a timely manner for appropriate action. OI also provides assistance to the staff when requested. Generally, "assists to staff" are matters of regulatory concern for which the staff has requested OI's investigative expertise but which do not involve a specific allegation of wrongdoing.

OI consists of four regionally based field offices reporting to OI Headquarters. OI reports to the Deputy Executive Director for Materials, Research, State and Compliance Programs and supports the reactor and materials programs. In FY 2005, on the average, there were 32 special agents and 6 operational support staff nationwide. The average experience of an OI special agent in FY 2005 was approximately 18 years in Federal law enforcement.

During FY 2005, NRC received 642 allegations regarding potential violations of its rules, regulations, or requirements. The 642 allegations represent a 6% increase over the 608 received in FY 2004.

The total number of cases in the OI inventory during FY 2005 was 264, a 20% decrease from 328 in FY 2004. Of the 264 cases, 36 were assists to staff. OI closed 165 of the cases, or 63% of the total inventory. The appendix to this report contains a statistical summary of cases opened and closed during FY 2005.

In FY 2005, OI continued to focus on increasing effectiveness, efficiency, and productivity in management, organizational, and process-related activities.

OI made the following significant achievements during FY 2005:

- Of the 136 investigations closed by OI, 95% developed sufficient information to reach a conclusion regarding wrongdoing. This exceeded OI's performance goal of 90%.
- Of the 129 investigations closed with sufficient information to reach a conclusion regarding wrongdoing, 74% were closed in 10 months or less. OI did not meet its performance goal of 80% because it concentrated on closing as many of the old investigations in the inventory as possible, knowing that this effort would impact the performance measure.
- Of the 29 assists to staff closed, 83% were completed within 90 days, exceeding OI's performance goal of 70%. This was a new OI performance measure in FY 2005.
- OI processed 86 actions resulting from FOIA requests during FY 2005, a 65% increase over FY 2004.
- OI participated in various Department of Justice Anti-Terrorism Advisory Councils related to national security concerns and counterterrorism.
- During FY 2005, OI investigative findings were considered in approximately 20% of the agency's escalated enforcement items.[1]

[1] An escalated enforcement item is an action involving Severity Level I, II, or III violations; violations with white, yellow, or red significant determination process findings; civil penalties; orders; and impositions.

CASES

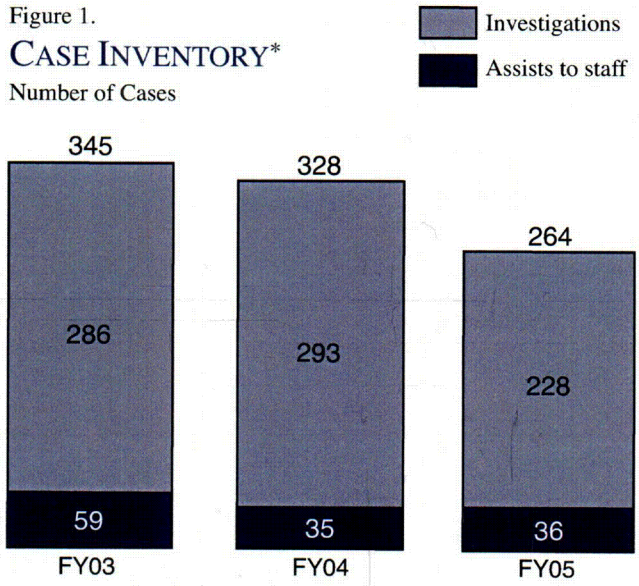
ANALYSIS OF CASE INVENTORY

Figure 1 shows the OI case inventory from FY 2003 through FY 2005. The total case inventory in FY 2005 was 264 cases, of which 98 cases were carried over from FY 2004. The inventory included 36 assists to staff, 3 carried over from FY 2004. Generally, assists to staff are matters of regulatory concern for which the staff has requested OI's investigative expertise but which do not involve a specific allegation of wrongdoing. In FY 2005, OI closed 165 cases, 63% of the cases in the inventory.

Figure 1.

CASE INVENTORY*

Number of Cases



* Cases carried over from previous year, plus cases opened in current year

ANALYSIS OF CASES OPENED

During FY 2005, NRC received 642 allegations regarding potential violations of its rules, regulations, or requirements. The 642 allegations represent a 6% increase over the 608 received in FY 2004.

