

March 14, 2005

The Honorable George V. Voinovich, Chairman  
Subcommittee on Clean Air, Climate Change,  
and Nuclear Safety  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510

Dear Mr. Chairman:

The Fiscal Year (FY) 2005 Energy and Water Development Appropriations Act, House Reports 108-554 and 108-792, directed the Nuclear Regulatory Commission (NRC) to continue to provide a monthly report on the status of its licensing and regulatory duties. The initial reporting requirement arose in the FY 1999 Energy and Water Development Appropriations Act, Senate Report 105-206. On behalf of the Commission, I am pleased to transmit the seventy-fourth report, which covers the month of January 2005. I am also providing more recent information in this cover letter in order to keep you fully and currently informed of NRC's licensing and regulatory activities.

The previous report provided information on a number of significant activities. These activities included the commencement of a broad, three-part inspection to assess First Energy's activities as part of NRC's heightened oversight of the Perry Nuclear Power Plant, and the upholding, in a unanimous opinion by Federal Court of Appeals for the First Circuit, of our amended regulations on the conduct of hearings.

I wanted to update you on the status of the Hope Creek special inspection that I mentioned in previous monthly reports. The NRC held a public meeting to discuss NRC's findings related to the Hope Creek special inspection and other technical issues on January 12, 2005. The public meeting was attended by approximately 150 people. The NRC staff presented the results of its special inspection of the steam leak that occurred on October 10, 2004, and its findings on the "B" reactor recirculation pump issue. The NRC staff concluded that the licensee can safely operate the plant by implementing commitments to monitor the "B" recirculation pump for vibrations continuously with enhanced monitoring devices and take prompt action in response to any evidence that the pump's performance may be degrading. To reinforce the importance the NRC placed on ensuring that any degradation of pump conditions will be identified and action taken promptly, the licensee's commitments were formalized in a Confirmatory Action Letter on January 11, 2005. The NRC's resident inspectors at the site, in consultation with regional inspectors and a pump expert from the NRC's headquarters office, have been monitoring the licensee's activities closely to ensure that the licensee is effectively implementing the continuous monitoring program and that operators are prepared to take prompt actions. During the restart of Hope Creek, on February 8, 2005, the licensee's monitoring program detected some increases in vibration readings. In response to these readings, the licensee took action in accordance with procedures, including reducing pump speed and reactor power, and performing engineering evaluations. NRC inspectors monitored the licensee's response very closely and confirmed that the actions taken by the licensee were

appropriate. The licensee's actions immediately reduced the vibration levels, and all monitored vibration parameters have since remained within the licensee's established acceptance criteria. Evaluation of the vibration data indicated that the increased vibration readings were not due to degradation of the pump shaft. The NRC will continue to monitor closely licensee's activities related to this matter.

I am pleased to report that access to documents in the Nuclear Regulatory Commission's online Agencywide Documents Access and Management System (ADAMS) is available through a convenient, user-friendly, Web-based access tool. As discussed in previous letters, on October 25, 2004, the NRC suspended public access to the ADAMS online library and some other parts of its Web site to review documents and remove any that could reasonably be expected to aid a potential terrorist. The agency already restored non-sensitive documents in several categories, including those pertaining to reactors, and allowed access to parts of ADAMS by using Citrix software. The agency is still in the process of reviewing documents which will be restored at a later date, as appropriate. As of February 4, 2005, users may access documents directly from the NRC Web site rather than only through Citrix. This Web-based ADAMS, which was initially available in January 2003, features basic and advanced search options for users to search and retrieve files of publicly available documents. Although links to some documents in ADAMS are not active yet, we expect to restore them soon.

Recently, the Commission, or in some cases the NRC staff, also accomplished the following:

- published in the Federal Register, on February 4, 2005 (70 FR 6047), a Final Environmental Impact Statement (FEIS) on the proposed construction and operation of a mixed oxide (MOX) fuel fabrication facility at the Savannah River Site in South Carolina (dated December 21, 2004). The FEIS was issued as part of the NRC's decision-making process on whether to authorize Duke Cogema Stone & Webster (DCS), a contractor of the U.S. Department of Energy (DOE), to construct and operate the proposed MOX fuel fabrication facility. Based on the evaluation in the FEIS, the NRC environmental review staff have concluded that the proposed action will generally have small effects on the public and existing environment. This FEIS reflects the final analysis of environmental impacts of DCS's proposal and its alternatives, including the consideration of public comments received by the NRC. In addition, the FEIS provides summaries of the substantive public comments on the draft Environmental Impact Statement and responses, as appropriate.
- approved on March 1, 2005, a request by FPL Energy Seabrook to increase the generating capacity of Seabrook Station by 5.2 percent. The NRC staff determined that FPL could safely increase the reactor's power output primarily by upgrading minor plant components. NRC staff also reviewed FPL evaluations that showed the plants design can handle the increased power level. The power uprate for the unit, located 13 miles south of Portsmouth, New Hampshire, will increase its generating capacity from approximately 1115 to 1173 megawatts electric. This is the first extended power uprate approved for a pressurized water reactor (PWR). Similar extended power uprates have been approved for boiling water reactors.

