



CHAIRMAN

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 21, 2004

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) 2004 Energy and Water Development Appropriations Act, House Report 108-212 and Senate Report 108-105, 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 fifty-ninth report, which covers the month of October 2003. 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 an update on the status of the Davis-Besse nuclear power plant; issuance of Bulletin 2003-04 "Rebaselining of Data in the Nuclear Materials Management and Safeguards System (NMMSS);" issuance of an immediately effective Order imposing additional security measures to all power reactor licensees and research reactor licensees who transport spent nuclear fuel; and renewal of the Ft. Calhoun Nuclear Power Station license.

Since our last report, the Commission published a revision to the regulations governing the conduct of hearings to make them more effective, efficient, and understandable to the public. The revisions retain formal trial-type proceedings for enforcement actions, the construction and operation of uranium enrichment facilities, the initial authorization hearings on whether to construct a potential high-level waste repository, and the initial authorization hearings on whether to receive and possess high-level waste at a repository. Either informal or formal proceedings could be used in all other proceedings, including applications to build new power plants, depending on specific issues in those proceedings. Formal proceedings may also be used to resolve specific issues involving disputes over the credibility of an eyewitness or issues of motive or intent of an eyewitness or party.

The final rule contains a revised Subpart G for more formal trial-type proceedings, a substantially revised Subpart L to provide less formal hearing procedures to cover most NRC adjudicatory proceedings, and a new Subpart N that provides "fast track" proceedings to be used in simple cases when the oral hearing can be completed within two days. The final rule also requires most proceedings to be conducted by an Atomic Safety and Licensing Board or

an administrative law judge. The final rule was published in the Federal Register on January 14, 2004, and will become effective February 13, 2004.

Also since our last report, Exelon, the licensee for Quad Cities Nuclear Power Station Unit 1, identified on October 28, 2003, an increase in flow through one of the main steam lines with a corresponding decrease in flow in the other remaining main steam lines. These indications are similar to the indications observed at Quad Cities Unit 2, which resulted from cracking in the steam dryer at that unit. As a result, the licensee shut the unit down to perform inspections and repairs of the steam dryer. The steam dryer does not perform an accident mitigating role or safety function, but it is required to maintain its structural integrity. The licensee inspected, repaired, and modified the steam dryer, repaired damaged valve actuators, and modified their supports. Quad Cities Unit 1 was brought back on-line on November 30, 2003. Licensee activities continue to be monitored closely by NRC Region III and the Office of Nuclear Reactor Regulation.

With regard to Davis-Besse, the NRC staff continues to monitor closely the licensee's preparation for restart and onsite activities. The licensee began activities to heat up the plant which reached normal operating temperature and pressure in early January 2004. Heat-up activities were observed by NRC inspectors, who provided expanded coverage throughout the plant heat-up. The plant may not restart without NRC authorization. The NRC conducted a restart readiness inspection in early December 2003 with seven senior inspectors from NRC Regions II, III, and IV. The inspectors examined plant operations, maintenance, testing, engineering, and quality assurance activities. The inspectors concluded that the plant was not ready to be restarted. Plant management agreed with the team's findings and has instituted a number of corrective actions. A follow-up restart team inspection is planned to be conducted to assess the effectiveness of the corrective actions in January 2004. The NRC also concluded a management and human performance inspection in December 2003 and noted areas of decline that warrant further review regarding safety culture and safety conscious work environment among plant employees as a result of surveys taken in March and November 2003. A follow-up inspection is also planned to be conducted in January 2004 to assess plant management's actions to address these areas.

Recently, the Commission and the NRC staff also:

- dispatched an Augmented Inspection Team (AIT) on December 22, 2003, to the Honeywell International fuel processing plant near Metropolis, Illinois, following a gaseous chemical release containing radioactivity. The chemical release was subsequently terminated. A site area emergency was declared following the release of uranium hexafluoride, a potentially hazardous chemical containing low levels of radioactivity. The licensee determined soon after the event that the problem stemmed not from a deliberate act, but from probable human errors and malfunctioning equipment. The inspectors will evaluate the cause of the event. In addition to the AIT inspection, the NRC has issued a Confirmatory Action Letter to Honeywell to confirm that the company has shut down uranium hexafluoride operations, initiated its own investigation, and will discuss with the NRC both the results of that investigation and proposed corrective actions prior to restarting the processes involved in the incident.