OI opened 166 cases in FY 2005 in the following categories:

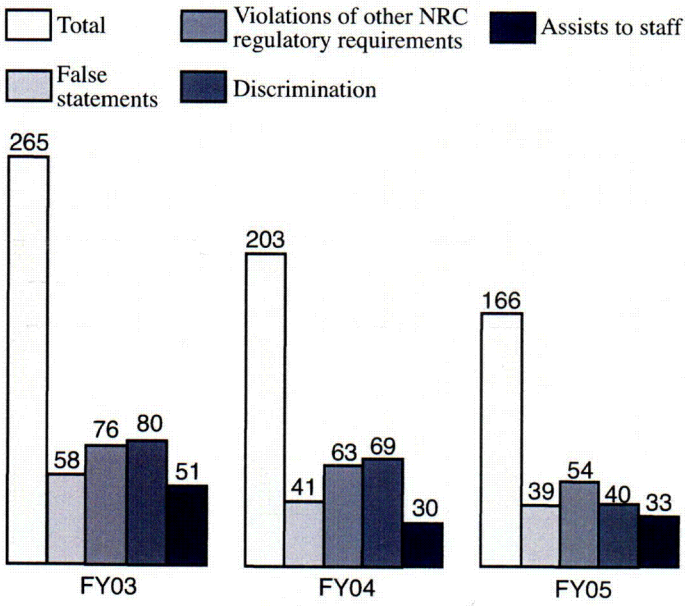
Material False Statements	39
Violations of Other NRC Regulatory Requirements	54
Discrimination	40
Assists to Staff	33

Figure 2 shows the number of cases opened from FY 2003 through FY 2005. In FY 2005, there was an 18% decrease in cases opened from FY 2004. Violations of other NRC regulatory requirements led other categories but decreased by 14%. Discrimination investigations also decreased, as did investigations of suspected material false statements; however, assists to staff increased in FY 2005.

Figure 2.

CASES OPENED BY CATEGORY

Number of Cases

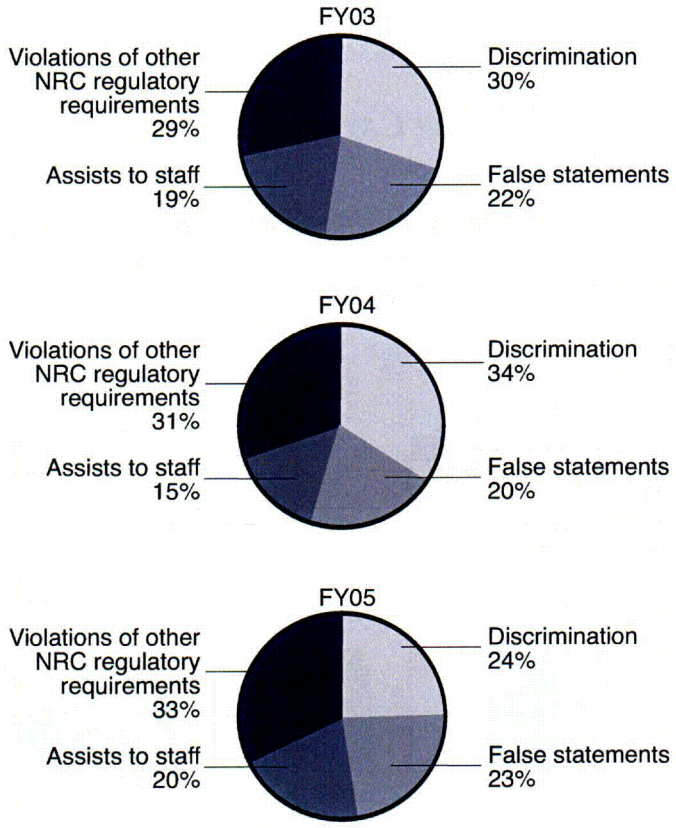


C01

Figure 3 shows the distribution of cases opened from FY 2003 through FY 2005 in the various categories. The FY 2005 distribution shows that 24% of the cases opened were discrimination investigations, 33% were investigations of violations of other NRC regulatory requirements, 23% were material false statement investigations, and 20% were assists to staff.

Figure 3.