- renewed the license of Dominion Generation for its dry-cask independent spent fuel storage installation at the Surry nuclear power plant in Surry, Virginia, for an additional 40 years. This is the first time the NRC has renewed a license for a dry-cask spent nuclear fuel storage facility. In December, the agency renewed the license for an away-from-reactor spent fuel pool storage facility at G.E. Morris in Illinois. The 40-year term for Surry's renewed license represents an exemption from NRC regulations that specify a 20-year license term for spent fuel storage facilities. The Commission approved the exemption in early December. At that time, the agency emphasized its position that dry casks are an interim or temporary storage method for spent nuclear fuel until a permanent repository for high-level nuclear waste is available.
- issued on February 14, 2005, Regulatory Issue Summary (RIS) 2005-02, "Clarifying the Process For Making Emergency Plan Changes." The RIS clarifies the process for making changes to the nuclear plant site emergency plan, such as the meaning of "decrease in effectiveness (DIE)," as stated in 10 CFR 50.54(q), and the process for making changes to emergency plans. The RIS also provides some examples of changes that are considered a decrease in effectiveness of an emergency plan.
- issued a license authorizing Westinghouse Electric Company to export to China the reactor systems, components, and associated equipment and engineering services to build and operate as many as two pressurized water nuclear reactors at the San Men site and two at the Yang Jiang site. A second license was also issued authorizing Westinghouse to export enough low-enriched uranium fuel to be used in the initial core and in one refueling. Westinghouse submitted the application for the license to export the reactors on February 25, 2004, and the application for the fuel export license on August 26, 2004. Should China accept Westinghouses bid for constructing the plants, shipments of the reactor systems and components are expected to begin around mid-2007. After carefully reviewing the applications and associated information, the NRC concluded that approving these exports to China will not be adverse to the common defense and security. The NRC also agreed with the conclusions reached by interested Executive Branch agencies that approving these exports is fully consistent with U.S. legal requirements.
- published in the Federal Register on February 22, 2005 (70 FR 8677), a proposed rule amending the licensing, inspection, and annual fees charged to its applicants and licensees. The proposed amendments are necessary to implement the Omnibus Budget Reconciliation Act of 1990 (OBRA-90), as amended, which requires that the NRC recover approximately 90 percent of its budget authority in fiscal year (FY) 2005, less the amounts appropriated from the Nuclear Waste Fund (NWF). The total amount to be recovered for FY 2005 is approximately \$540.7 million. After accounting for carryover and billing adjustments, the net amount to be recovered through fees is approximately \$538 million.
- conducted the fourth quarterly management meeting with Louisiana Energy Services (LES) on January 12, 2005, to discuss management issues related to the uranium enrichment facility proposed to be located in Eunice, New Mexico. Issues discussed included the status of the licensing review, preparation of the environmental impact statement, and open technical issues.

- amended, on January 25, 2005, a Certificate of Compliance for the Model No. NAC-LWT cask, to authorize transport of irradiated tritium-producing burnable absorber rods. The cask is a steel- and lead-shielded truck cask that was designed to transport commercial spent fuel. The certificate amendment supports DOE's program to produce tritium in commercial light-water reactors.
- reached an agreement with Baxter Healthcare Corporation, which has agreed to take additional corrective actions at a commercial irradiation facility it operates in Puerto Rico. The agreement was achieved through the NRC's Alternate Dispute Resolution (ADR) Process, during which the agency and the company discussed the terms of a \$44,000 civil penalty levied against the company last year. That action stemmed from an event last April in which two workers failed to follow procedures at the facility, creating the possibility of a lethal exposure to radiation for the employees. Under the agreement, Baxter has agreed to implement additional corrective actions (specifically, reviews of irradiator operations, maintenance, radiation safety and the Radiation Safety Officer (RSO) and Assistant RSO functions by a qualified consultant).
- issued a working draft of a NUREG report, "Regulatory Structure for New Plant Licensing, Part 1: Technology-Neutral Framework" (draft NUREG-3-2005), dated January 25, 2005, for public review and comment. The purpose of this working draft NUREG is to provide an approach, scope, and acceptance criteria that could be used by the NRC staff to develop a technology-neutral set of requirements for future plant licensing.
- issued, on February 10, 2005, a draft safety evaluation report for an early site permit application for the Clinton site, located about six miles east of Clinton, Illinois. The application was filed on September 25, 2003, by Exelon Generation Company, LLC. If approved, the permit would give Exelon up to 20 years to decide whether to build one or more nuclear plants on the site and to file an application with the NRC for approval to begin construction.
- published, in the Federal Register, on February 11, 2005 (70 FR 7196), a proposed rule to amend the regulations for the protection of Safeguards Information (SGI) to protect SGI from inadvertent release and unauthorized disclosure that might compromise the security of nuclear facilities and materials. The proposed amendments are consistent with recent Commission practices reflected in orders and threat advisories issued since September 11, 2001. The proposed amendments would affect certain licensees, information, and materials not currently in the regulations, but which are within the scope of Commission authority under the Atomic Energy Act of 1954, as amended. The comment period for the proposed rule expires on March 28, 2005.
- extended the deadline for licensees to request the use of a new, optional fire protection standard to resolve existing issues with a plant's fire protection program from January 16, 2005, to December 31, 2005. The extension was requested by the Nuclear Energy Institute to allow for adequate planning and budgeting by plant operators. The new standard focuses resources on issues of greatest risk significance. The NRC published in the Federal Register on January 14, 2005 (70 FR 2662), a companion revision to the Commission's Enforcement Policy to extend the interim enforcement

policy regarding enforcement discretion for certain issues involving fire protection program at operating nuclear power plants.

Please do not hesitate to contact me if I may provide additional information.

Commissioner Jaczko did not participate in the development of this letter to the extent it deals with the Yucca Mountain project.

Sincerely,

*/RA/*

Nils J. Diaz

Enclosure:  
Monthly Report

cc: Senator Thomas R. Carper

Identical letter sent to:

The Honorable George V. Voinovich, Chairman  
Subcommittee on Clean Air, Climate Change,  
and Nuclear Safety  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510  
cc: Senator Thomas R. Carper

The Honorable Ralph M. Hall, Chairman  
Subcommittee on Energy and Air Quality  
Committee on Energy and Commerce  
United States House of Representatives  
Washington, D.C. 20515  
cc: Representative Rick Boucher

The Honorable Pete V. Domenici, Chairman  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
United States Senate  
Washington, D.C. 20510  
cc: Senator Harry Reid

The Honorable David L. Hobson, Chairman  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
United States House of Representatives  
Washington, D.C. 20515  
cc: Representative Peter Visclosky

The Honorable James M. Inhofe, Chairman  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510  
cc: Senator James Jeffords

The Honorable Joe Barton, Chairman  
Committee on Energy and Commerce  
United States House of Representatives  
Washington, D.C. 20515  
cc: Representative John D. Dingell

MONTHLY STATUS REPORT ON THE  
LICENSING ACTIVITIES AND REGULATORY DUTIES OF THE  
UNITED STATES NUCLEAR REGULATORY COMMISSION

**JANUARY 2005**

Enclosure

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<sup>1</sup>Note: The period of performance covered by this report includes activities occurring between the first and last day of January 2005. The transmittal letter to Congress accompanying this report may provide more recent information in order to keep Congress fully and currently informed of NRC's licensing and regulatory activities.