- renewed the operating licenses of the Catawba Nuclear Station, Units 1 and 2, and the McGuire Nuclear Station, Units 1 and 2, for an additional 20 years. The Catawba units are located near Rock Hill, South Carolina, and the McGuire units are located near Charlotte, North Carolina. Both plants are operated by Duke Energy Corporation.
- received a license renewal application dated December 31, 2003, from the Tennessee Valley Authority for the Browns Ferry Nuclear Power Plant, Units 1, 2 and 3.
- received on December 15, 2003, an application from Louisiana Energy Services for a uranium enrichment plant proposed to be located in Eunice, New Mexico. The application included an environmental report and a safety analysis report. NRC staff is currently conducting an acceptance review of the application.
- published in the Federal Register on November 26, 2003 (68 FR 66372), a proposed rule amending NRC's Rules of Practice (10 CFR Part 2) applicable to the use of the Licensing Support Network (LSN) and the electronic hearing docket in the licensing proceeding on the disposal of high-level radioactive waste at a geologic repository. The proposed amendments would establish the basic requirements and standards for the submission of adjudicatory materials to the electronic hearing docket by parties to the high-level radioactive waste licensing proceeding. The proposed amendments would also address the issue of reducing the unnecessary loading of duplicate documents on individual participant LSN document collection servers; the continuing obligation of LSN participants to update their documentary material after the initial certification; the Secretary of the Commission's determination that the DOE license application is electronically accessible; and the provisions on material that may be excluded from the LSN.
- published in the Federal Register on November 20, 2003 (68 FR 65386), a direct final rule that clarifies the agency's intentions regarding decommissioning trust provisions for nuclear power plants. The direct final rule clarifies that payments for administrative expenses incurred by trust funds do not require notification to the NRC, that licensees will have the option to retain their existing license conditions relating to decommissioning trust agreements, and that decommissioning trust funds are not to be invested in other companies that own nuclear power plants.
- issued an Order Modifying Licenses to Entergy Operations, Inc. (EO), for River Bend Power Station and to Dominion Nuclear Connecticut, Inc. (DNC), for Millstone Power Station authorizing storage of spent fuel in an independent spent fuel storage installation (ISFSI) in accordance with the Atomic Energy Act of 1954, 10 CFR part 50, and 10 CFR part 72. The Orders were issued to EO and DNC, who have identified near term plans to store spent fuel in an ISFSI under the general license provisions of 10 CFR part 72. The Orders are based on the Commission's determination that certain compensatory measures are required to be implemented by licensees as prudent, interim measures, to address the current threat environment in a consistent manner throughout the nuclear ISFSI community.
- published in the Federal Register on November 13, 2003 (68 FR 64347), a solicitation of public comments on the fourth year of implementation of the NRC revised Reactor

Oversight Process (ROP). The feedback will assist the NRC in continuing to improve its regulatory approach. This is a follow-up to a similar Federal Register Notice (FRN) solicitation issued in November 2002 requesting feedback on the third year of implementation.

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

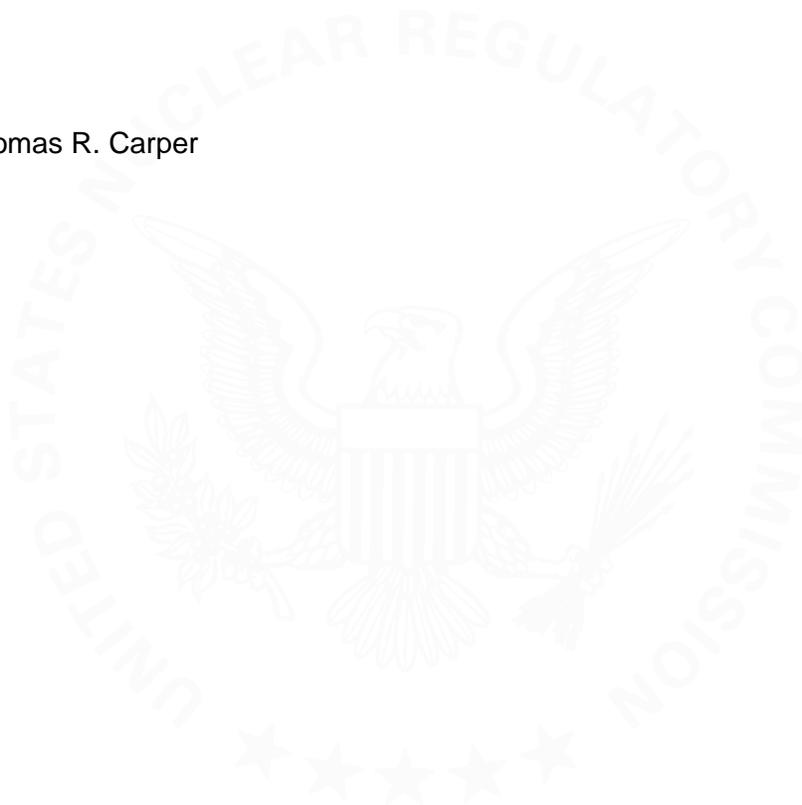
Sincerely,

/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 Joe Barton, 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 Environmental and Public Works
United States Senate
Washington, D.C. 20510
cc: Senator James Jeffords

The Honorable W.J. "Billy" Tauzin, Chairman
Committee on Energy and Commerce
United States Representatives
Washington D.C. 20515
cc: Representative John D. Dingell