PERCENTAGE OF CASES OPENED BY CATEGORY

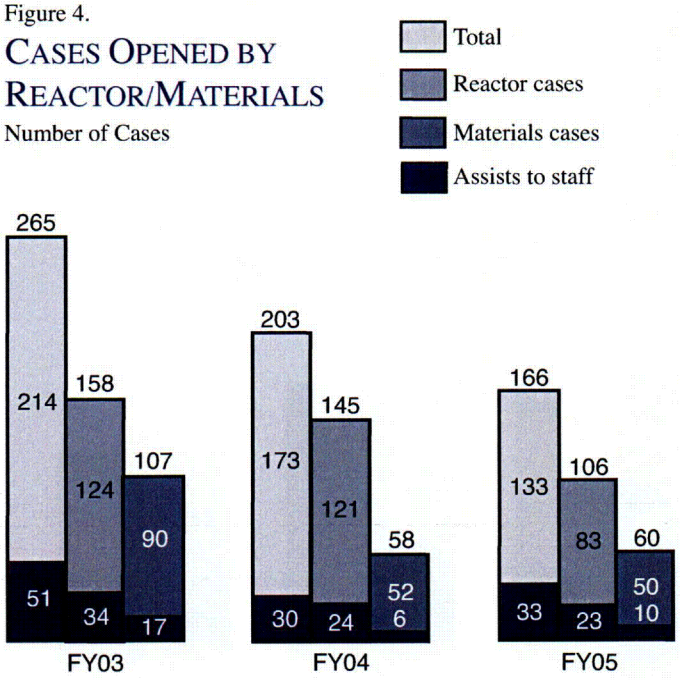


The graph in Figure 4 shows the distribution of cases opened from FY 2003 through FY 2005 between the reactor and the materials programs. From FY 2004 to FY 2005, overall reactor-related cases decreased 27%, with a 31% decrease in reactor investigations and a 4% decrease in reactor assists to staff. Materials-related cases increased 3% overall, with a 4% decrease in materials investigations and a 67% increase in materials assists to staff.

Figure 4.

CASES OPENED BY REACTOR/MATERIALS

Number of Cases



C02

ANALYSIS OF CASES CLOSED

Figure 5 shows the number of cases closed from FY 2003 through FY 2005. The 165 cases closed during FY 2005 represent a 28% decrease from the number closed in FY 2004. The cases are categorized as follows:

Material False Statements	32
Violations of Other NRC Regulatory Requirements	52
Discrimination	52
Assists to Staff	29

Figure 5.

CASES CLOSED BY CATEGORY

Number of Cases

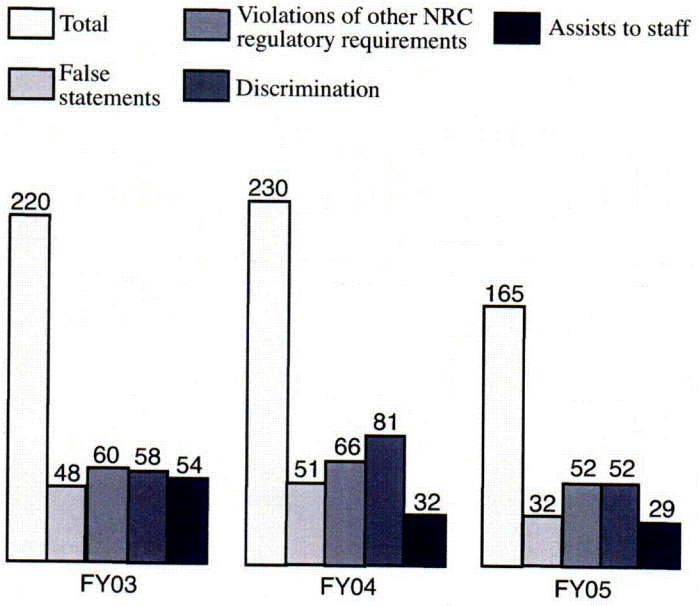
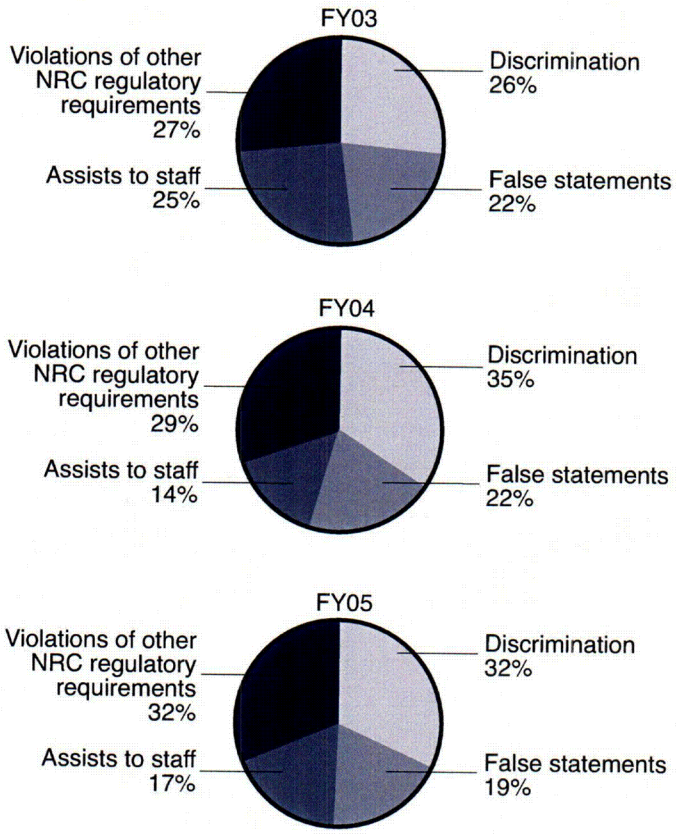