## **I Implementing Risk-Informed Regulations**

The staff continues to make progress on tasks involving the use of probabilistic risk information in many areas; however, there were no reportable milestones scheduled or completed during the month of January 2005.

## **II Revised Reactor Oversight Process**

The NRC continues to implement the Reactor Oversight Process (ROP) at all nuclear power plants. The NRC continues to meet with interested stakeholders on a periodic basis to collect feedback on the efficacy of the process and will consider the feedback in future ROP refinements. Recent activities include the following:

- On January 25, 2005, NRC staff met with a delegation from the Korean Institute of Nuclear Safety at the NRC Headquarters Office to discuss various issues associated with the ROP, including the Significance Determination Process (SDP).
- On January 26, 2005, NRC staff hosted the monthly public meeting on the Mitigating Systems Performance Index (MSPI) at the NRC Headquarters Office. The NRC staff led a discussion addressing comments on the MSPI Probabilistic Risk Assessment Staff/Industry Task Group Report. The industry attendees led a discussion on the logistics, detailed agenda, and format for the upcoming MSPI Workshop, scheduled to be held on February 9 and 10, 2005, in Dana Point, California.
- On January 27, 2005, NRC staff hosted the monthly ROP public meeting at the NRC Headquarters Office. The NRC staff led a discussion addressing industry concerns about the draft Maintenance Rule SDP. Industry and NRC staff attendees discussed the initiatives to improve the Performance Indicators for Scrams with Loss of Normal Heat Removal and Reactor Coolant System Leakage. The remainder of the meeting focused on a discussion of Performance Indicator frequently asked questions.

## **III Status of Issues in the Reactor Generic Issue Program**

Resolution of the issues in the Reactor Generic Issue Program continues to be on track in accordance with the schedules previously submitted.

Generic Safety Issue 80, "Pipe Break Effects on Control Rod Drive Hydraulic Lines in the Drywells of Boiling Water Reactor MARK I and II Containments," addresses a concern regarding the likelihood and potential effects of a loss of coolant accident, which could cause interactions with the control rod drive (CRD) hydraulic lines in a manner that could prevent rod insertion and create the potential for recriticality when the reactor core is reflooded. A technical analysis of the effects of postulated pipe breaks inside boiling-water reactor (BWR) Mark I and Mark II containments was completed in July 2004. A finite element code was used to perform a nonlinear transient analysis to determine the impact of pipe break impulsive loads on drywell steel shell and CRD bundles. The results of the analysis indicated that the CRD bundles will not be impacted by breaks in recirculation, steam, and feedwater system piping after a postulated break. The staff has prepared a closeout package for this issue for the review of the Advisory Committee on Reactor Safeguards.

Generic Safety Issue 196, "Boral Degradation," addresses the degradation of Boral plates in dry spent fuel storage systems. The Boral plates are used in these storage systems as neutron absorbers to prevent an inadvertent criticality from occurring, which could create a risk to public health and safety. The screening to determine whether the issue had a sufficiently high probability of safety risk to warrant further research was completed on November 19, 2004. A Task Action Plan is under development for the technical assessment of this issue.

#### **IV Licensing Actions and Other Licensing Tasks**

Operating power reactor licensing actions are defined as orders, license amendments, exemptions from regulations, relief from inspection or surveillance requirements, topical reports submitted on a plant-specific basis, notices of enforcement discretion, or other actions requiring NRC review and approval before they can be implemented by licensees. The FY 2005 NRC Performance Plan incorporates three output measures related to licensing actions -- number of licensing actions completed per year, age of the licensing action inventory, and size of licensing action inventory.

Other licensing tasks for operating power reactors are defined as licensee responses to NRC requests for information through generic letters or bulletins, NRC responses to 2.206 petitions, NRC review of generic topical reports, responses by the Office of Nuclear Reactor Regulation to regional requests for assistance, NRC review of licensee 10 CFR 50.59 analyses and FSAR updates, or other licensee requests not requiring NRC review and approval before they can be implemented by licensees. The FY 2005 NRC Performance Plan incorporates one output measure related to other licensing tasks -- number of other licensing tasks completed.

In FY 2004, several high priority activities, such as power grid reliability, changes to nuclear facility security plans, safeguards contingency plans, and guard force training and qualification plans resulted in the NRC reprogramming resources to accommodate the additional work. One of the programs affected by the reprogramming of resources was operating power reactor licensing actions. As a result, at the end of FY 2004, the size of the licensing action inventory exceeded the goal of # 1000, and the goal of competing at least 96 percent of the licensing actions in less than or equal to one year was not met. The effects of the reprogramming will continue into FY 2005 and FY 2006. The licensing actions inventory and timeliness goals for FY 2005 will be changed. Additional resources will be allocated in FY 2006 to work down the inventory and improve timeliness to meet the original timeliness and inventory goals.