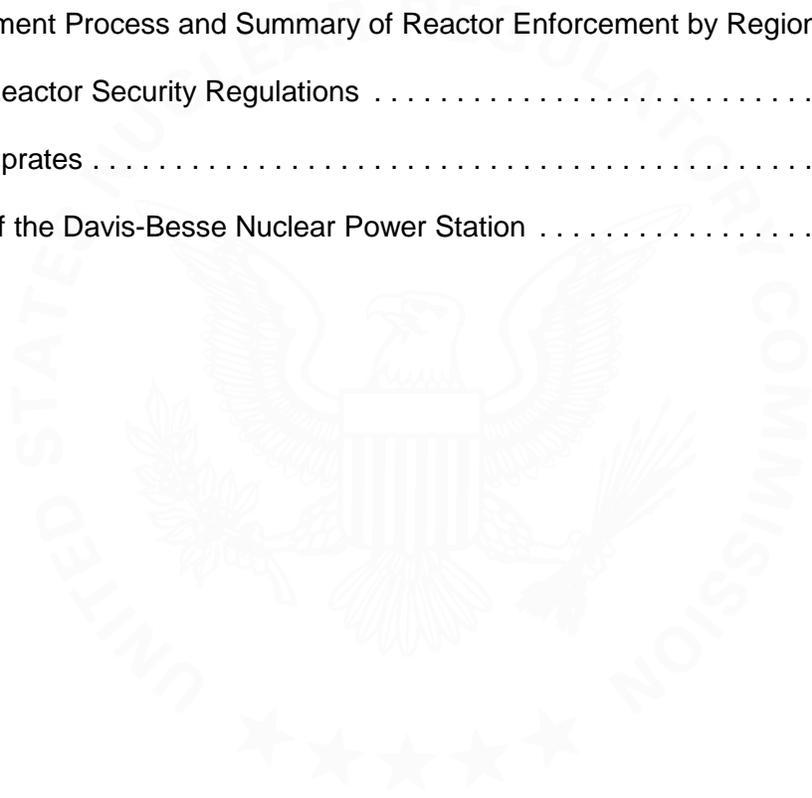
MONTHLY STATUS REPORT ON THE
LICENSING ACTIVITIES AND REGULATORY DUTIES OF THE
UNITED STATES NUCLEAR REGULATORY COMMISSION

OCTOBER 2003

Enclosure

TABLE OF CONTENTS¹

IX.	Implementing Risk-Informed Regulations	2
X.	Revised Reactor Oversight Process	2
XI.	Status of Issues in the Reactor Generic Issue Program	3
XII.	Licensing Actions and Other Licensing Tasks	3
XIII.	Status of License Renewal Activities	7
XIV.	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	8
XV.	Enforcement Process and Summary of Reactor Enforcement by Region	9
XVI.	Power Reactor Security Regulations	10
XVII.	Power Uprates	11
XVIII.	Status of the Davis-Besse Nuclear Power Station	12



¹Note: The period of performance covered by this report includes activities occurring between the first and last day of October 2003. 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

Although the staff continues to make progress on tasks involving use of probabilistic risk information in many areas, there were no significant milestones accomplished during the month of October 2003.

II 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 consider the feedback in future ROP refinements. Recent activities include the following:

- On September 30 and October 1, 2003, members of the NRC Inspection Program Branch attended the NASA Quality Leadership Forum at the Johnson Space Center, Houston, Texas, to provide information on how the NRC assesses licensee corrective action programs and to understand NASA's process. There were about 100 attendees from throughout the NASA community, including both NASA employees and NASA suppliers. NRC staff delivered a 45-minute presentation on how the NRC oversees reactor plant safety, with a focus on our oversight of licensee corrective action programs.
- On October 22 and 23, 2003, the NRC hosted a Mitigating Systems Performance Index (MSPI) and ROP public meeting. During the meeting, the MSPI pilot program and ongoing research activities of the MSPI pilot results, adequacy of Probabilistic Risk Analysis (PRA) issues for MSPI, and benchmarking activities between the MSPI and Significance Determination Process (SDP) processes were discussed. The staff continues to assess the implementation issues with the MSPI.
- The Office of Management and Budget (OMB) completed its review of the Reactor Inspection and Performance Assessment program using the Program Assessment Rating Tool (PART) and scored the program at 89%. This corresponds to an "Effective" rating by OMB for the management of the program, the highest rating possible under the PART system. Of the 234 Federal programs evaluated last year, only 6% of them received an "Effective" rating. The PART is a program evaluation tool developed and implemented by OMB to evaluate the management of all Federal programs in a manner that is consistent and objective. The Reactor Inspection and Performance Assessment program was the first Office of Nuclear Reactor Regulation (NRR) program evaluated using the PART process.
- The biannual Senior Risk Analyst (SRA) counterpart meeting was held in NRC's Region IV office from October 28 through October 30, 2003. Highlighting the meeting were discussions on current SDP developmental activities, appropriate use of thermal hydraulic codes in PRA analyses, Simplified Plant Analysis Risk (SPAR) model development and continuing SRA training, MSPI implementation, and Notice of Enforcement Discretion (NOED) implementation.

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.

IV Licensing Actions and Other Licensing Tasks

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 the licensee. The FY 2004 NRC Performance Plan incorporates three output measures related to licensing actions -- number of licensing action completions per year, age of the licensing action inventory, and size of licensing action inventory.