Figure 6 is a comparison of the percentages of cases closed, by category, from FY 2003 through FY 2005. Material false statement investigations made up 19% of the closed cases in FY 2005, discrimination investigations 32%, investigations involving other violations of NRC regulatory requirements 32%, and assists to staff 17%.

Figure 6.

PERCENTAGE OF CASES CLOSED BY CATEGORY



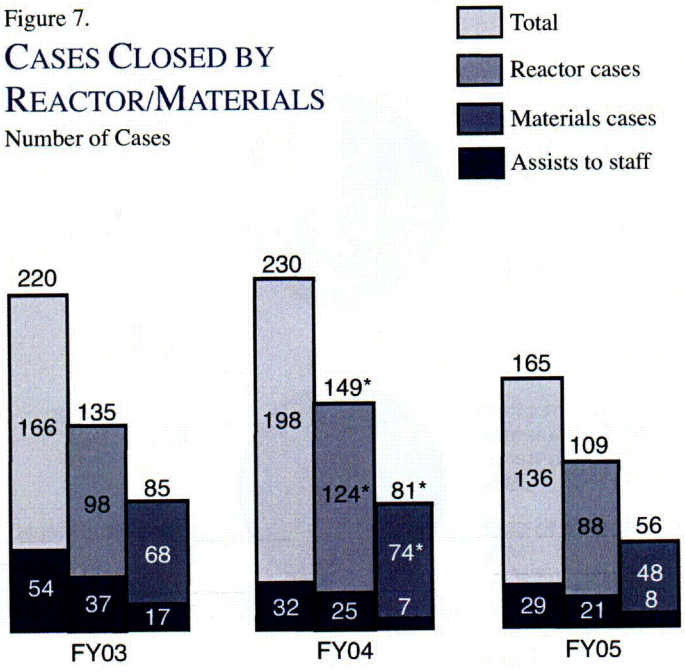
C03

The graph in Figure 7 shows the distribution of cases closed from FY 2003 through FY 2005 between the reactor and the materials programs. From FY 2004 to FY 2005, overall reactor-related cases decreased 27%, with a 29% decrease in reactor investigations and a 16% decrease in reactor assists to staff. Materials-related cases decreased 31% overall, with a 35% decrease in materials investigations and a 14% increase in materials assists to staff during the same period.

Figure 7.

CASES CLOSED BY REACTOR/MATERIALS

Number of Cases



* Change in data from FY 2004 Annual Report. One reactor case was incorrectly counted as a materials case.

Of the 165 cases closed in FY 2005—

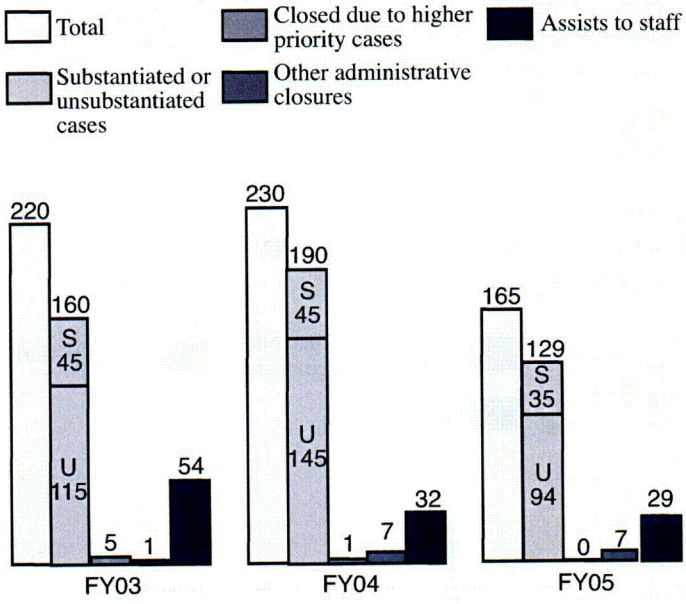
- 35 cases were closed after the investigation substantiated one or more of the allegations of wrongdoing.
- 94 cases were closed after the investigation did not substantiate wrongdoing.
- 7 cases were closed for administrative reasons.
- 29 cases were assists to staff.