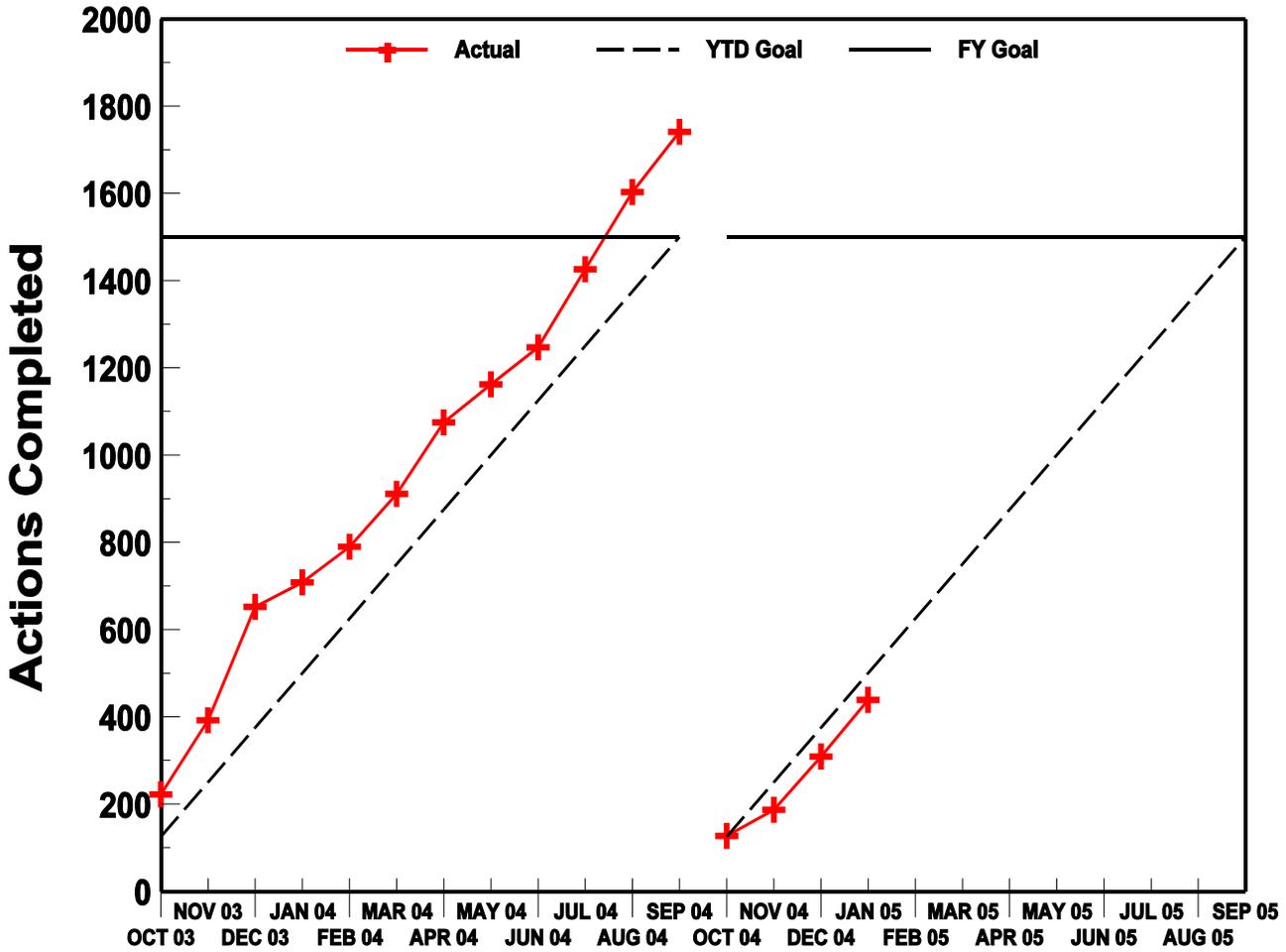
The actual FY 2003 and FY 2004 results, the FY 2005 goals, and the actual FY 2005 results, as of January 31, 2005, for the four NRC Performance Plan output measures for operating power reactor licensing actions and other licensing tasks are shown in the table below.

<b>PERFORMANCE PLAN</b>				
<b>Output Measure</b>	<b>FY 2003 Actual</b>	<b>FY 2004 Actual</b>	<b>FY 2005 Goals</b>	<b>FY 2005 Actual (thru 01/31/2005)</b>
Licensing actions completed/year	1774	1741	\$ 1500	439
Age of licensing action inventory	96% # 1 year; and 100% # 2 years	91%# 1 year; and 100% # 2 years	90% # 1 year; and 100% # 2 years	88%# 1 year; and 99 % # 2 years
Size of licensing action inventory	1296	1135	# 1200	1240
Other licensing tasks completed/year	500	671	\$ 500	144

The charts on the pages that follow demonstrate NRC's FY 2005 trends for the four operating power reactor licensing action and other licensing task output measure goals:

# Nuclear Reactor Safety - Reactor Licensing

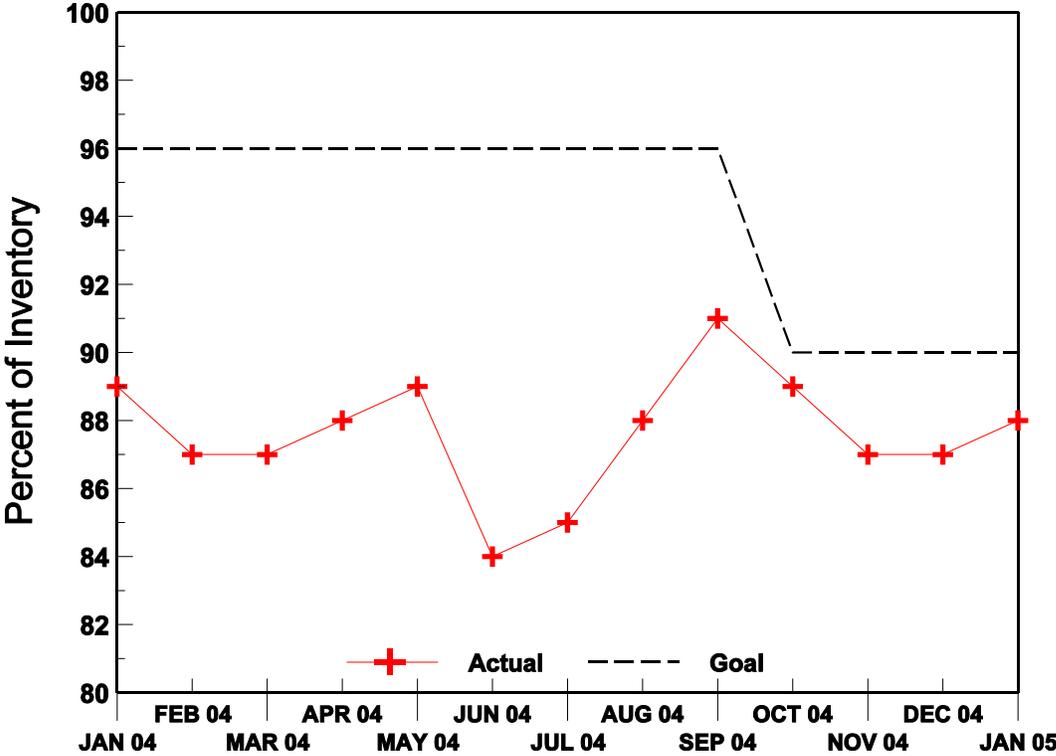
Performance Plan Target: Completed Licensing Actions