Other licensing tasks are defined as licensee responses to NRC requests for information through generic letters or bulletins, NRC responses to 2.206 petitions, NRC review of licensee topical reports, NRR responses to regional requests for assistance, NRC review of licensee 10 CFR 50.59 analyses and Final Safety Analysis Report (FSAR) updates, or other licensee requests not requiring NRC review and approval before it can be implemented by the licensee. The FY 2004 NRC Performance Plan incorporates one output measure related to other licensing tasks -- number of other licensing tasks completed.

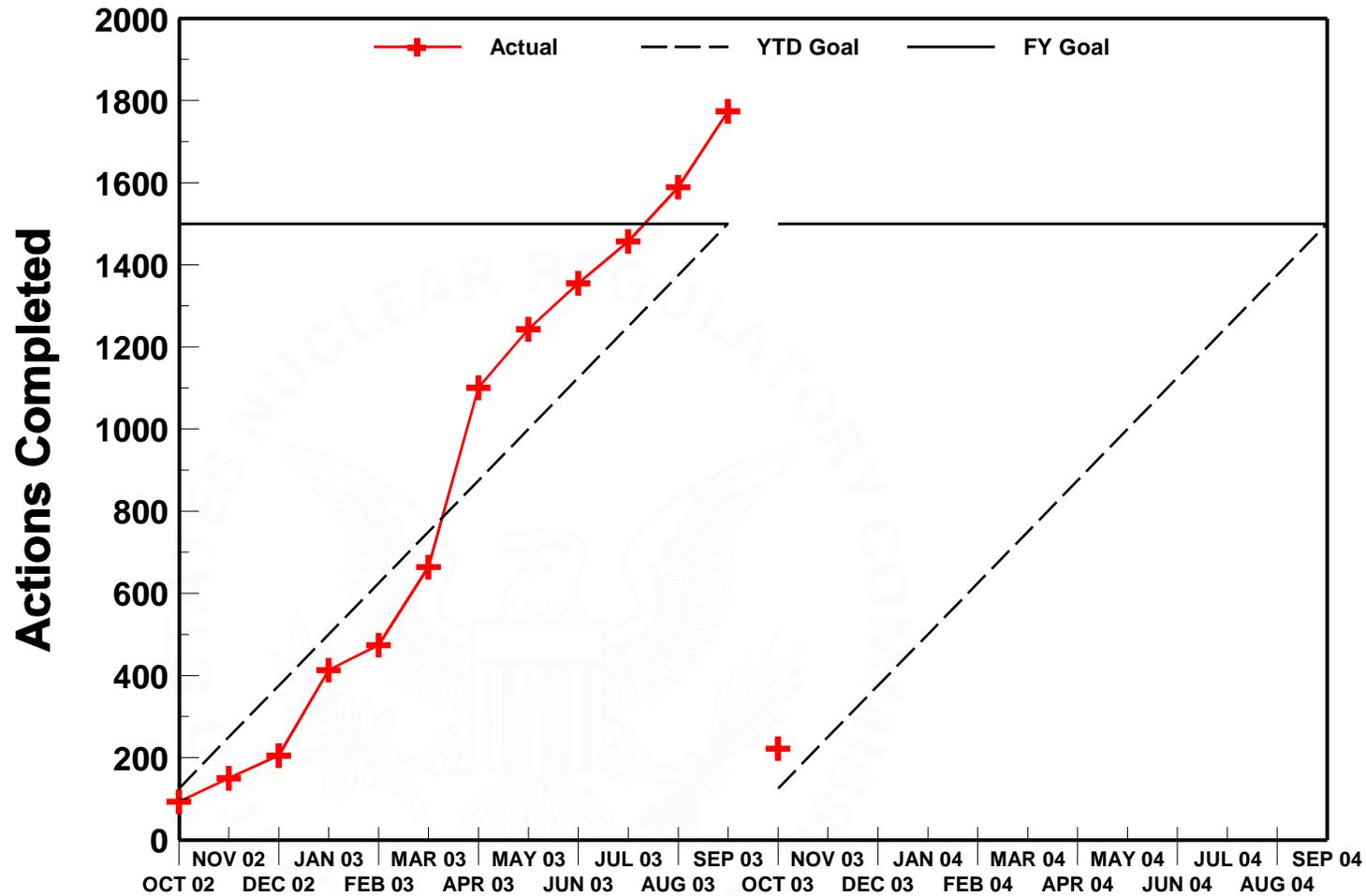
The actual FY 2002 and FY 2003 results, the FY 2004 goals, and the actual FY 2004 results, as of October 31, 2003, for the four NRC Performance Plan output measures for licensing actions and other licensing tasks are shown in the table below:

PERFORMANCE PLAN				
Output Measure	FY 2002 Actual	FY 2003 Actual	FY 2004 Goals	FY 2004 Actual (thru 10/31/2003)
Licensing actions completed/year	1560	1774	≥ 1500	222
Age of licensing action inventory	96.6% ≤ 1 year; and 100% ≤ 2 years	96% ≤ 1 year; and 100% ≤ 2 years	96% ≤ 1 year and 100% ≤ 2 years old	94.0% ≤ 1 year; 100% ≤ 2 years
Size of licensing action inventory	765	1296	≤ 1000	1168
Other licensing tasks completed/year	426	500	≥ 350	91

The following charts demonstrate NRC's trends for the four licensing action and other licensing task output measure goals.