Figure 8 shows the closures by category. Substantiated (S) and unsubstantiated (U) investigations are combined.

Figure 8.

CASES CLOSED BY TYPE OF CLOSURE

Number of Cases



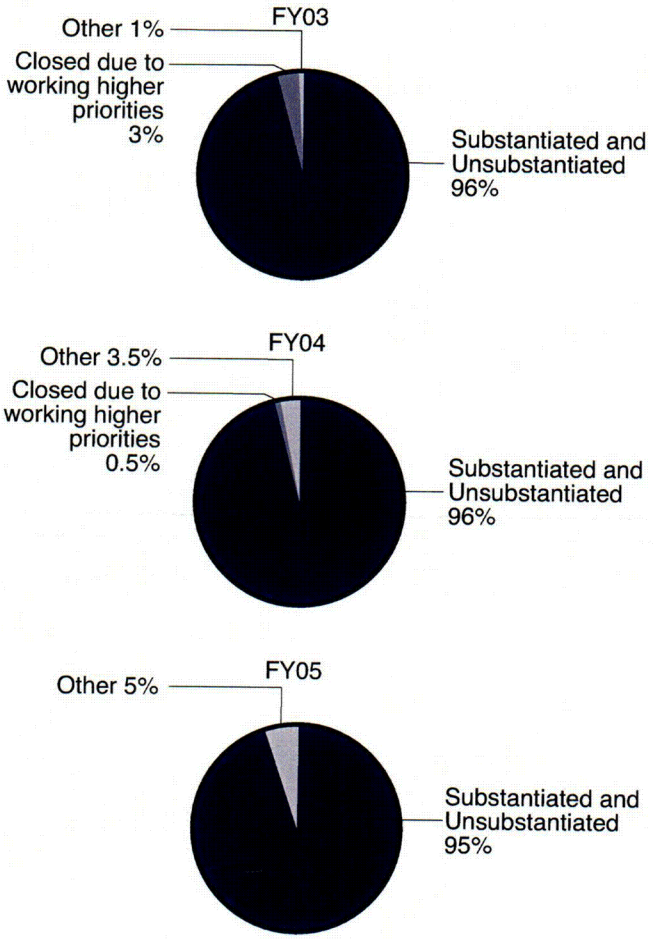
OI's effectiveness in supporting the NRC's regulatory mission is measured by the number of investigations that develop sufficient information to reach a conclusion regarding wrongdoing. The technical, legal, and enforcement staffs use the substantive information developed during these investigations as the basis for enforcement and other regulatory decisions. Additionally, if an investigation substantiates wrongdoing, it is referred to the Department of Justice for prosecutorial review. Two of OI's performance goals are that 90% of investigations closed will develop sufficient information to reach a conclusion regarding wrongdoing and that 80% of investigations closed with sufficient information to reach a conclusion regarding wrongdoing will be completed within 10 months.

C04

Figure 9 shows the disposition of investigations closed from FY 2003 through FY 2005. In FY 2005, 95% of the investigations developed sufficient information to reach a conclusion regarding wrongdoing, exceeding the OI performance goal of 90%.

Figure 9.

PERCENTAGE OF INVESTIGATIONS CLOSED AS SUBSTANTIATED AND UNSUBSTANTIATED*

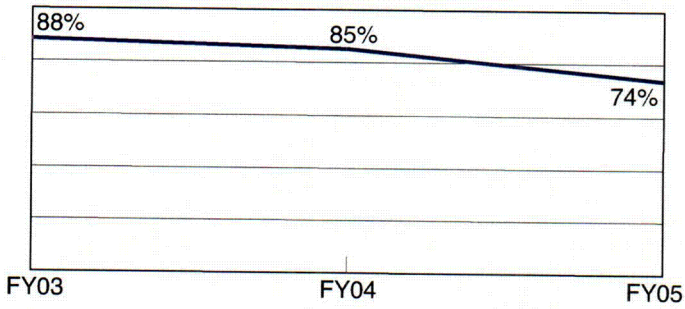


*Based on number of cases closed, less number of assists

Figure 10 shows the percentage of investigations closed in 10 months or less with sufficient information to reach a conclusion regarding wrongdoing. In FY 2005, 74% were completed within 10 months. OI did not meet its performance goal of 80% because it concentrated on closing as many of the old investigations in the inventory as possible, knowing that this effort would impact the performance measure.