# Nuclear Reactor Safety - Reactor Licensing

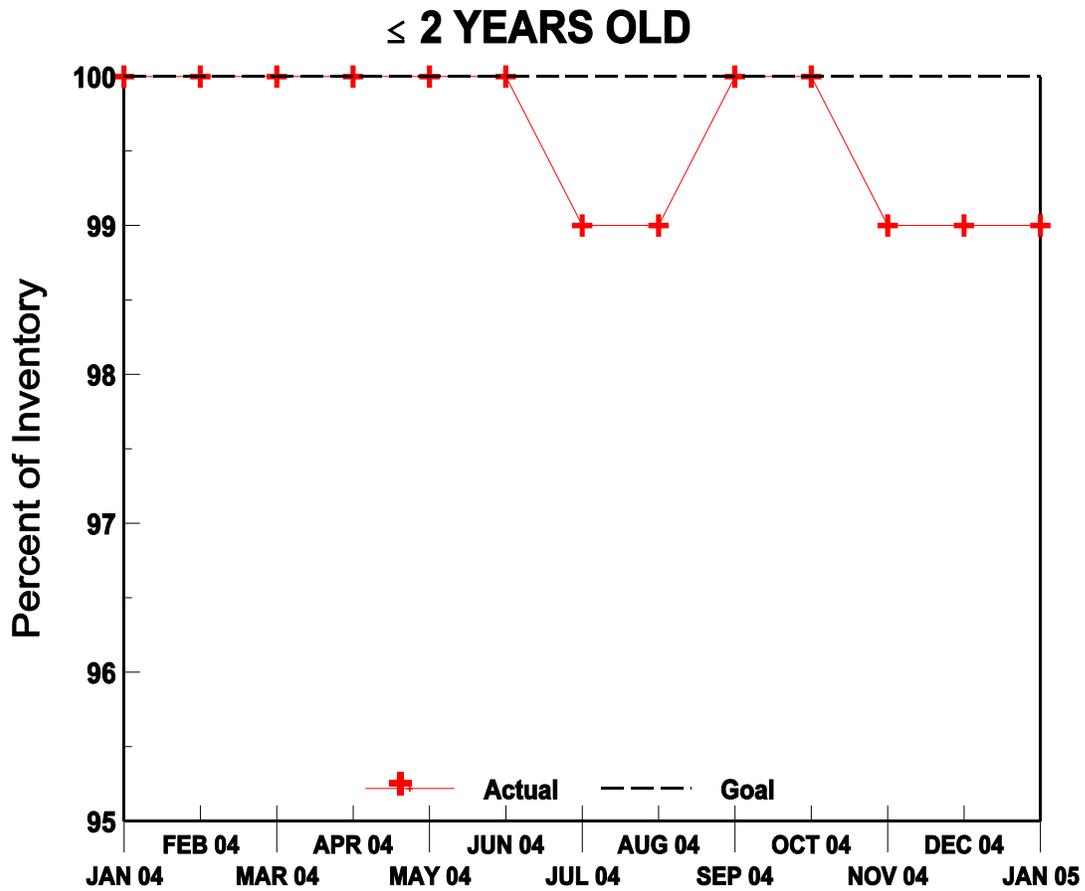
Performance Plan Target: Age of Licensing Action Inventory