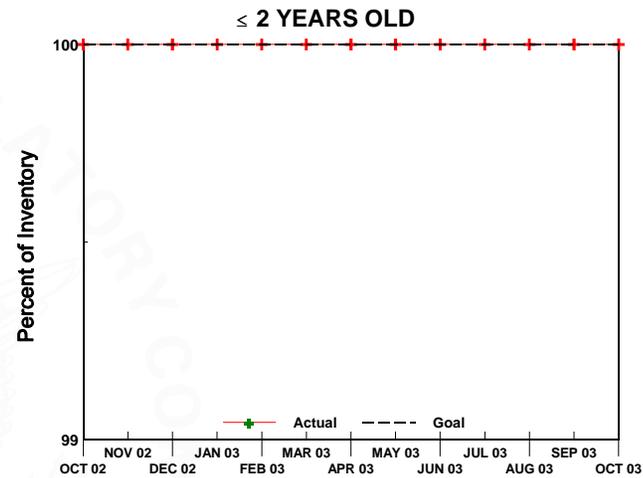
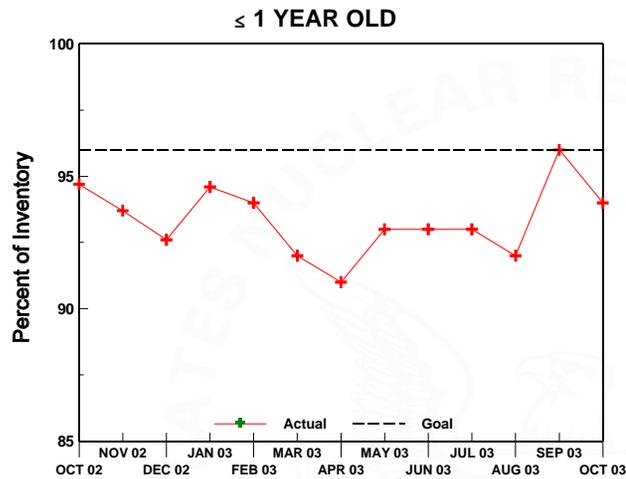
Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Completed Licensing Actions



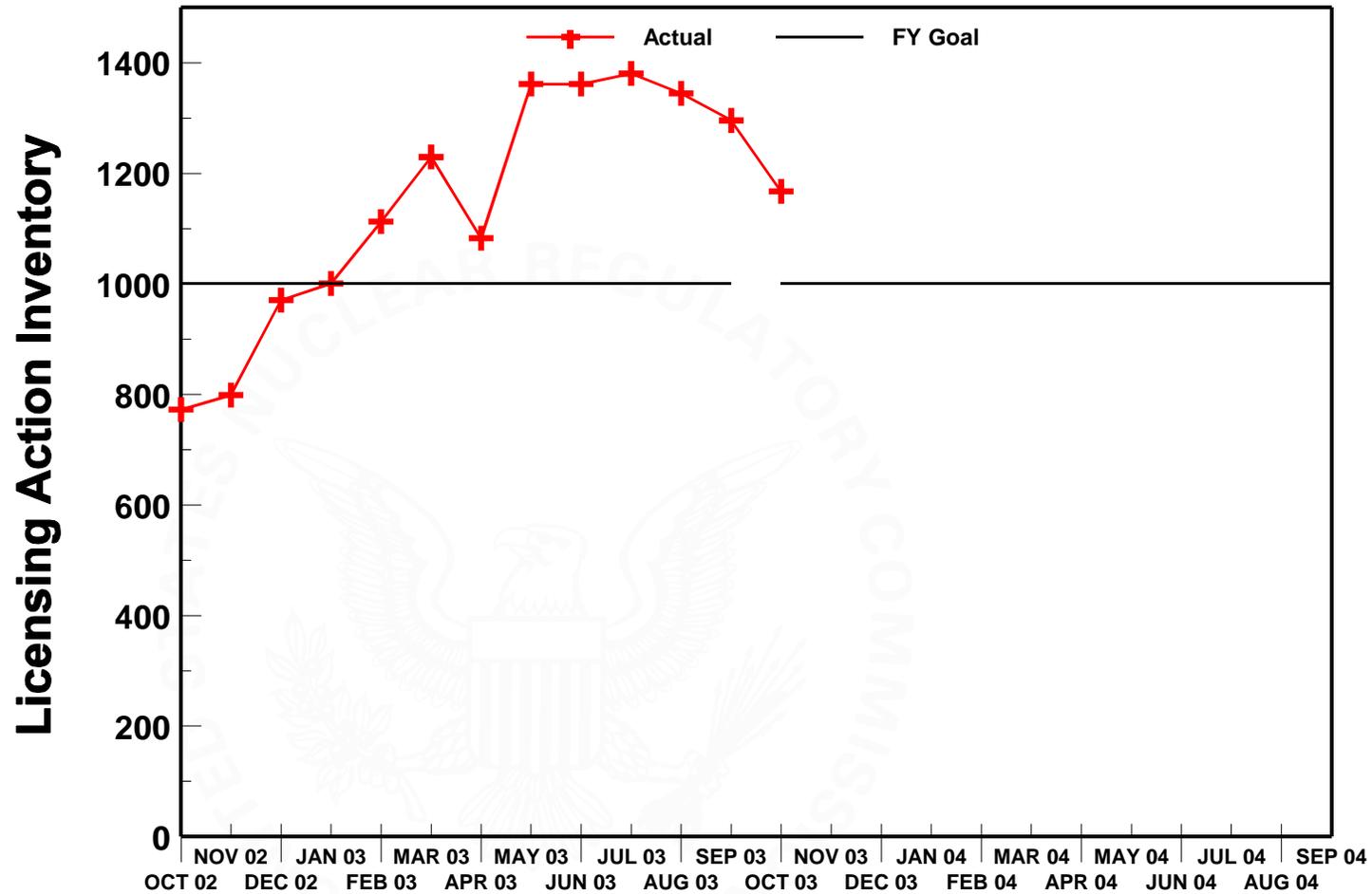
Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Age of Licensing Action Inventory