Figure 10.

PERCENTAGE OF SUBSTANTIATED OR UNSUBSTANTIATED INVESTIGATIONS CLOSED WITHIN 10 MONTHS



A third performance measure, new in FY 2005, is that 70% of assists to staff will be completed within 90 days. OI completed 83% of assists to staff within 90 days.

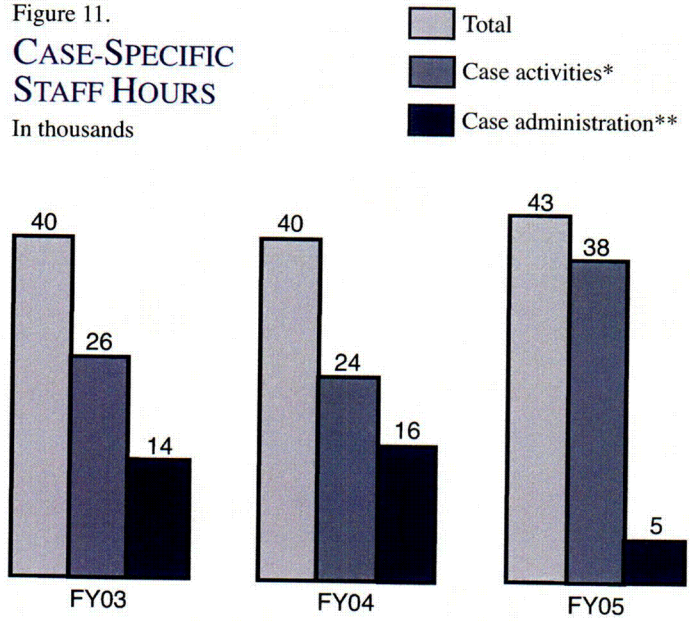
MANAGEMENT OF CASES

The case-specific staff hours in Figure 11 show an increase from FY 2004 to FY 2005 (from 40,000 to 43,000 investigative hours). The FY 2005 ratio of investigative activities* (case-related planning, preparation, supervision, field work, travel, and organizing, analyzing, and reporting evidence) to administrative activities** (FOIA and other miscellaneous case-related activities) is 88:12.

Figure 11.

CASE-SPECIFIC STAFF HOURS

In thousands



CRIMINAL REFERRALS

In FY 2005, OI referred 35 cases to the Department of Justice for prosecutorial review.

C05

SIGNIFICANT INVESTIGATIONS

MILTON S. HERSHEY MEDICAL CENTER

This investigation was initiated to determine whether a nuclear medicine technologist (NMT) at the Milton S. Hershey Medical Center (MSHMC) deliberately caused herself to be injected with radioactive material by a student NMT in violation of NRC requirements. The investigation found that the unauthorized use of technetium-99m was for a medically unnecessary brain scan and was deliberately perpetrated without the knowledge or approval of a physician/authorized user. The NMT was issued a Level III Notice of Violation (NOV) for her deliberate actions. OI initiated three additional wrongdoing investigations involving the unauthorized use of radioactive material as a result of the original investigation. Two of those investigations were substantiated. One substantiated investigation resulted in a second NMT admitting his role in the unauthorized administration of radioactive material. The NMT received a Level III NOV. The second substantiated investigation involved the Chief of Nuclear Medicine (a physician) who injected a student NMT with radioactive material to perform a brain scan. The sole purpose of the scan was to compare a newly purchased imaging device to an imaging device already in use at MSHMC. This matter was entered into the NRC's pilot program for Alternative Dispute Resolution (ADR). MSHMC went through the ADR process and was issued an NOV and Confirmatory Order as part of the ADR process. OI's investigations into the wrongdoing at MSHMC provided the NRC staff with valuable information about a programmatic failure and resulted in enforcement action and subsequent corrective actions by MSHMC.