≤ 1 YEAR OLD



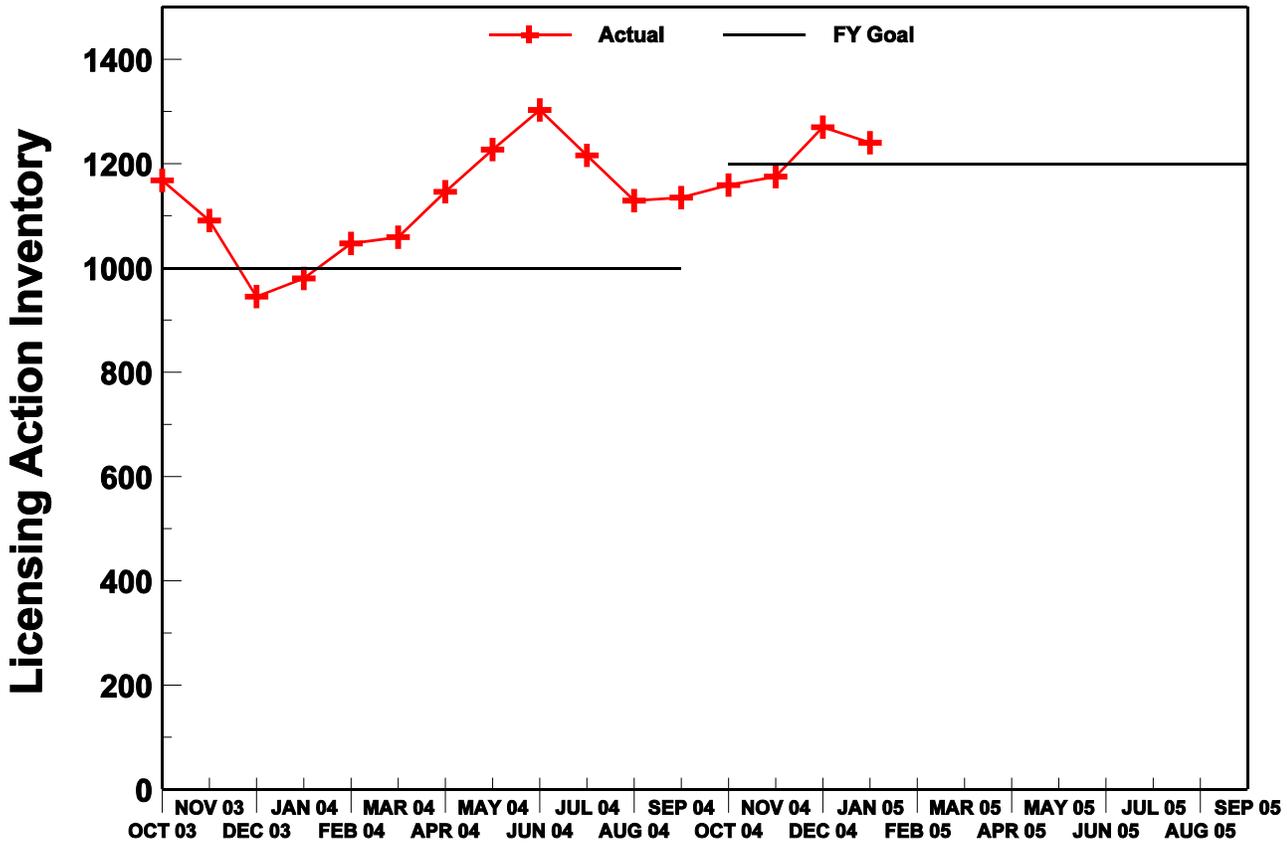
# Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Age of Licensing Action Inventory



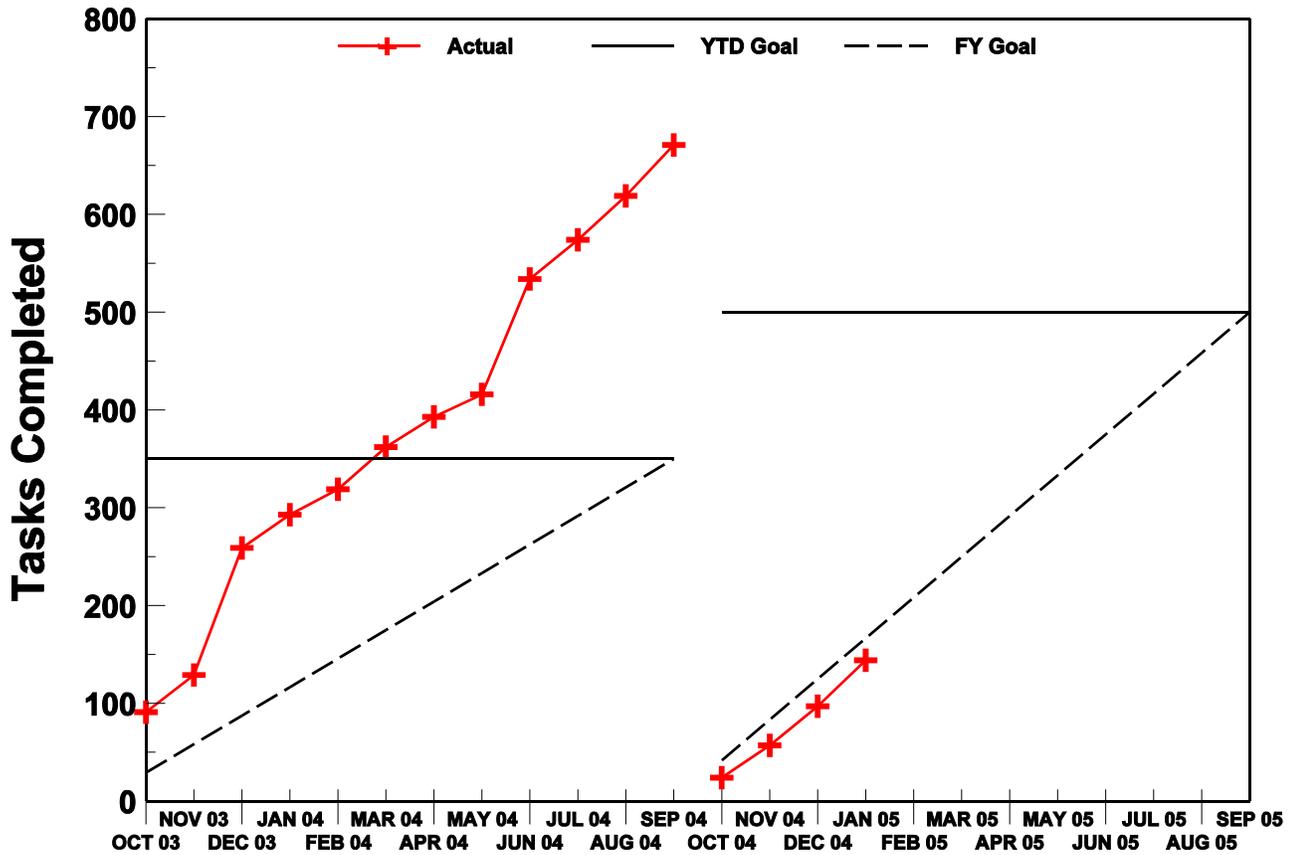
# Nuclear Reactor Safety - Reactor Licensing

## Performance Plan: Size of Licensing Action Inventory



# Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Completed Other Licensing Tasks



## **V Status of License Renewal Activities**

### Farley, Units 1 and 2, License Renewal Application

The Farley license renewal application is currently under review. The draft supplemental environmental impact statement (SEIS) was issued for public comment in August 2004, and the comment period ended in November 2004. The staff is addressing the comments received on the draft SEIS and is preparing to issue the final SEIS in March 2005. The draft safety evaluation report was issued in October 2004. The applicant's comments on the draft safety evaluation report were received, and the staff is preparing to issue the report in March 2005.