Nuclear Reactor Safety - Reactor Licensing

Performance Plan: Size of Licensing Action Inventory



V Status of License Renewal Activities

McGuire, Units 1 and 2, and Catawba, Units 1 and 2, Combined Renewal Applications

The staff issued the final supplemental environmental impact statements (SEISs) for McGuire and Catawba in December 2002 and the safety evaluation report in January 2003. Since issuing these documents, the staff has supported completion of the hearing process.

In January 2002, the Atomic Safety and Licensing Board (ASLB) admitted contentions filed by two petitioners in the Catawba and McGuire license renewal proceeding. In October 2003, the ASLB denied the petitioners' contentions and request for hearing and terminated the proceeding. The staff's recommendation on issuing the renewed licenses is being submitted to the Commission, and a decision is scheduled in December 2003.

St. Lucie, Units 1 and 2, Renewal Application

The renewed licenses for St. Lucie, Units 1 and 2, were issued on October 2, 2003, completing the NRC's review of the license renewal application (22 months after receipt).

Fort Calhoun Renewal Application

The staff issued the final SEIS in August 2003 and the safety evaluation report in September 2003. A decision on issuing the renewed license is scheduled for November 2003.

Robinson Unit 2 Renewal Application

The staff issued the draft SEIS for public comment in May 2003, and the comment period ended in July 2003. The staff is addressing the comments received and is preparing to issue the final SEIS in December 2003. The staff issued the safety evaluation report identifying the remaining open items in August 2003, and the applicant's responses were received in September 2003. The staff is reviewing the applicant's responses and is preparing to issue the safety evaluation report in January 2004.

Ginna Renewal Application

The staff issued the draft SEIS for public comment in June 2003, and the comment period ended in September 2003. The staff is addressing the comments received and is preparing to issue the final SEIS in February 2004. The safety requests for additional information were issued in March 2003, and the applicant's responses were received in June 2003. The staff issued the safety evaluation report identifying the remaining open items in October 2003.

Summer Renewal Application

The staff issued the draft SEIS for public comment in July 2003, and the comment period ended in October 2003. The staff is addressing the comments received and is preparing to issue the final SEIS in February 2004. The safety requests for additional information were issued in March 2003, and the applicant's responses were received in June 2003. The staff issued the safety evaluation report in October 2003. The applicant's comments on the safety evaluation report are due December 2003.

Dresden, Units 2 and 3, and Quad Cities, Units 1 and 2, Combined Renewal Applications

Environmental requests for additional information were issued in May 2003, and the responses were received in July 2003. The staff is reviewing the responses and is preparing to issue the draft SEIS in November 2003 for Quad Cities and in December 2003 for Dresden. The safety requests for additional information were issued in August 2003 and the applicant's responses were received in October 2003. The staff is reviewing the applicant's responses and preparing to issue the safety evaluation report, which will identify any remaining open items, in February 2004.

Farley, Units 1 and 2

On September 15, 2003, the NRC received an application for renewal of the Farley Units 1 and 2 operating licenses. In October 2003, the staff completed its acceptance review and found the application acceptable for docketing and review. Until it is determined whether a hearing will be conducted, a 30-month review schedule has been established with a final decision on issuance of the renewed licenses scheduled for March 2006.

Arkansas Nuclear One, Unit 2

On October 15, 2003, the NRC received an application for renewal of the Arkansas Nuclear One, Unit 2, operating license. The staff is currently performing the required acceptance review of the application and, if found acceptable, will docket the application, notice an opportunity for hearing, and issue the review schedule. A renewed operating license for Unit 1 was previously issued on June 20, 2001.