PILGRIM NUCLEAR POWER STATION

This investigation was initiated to determine whether a control room supervisor/senior reactor operator (CRS/SRO) was sleeping/inattentive to duty in the control room of the operating power plant. The investigation was also conducted to determine whether the reactor operator (RO) who took a video of the sleeping/inattentive CRS/SRO and other individuals who had knowledge that the CRS/SRO was sleeping/inattentive deliberately violated station procedures by not correcting the condition adverse to quality. The investigation concluded that the RO deliberately failed to take immediate action to awaken the CRS/SRO and notify the shift manager and/or to write a condition report. Both the CRS/SRO and the RO lost their jobs. The licensee was issued a Severity Level III NOV and paid a civil penalty of $60,000. OI also concluded that the shift manager on duty when the SRO was sleeping/inattentive to duty willfully failed to write a condition report or notify his management about the sleeping/inattentive CRS/SRO in violation of requirements. The shift manager admitted responsibility and chose to enter the NRC's pilot program for ADR. A Confirmatory Order was issued to the shift manager.

CARDIOLOGIST

This investigation determined that a medical doctor (cardiologist) who applied for an NRC byproduct material license deliberately provided false information to the NRC by claiming that he was an authorized user on another NRC materials license when he was not. The doctor's license application also contained inaccurate information on the number of hours of experience he had in clinical practice. The doctor is participating in the NRC's ADR program; enforcement action is pending. An additional wrongdoing investigation resulted from this investigation. OI determined that the same cardiologist had provided false information to Digirad Imaging Solutions, Inc., an NRC materials licensee, which in turn had provided it to the NRC for the purpose of having the cardiologist placed on its license as an authorized user. Digirad has requested to participate in the ADR pilot program; enforcement action is pending.

PROFESSIONAL INSPECTION AND TESTING SERVICES

This investigation determined that a nuclear gauge user working for Professional Inspection and Testing Services (PITS) deliberately failed to control a gauge containing radioactive material (cesium and americium) contrary to PITS's license conditions and NRC requirements. The investigation determined that the gauge user stole the licensee's truck which contained the gauge. The truck and gauge were eventually located by local law enforcement, and the gauge was returned to PITS. A local warrant for the gauge user's arrest was issued for theft of property (the truck and the gauge). Based on OI's investigation, the NRC issued an Order banning the gauge user from involvement in NRC-licensed activities for 5 years.

BAXTER HEALTHCARE CORPORATION, INC.

This investigation determined that an irradiator operator at Baxter Healthcare Corporation, Inc., willfully failed to provide his assistant (an irradiator loader) with an individual radiation monitoring device when they entered the irradiator on April 21, 2004, while a source rack was stuck in the unshielded position. In response to an NOV, this matter was entered into the NRC's pilot program for ADR. An ADR session was held on December 13, 2004, and a settlement agreement was reached between Baxter and the NRC. On January 26, 2005, the NRC issued a Confirmatory Order to Baxter to confirm commitments made to the NRC. As part of the settlement agreement, Baxter agreed to pay a $31,200 civil penalty and to take additional corrective actions.

DAVIS-BESSE NUCLEAR POWER PLANT

This investigation was initiated to determine whether FirstEnergy Nuclear Operating Company (FENOC) personnel violated NRC requirements regarding the reactor vessel head, including deliberately failing to provide complete and accurate information to the NRC in response to NRC Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles." The investigation documented a pattern of willful violations of FENOC's boric acid corrosion control and corrective action programs over a protracted period of time and a pattern of willfully inaccurate or incomplete documentation of information that was required to be maintained or submitted to the NRC. The investigation determined that FENOC willfully provided incomplete and inaccurate information in its responses to NRC Bulletin 2001-01, which contributed to the continued operation of the plant with ongoing reactor coolant system pressure boundary leakage and significant degradation of the reactor pressure vessel head. This matter was referred to the Department of Justice for prosecutorial review. On April 21, 2005, the NRC issued a Notice of Violation and proposed civil penalty in the amount of $5,450,000 for the significant degradation of the reactor pressure vessel head that was identified in February and March 2002. FENOC paid the $5,450,000 fine and accepted full responsibility for its past failure to properly implement its boric acid corrosion control and corrective action programs.

HUNT VALVE COMPANY, INC.