### Arkansas Nuclear One, Unit 2, License Renewal Application

The Arkansas Unit 2 license renewal application is currently under review. The draft SEIS was issued for public comment in August 2004, and the comment period ended in November 2004. The staff is addressing the comments received on the draft SEIS and is preparing to issue the final SEIS in April 2005. The draft safety evaluation report was issued in November 2004. The applicant's comments on the draft safety evaluation report were received, and the staff is preparing to issue the report in May 2005.

### Cook, Units 1 and 2, License Renewal Application

The Cook license renewal application is currently under review. The draft SEIS was issued for public comment in September 2004, and the comment period ended in December 2004. The staff is addressing the comments received on the draft SEIS and is preparing to issue the final SEIS in May 2005. The safety evaluation report, identifying any remaining open items, was issued in December 2004, and the applicant's responses to the open items are due in February 2005.

### Browns Ferry, Units 1, 2, and 3, License Renewal Application

The Browns Ferry license renewal application is currently under review. The draft SEIS was issued for public comment in December 2004, and the public comment period ends in March 2005. The safety evaluation report, identifying any remaining open items, is scheduled to be issued in August 2005.

### Millstone, Units 2 and 3, License Renewal Application

The Millstone license renewal application is currently under review, and the staff is preparing requests for additional information. The draft SEIS was issued for public comment in December 2004, and the public comment period ends in March 2005. The safety evaluation report, identifying any remaining open items, is scheduled to be issued in February 2005.

### Point Beach, Units 1 and 2, License Renewal Application

The Point Beach license renewal application is currently under review, and the staff is preparing requests for additional information. The draft SEIS was issued for public comment in January 2005, and the public comment period ends in April 2005. The safety evaluation report, identifying any remaining open items, is scheduled to be issued in May 2005.

### Nine Mile Point, Units 1 and 2, License Renewal Application

The Nine Mile Point license renewal application is currently under review, and the staff is preparing requests for additional information. The draft SEIS is scheduled to be issued in April 2005, and the safety evaluation report, identifying any remaining open items, is scheduled to be issued in June 2005.

#### Brunswick, Units 1 and 2, License Renewal Application

The Brunswick license renewal application is currently under review, and the staff is preparing requests for additional information. The draft SEIS is scheduled to be issued in September 2005, and the safety evaluation report, identifying any remaining open items, is scheduled to be issued in December 2005.

#### **VI Status of Review of Private Fuel Storage, Limited Liability Corporation's Application for a License to Operate an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians**

Litigation continues on the application by Private Fuel Storage, L.L.C. (PFS) for a license to construct and operate an independent spent fuel storage installation (ISFSI) on the Reservation of the Skull Valley Band of Goshute Indians in Skull Valley, Utah. As noted in previous monthly updates, one issue concerning the consequences of an F-16 aircraft crash accident at the proposed facility remains in litigation before the Atomic Safety and Licensing Board (ASLB). Hearings on this matter have been completed. Also before the ASLB is the State's late-filed contention (UU) on issues related to whether the proposed Yucca Mountain repository will accept spent fuel canisters from the PFS Facility.

During this reporting period, the Commission ruled (Memorandum and Order, CLI-05-01, dated January 5, 2005) on matters concerning the disclosure or redaction of certain financially-related information in the record and in the Board's and Commission's decisions on financial assurance.

## VII Enforcement Process and Summary of Reactor Enforcement by Region

### Reactor Enforcement by Region

Reactor Enforcement Actions						
		Region I	Region II	Region III	Region IV	TOTAL
Severity Level I	January 05	0	0	0	0	0
	FY 05 YTD Total	0	0	0	0	0
	FY 04 Total	0	0	0	0	0
	FY 03 Total	0	0	0	0	0
Severity Level II	January 05	0	0	0	0	0
	FY 05 YTD Total	0	0	0	0	0
	FY 04 Total	0	1	0	0	1
	FY 03 Total	0	0	0	0	0
Severity Level III	January 05	0	1	0	0	1
	FY 05 YTD Total	0	1	0	0	1
	FY 04 Total	1	2	4	0	7
	FY 03 Total	2	0	4	0	6
Cited Severity Level IV or GREEN	January 05	0	0	0	0	0
	FY 05 YTD Total	0	0	0	0	0
	FY 04 Total	1	0	2	2	5
	FY 03 Total	1	0	2	1	4
Non-Cited Severity Level IV or GREEN	January 05	23	41	31	11	106
	FY 05 YTD Total	94 <sup>2</sup>	88	111	75	368
	FY 04 Total	271	175	290	301	1037
	FY 03 Total	211	164	253	184	812

\* Numbers of violations are based on enforcement action tracking system (EATS) data that may be subject to minor changes following verification. The numbers shown as Severity Level I, II, III, or IV refer to the number of Severity Level I, II, III, and IV violations or problems. The monthly totals generally lag by 30 days due to inspection report and enforcement development.

<sup>2</sup> In addition to being increased by 23 in order to incorporate the January 2005 data, the Non-Cited Severity Level IV or GREEN FY 05 YTD Total for Region I has also been increased by 4 in order to reflect a correction in the December 2004 data.