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 the September update, the NRC staff found that the PFS response to the staff's first request for additional information (RAI) was not complete, and the staff therefore issued a second RAI on October 1, 2003, requesting supplemental analyses and information from PFS. The NRC staff met with representatives of PFS on October 3, 2003, to ensure that PFS understood all items in the RAI. A representative of the State of Utah also attended this meeting. The need for additional information and analyses from PFS affects the established litigation schedule. On October 10, 2003, the Atomic Safety and Licensing Board (ASLB) issued an order which stated, in part:

In accordance with the suggestion of the Applicant and with the concurrence of the NRC staff and the State of Utah, the prehearing/post-hearing schedule previously adopted is SUSPENDED pending receipt of further information that will permit its modification.

PFS has not yet provided the ASLB and the parties with a proposed schedule for its response to the October 1, 2003 RAI. It is anticipated that NRC staff, the State of Utah, and PFS will

confer after such a schedule is provided, and the parties will then propose a modified litigation schedule to the ASLB.

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	Oct 2003	0	0	0	0	0
	FY 04 YTD	0	0	0	0	0
	FY 03 Total	0	0	0	0	0
	FY 02 Total	0	0	0	0	0
Severity Level II	Oct 2003	0	0	0	0	0
	FY 04 YTD	0	0	0	0	0
	FY 03 Total	0	0	0	0	0
	FY 02 Total	1	0	0	0	1
Severity Level III	Oct 2003	0	0	0	0	0
	FY 04 YTD	0	0	0	0	0
	FY 03 Total	2	0	4	0	6
	FY 02 Total	2	0	0	0	2
Severity Level IV	Oct 2003	1	0	0	0	1
	FY 04 YTD	1	0	0	0	1
	FY 03 Total	1	0	2	1	4
	FY 02 Total	0	0	2	0	2
Non-Cited Severity Level IV or Green	Oct 2003	5	29	45	22	101
	FY 04 YTD	5	29	45	22	101
	FY 03 Total	211	164	202	184	761
	FY 02 Total	207	89	202	151	649

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

Escalated Reactor Enforcement Actions Associated with the Reactor Oversight Process						
		Region I	Region II	Region III	Region IV	Total
NOVs** Related to White, Yellow or Red Findings	10/03 Red	0	0	0	0	0
	10/03 Yellow	0	0	1	0	1
	10/03 White	0	0	0	0	0
	FY 04 YTD	0	0	1	0	1
	FY 03 Total	6	1	7	1	15
	FY 02 Total	5	4	6	8	23

**Notices of Violations

Description of Significant Actions taken in October 2003

FirstEnergy Nuclear Operating Company (Davis-Besse) EA-03-131

On October 7, 2003, a Notice of Violation was issued for a violation associated with a Yellow SDP finding involving the inability of the emergency core cooling system sump to perform its safety function under certain accident scenarios due to potential clogging of the sump screen. The violation cited the licensee's failure to identify promptly and correct significant conditions adverse to quality involving the potential to clog the emergency core cooling and containment spray system sump with debris following a loss of coolant accident (LOCA).

VIII Power Reactor Security Regulations

In response to the terrorist attacks on September 11, 2001, the NRC and the nuclear industry have taken a number of actions to ensure the security at nuclear power plants. A series of Advisories, Orders, and Regulatory Issue Summaries have been issued to strengthen further the security of NRC-licensed facilities and control of nuclear materials.

An Order was issued on April 29, 2003, that revised the threat against which individual power reactor licensees and category 1 fuel cycle facilities must be able to defend, limited the number of hours that security personnel can work, and enhanced training and qualification requirements for security personnel. Licensees are required to implement the April 29, 2003 Order revising the design basis threat no later than October 29, 2004. Implementation of this Order will include employing revised security plans, revised safeguards contingency plans, and revised guard training and qualification plans, and completing any necessary plant modifications. The NRC staff is currently working to ensure appropriate guidance is available to the industry so plant and program changes can be completed on schedule and in time to implement the Order by the October 29, 2004 deadline.

In March 2003, the NRC initiated a pilot program for full force-on-force exercises, which use expanded adversary characteristics that were developed as a result of the increased post 9/11 threat. The purposes of the force-on-force exercises are to assess and improve, as necessary, performance of defensive strategies at licensed facilities. As of the end of October, pilot force-on-force exercises have been completed at thirteen plants. The staff will present a paper to the Commission in early 2004 summarizing lessons learned from the force-on-force pilot program and how these lessons can be factored into the full implementation of the force-on-force program. The NRC plans to continue to conduct force-on-force exercises at a rate of approximately two per month through October 2004. Following implementation of the revised design basis threat on October 29, 2004, the NRC will implement triennial force-on-force testing at each nuclear power plant site.

Orders were issued on October 23, 2003, to all nuclear power reactor licensees and research reactor licensees who transport spent nuclear fuel. The Commission determined that additional security measures are required to be implemented to address the current threat environment.

IX Power Upgrades

The staff has assigned a high priority to power upgrade license amendment reviews and is therefore conducting power upgrade reviews on accelerated schedules.