As previously reported in the FY 2004 Annual Report, an investigation was initiated regarding allegations of deliberate misconduct by Hunt Valve Company, Inc., management regarding falsification of quality assurance certification records on uranium hexafluoride cylinder valves manufactured to specification for NRC-regulated gaseous diffusion plants. On July 15, 2004, Hunt's former quality manager pleaded guilty to one count of conspiracy, pursuant to 18 U.S.C. § 371, and was sentenced on June 2, 2005, to 33 months' incarceration and 3 years of supervision upon release. Further, the former quality manager was ordered to pay restitution in the amount of $4.1 million to the U.S. Navy. On February 16, 2005, the former vice president, Military and Commercial Division, pleaded guilty to one count of conspiracy, pursuant to 18 U.S.C. § 371, and was sentenced on January 17, 2006, to 24 months' incarceration and 3 years' supervised release. In addition, the former vice president was ordered to pay restitution in the amount of $4.1 million, jointly and severally, with the former quality manager.

POINT BEACH NUCLEAR POWER PLANT

An investigation determined that a Point Beach Nuclear Power Plant emergency preparedness (EP) supervisor and an EP specialist falsified EP drill documents and then provided those documents to the NRC as proof that Point Beach had successfully passed its EP drill. The NRC had maintained that Point Beach had failed the EP drill because plant personnel had failed to properly identify the start time of the drill. The Point Beach supervisor and the specialist changed the documentation after the fact to reflect that they had properly identified the start time of the drill and then backdated the documents by 3 months just prior to an NRC followup visit. The altered documents were presented to the NRC as proof that Point Beach had successfully passed the EP drill. The supervisor and the specialist maintained that the drill documents were accurate, even though the documents had been altered just a few days earlier. The Point Beach supervisor and the specialist subsequently admitted that they had changed and backdated the EP drill documents and then presented them to the NRC as authentic. The U.S. Attorney's Office for the Eastern District of Wisconsin accepted the case for prosecution and indicted the supervisor for knowingly and willfully falsifying and concealing a material fact related to a matter within the jurisdiction of the NRC in violation of 18 U.S.C. § 1018 and § 2. The supervisor was convicted and sentenced to a year's probation, banned from any NRC-licensed activities during his probation, and fined $525. The specialist agreed to a 1-year ban from the industry under a voluntary agreement with the U.S. Attorney's office and was not criminally prosecuted. The NRC sent a choice letter to the licensee in October 2005 with a proposed enforcement action and is awaiting the licensee's response.

LA SALLE NUCLEAR POWER PLANT

An investigation determined that three contract workers (two craft workers and a supervisor) at the La Salle Nuclear Power Plant willfully violated radiation protection procedures. On January 25, 2004, a supervisor and two craft workers entered a high radiation area repeatedly without having been given a high radiation area briefing or having a high radiation area work permit. The contract supervisor and the two craft workers, who were found to have willfully violated the procedures, admitted to having received training related to radiation protection issues. The craft workers admitted knowledge of violating radiation protection procedures by entering the high radiation area, but said they had deferred to their supervisor's instructions about the job. The matter was entered into the ADR process and was categorized as a Severity Level IV violation with a civil penalty of $10,000. Additional training and oversight of the radiation protection practices at La Salle were outlined and incorporated into a Confirmatory Order modifying La Salle's NRC license.

R&M ENGINEERING CONSULTANTS

This investigation was initiated to determine whether R&M Engineering Consultants, a materials licensee, willfully violated an NRC license condition and/or regulations by failing to perform leak tests on portable nuclear density gauges as required by its NRC license. During a June 2004 inspection of R&M by the NRC, R&M's president/radiation safety officer (RSO) was asked for the results of gauge leak tests purportedly conducted by R&M. A review of R&M's records and statements made by the president/RSO indicated that the gauges had not been leak tested since at least 1997 and possibly as far back as 1992. The R&M president/RSO subsequently admitted to OI that he did not recall the last time the gauges had been leak tested, nor was he able to find any records documenting that the gauges had been, in fact, leak tested. The investigation determined that the president/RSO willfully violated an NRC license condition by failing to perform leak tests on the gauges as required by the license. The NRC issued a *Confirmatory Order Modifying License* to R&M and later terminated its license.

APPENDIX

OFFICE OF INVESTIGATIONS CASELOAD SUMMARY

For the Period 10/01/2004 to 09/30/2005

Cases Open at Start of This Period	98
Cases Opened This Period	166
Cases Closed This Period*	165
Investigations	136
Substantiated	35
Unsubstantiated	94
Other	7
Assists to Staff	29
Cases Open at End of This Period	99
Criminal Referrals	35

* Source:
Alleger/Whistleblower/Intervenor - 98
NRC (inspector/technical staff) - 40
Licensee/Licensee Employee Concerns Program - 16
OI (self-initiated and developed by OI) - 4
Other Government Agencies - 7

NUREG-1830
Volume 2
February 2006