Escalated Reactor Enforcement Actions Associated with the Reactor Oversight Process						
		Region I	Region II	Region III	Region IV	Total
Notices of Violation Related to RED, YELLOW, or WHITE Findings	Jan 05 RED	0	0	0	0	0
	Jan 05 YELLOW	0	0	0	0	0
	Jan 05 WHITE	0	1	0	0	1
	FY 05 YTD Total	0	1	0	0	1
	FY 04 Total	3	4	7	6	20
	FY 03 Total	6	1	7	1	15

### Description of Significant Actions Taken During January 2005

Tennessee Valley Authority (Sequoyah Unit 1) EA-04-223 - On January 26, 2005, a Notice of Violation was issued for a violation associated with a White finding involving binding problems with the breaker mechanism operated cell slide assembly for the 1A Residual Heat Removal pump. The violation cited the licensee's failure to correct conditions adverse to quality based on the identification of binding problems during previous surveillance testing.

Duke Energy Corporation (Catawba Units 1 and 2) EA-04-189 - On January 24, 2005, a Notice of Violation was issued for a Severity Level III violation involving the failure to provide complete and accurate information involving a proposed amendment to allow the irradiation of four mixed oxide lead test assemblies.

### VIII Power Reactor Security Regulations

In response to the terrorist attacks on September 11, 2001, the NRC and the nuclear industry have taken many actions to ensure the security at nuclear power plants. A series of Advisories, Orders, and Regulatory Issue Summaries have been, and as needed, continue to be issued, to strengthen further the security of NRC-licensed facilities and control of nuclear materials. The latest advisory was issued on January 28, 2005, and concerned security regarding the President's State of the Union address.

Orders were issued on April 29, 2003, to supplement the threat against which individual power reactor licensees and category I fuel cycle facilities must be able to defend (design basis threat [DBT]), limit the number of hours that security personnel can work, and enhance training and qualification requirements for security personnel. All licensees implemented the Orders by October 29, 2004.

Orders were issued on October 23, 2003, to all nuclear reactor licensees and research reactor licensees that transport spent nuclear fuel. The licensees subject to the Order have been issued a specific license by NRC authorizing the possession of spent nuclear fuel and a general

license authorizing the transportation of spent nuclear fuel in a transport package approved by the Commission in accordance with the Atomic Energy Act of 1954, as amended, and 10 CFR Parts 50 and 71.

In March 2003, the NRC initiated a pilot program for full force-on-force exercises, which used expanded adversary characteristics that were developed as a result of the increased post 9/11 threat. The purpose of the force-on-force exercises is to assess and improve, as necessary, performance of defensive strategies at licensed facilities. Pilot force-on-force exercises were completed at fifteen plants in 2003. The staff provided a paper to the Commission summarizing lessons learned from the force-on-force pilot program and how these lessons could be factored into the full implementation of the force-on-force program. The Commission approved enhanced force-on-force testing, and sixteen transitional force-on-force tests were conducted through October 2004. In November 2004, the NRC implemented a triennial force-on-force testing program and had completed force-on-force exercises at three power reactor sites by January 2005.

To enhance the realism and effectiveness of the force-on-force exercises, the NRC has established fitness and training standards for mock adversary force personnel. Application of these standards provides assurance that the mock adversary force has received appropriate training in offensive tactics and is a credible and challenging adversary. The NRC retains responsibility for oversight of the mock adversary force and evaluation of licensee performance. In addition, measures have been established to minimize any possibility for a conflict of interest with respect to responsibilities for physical protection. To date, the mock adversary force has performed adequately in the seven force-on-force exercises in which it has participated.

Since 9/11, the staff suspended the physical protection portion of the baseline inspections in the Reactor Oversight Process and focused NRC security inspections on licensee implementation of compensatory measures to address the post-9/11 threat environment. In March 2004, the staff began implementation of the revised baseline inspection program, which took into consideration enhanced security requirements and the higher threat environment. During FY 2005, inspection efforts are focusing on verifying implementation of the revised security plans. Implementation of all elements of the baseline inspection program will commence in 2006.

The NRC continues to support the U.S. Department of Homeland Security (DHS)/Homeland Security Council (HSC) initiative to enhance integrated response planning for power reactor facilities. Two Integrated Response Tabletop exercises were completed in 2004. The staff is continuing to work with HSC, DHS, the Federal Bureau of Investigation and others to develop plans to address recommended actions. Additionally, the NRC completed six imminent aircraft threat announced walk-throughs with nuclear power plants and lessons learned have been incorporated into a Safeguards Advisory. Walk-throughs are scheduled to resume in March 2005.

The staff is developing Emergency Action Levels (EALs) for all imminent threats. The EAL development program includes plans to coordinate issues with other agencies and state and local governments.

## **IX Power Uprates**

The staff has assigned a high priority to power uprate license amendment reviews. The staff considers power uprate applications among the most significant licensing actions and is therefore conducting power uprate reviews on accelerated schedules.

There are three types of power uprates. Measurement uncertainty recapture (MUR) power uprates are power uprates of less than 2 percent and are based on the use of more accurate feedwater flow measurement techniques. Stretch power uprates are power uprates that are typically on the order of less than 7 percent and are within the design capacity of the plant. Stretch power uprates require only minor plant modification. Extended power uprates (EPUs) are power uprates beyond the design capacity of the plant and, thus, require major plant modification.

Licensees have been applying for and implementing power uprates since the 1970s as a way to increase the power output of their plants. The staff has been conducting power uprate reviews since then, and to date, has completed 102 such reviews. Approximately 12,650 megawatts-thermal (4217 megawatts-electric) or an equivalent of about four nuclear power plant units has been gained through implementation of power uprates at existing plants. The staff currently has 11 plant-specific power uprate applications under review. The 11 applications under review include 4 stretch power uprates and 7 EPUs.

In July 2004, the staff completed a survey of nuclear power plant licensees to obtain information regarding industry's plans related to power uprate applications. Based on this survey, licensees plan to submit power uprate applications for 16 nuclear power plant units in the next 5 years. These include 7 MUR power uprates, 1 stretch power uprate, and 8 EPUs. Planned power uprates are expected to result in an increase of about 2419 megawatts-thermal (806 megawatts-electric).

## **X Status of the Davis-Besse Nuclear Power Station**

Interim reports to be provided in March 2005, September 2005, and March 2006.