Licensees have been applying for and implementing power upgrades since the 1970s as a way to increase the power output of their plants. The staff has been conducting power upgrade reviews since then and to date has completed 99 such reviews. Approximately 12,414 MWt (4,138 MWe) or an equivalent of about four nuclear power plant units has been gained through implementation of power upgrades at existing plants. There are three types of power upgrades. Measurement uncertainty recapture power upgrades are power upgrades of less than 2 percent and are based on the use of more accurate feedwater flow measurement techniques. Stretch power upgrades are power upgrades that are typically on the order of less than 7 percent and are within the design capacity of the plant. Stretch power upgrades require only minor plant modification. Extended power upgrades are power upgrades beyond the design capacity of the plant and, thus, require major plant modification.

In June 2003, the staff completed a survey of nuclear power plant licensees to obtain information regarding industry's plans related to power upgrade applications. Based on this survey and information obtained since the survey, licensees plan to submit power upgrade applications for 28 nuclear power plant units in the next 5 years. These include 11 measurement uncertainty recapture power upgrades, 5 stretch power upgrades, and 12 extended power upgrades. Planned power upgrades are expected to result in an increase of about 5,659 MWt (1,886 MWe). The staff currently has 4 plant-specific applications under review.

Following a power upgrade, Quad Cities Units 1 and 2 experienced cracking in the steam dryers. The steam dryer is located in the upper region of the reactor vessel and functions to remove moisture from the steam before the steam is delivered to the turbine. The steam dryer does not perform an accident mitigating role or safety function, but it is required to maintain its structural integrity. The NRC has determined that the dryer cracking does not pose an immediate safety concern. Nevertheless, the NRC is following the events at Quad Cities. The NRC is currently

actively engaged with industry regarding industry's plans for addressing this experience generically.

X Status of Davis-Besse Nuclear Power Station

During the month of October, NRC continued its inspections evaluating issues on the NRC Oversight Panel's Restart Checklist. The NRC issued three inspection reports in October 2003. Inspection Report 50-346/03-21 documented a Preliminary Significance Determination for a Greater than Green finding for a high pressure injection pump design issue. A Final Significance Determination and associated violation will be issued once the NRC evaluates the licensee's response. Inspection Report 50-346/03-03 was issued after a special inspection involving the capability of safety significant structures, systems, and components to support safe and reliable plant operation. Inspection Report 50-346/03-18 was issued to document the results of a six-week resident inspection.

In addition to these three inspection reports, a Final Significance Determination and associated Violation was issued concerning a Yellow finding discussed in Inspection Report 50-346/03-15, issued in July 2003, regarding unqualified containment coatings and other debris inside containment that could have potentially blocked the emergency sump intake screen, rendering the sump inoperable following a loss-of-coolant accident. Please note that Section VII provides additional information on the enforcement action. These and other Davis-Besse inspection reports associated with the reactor vessel head degradation event can be viewed on the NRC's Davis-Besse web pages.

The plant completed fuel load on February 26, 2003, and at the end of October was in Cold Shutdown (average coolant temperature less than 200 degrees Fahrenheit). In October, the licensee completed its inspections of the reactor vessel head and control rod drive mechanism flanges and identified no definitive indication of reactor coolant system leakage. Significant work items that need to be accomplished prior to restart include reinstalling high pressure injection pumps that were refurbished and modifying twenty-four circuit breakers in 480 Volt alternating current load centers to correct lack of coordination issues.

The Oversight Panel closed two Restart Checklist Items this month. One concerned the extent-of-condition of any boric acid leakage from systems outside containment, and the other pertained to quality audits and self-assessments of programs. As of October 31, 2003, the Oversight Panel has closed 20 of 31 Restart Checklist Items.

The Oversight Panel conducted five public meetings in October. A public meeting with the licensee was held in NRC Region III on October 1, 2003, to discuss the licensee's long-term plans to address safety conscious work environment and organizational effectiveness. Two public meetings were held in Oak Harbor, Ohio, on October 7, 2003. The first meeting was held with the licensee to discuss the status of its restart plan, and the second meeting was held with the public to hear comments and answer questions. A fourth public meeting was held at the Davis-Besse site on October 8, 2003, to discuss the results of the special inspection, mentioned above, associated with assuring the capability of safety significant structures, systems, and components to support safe and reliable plant operation. The fifth public meeting was held in NRC Headquarters on October 21, 2003, to discuss the licensee's modifications to the high pressure injection pumps.

On October 7, 2003, the NRC responded to a 10 CFR 2.206 Petition submitted by Greenpeace on behalf of the Nuclear Information & Resource Service and the Union of Concerned Scientists. The response considered the Petitioners' requests to suspend the Davis-Besse license and preclude plant restart until certain conditions have been met to be equivalent to "immediate action" requests. The NRC will supplement this response with its findings on the Petitioners' "immediate action" requests before the Davis-Besse plant is allowed to restart.

Detailed information on NRC activities associated with the Davis-Besse reactor vessel head degradation event can be found at:

<http://www.nrc.gov/reactors/operating/ops-experience/vessel-head-degradation.html>

