September 30, 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 sixty-ninth report, which covers the month of August 2004. 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 following: (1) the Commission decision to treat certain site-specific physical protection and security inspection, assessment, and enforcement information that might be useful to a terrorist in planning a potential attack as sensitive, unclassified information and withhold it from public release; (2) initiation of an engineering design inspection at the Vermont Yankee nuclear power plant; (3) heightened NRC oversight of the Perry Nuclear Power Plant because of ongoing NRC concerns regarding the thoroughness of the licensee's root cause analysis and corrective action program; and (4) a status update on efforts to account for the missing three small fuel rod segments believed to be in the spent fuel pool at Humboldt Bay Nuclear Plant.

I would like to provide follow-up information on the status of the engineering design inspection at the Vermont Yankee nuclear power plant in Vernon, Vermont. On September 3, 2004, the NRC completed its on-site portion of the engineering design inspection. The new engineering design inspection concept is intended to enhance the agency's Reactor Oversight Process. The Vermont Yankee engineering design inspection will also provide information relevant to reviewing Entergy Nuclear's application to increase the plant's power output by 20 percent. The NRC will hold a public exit meeting to discuss the inspection results in October 2004. The team's findings will also be made public in an inspection report expected to be issued in October 2004.

On August 10, 2004, I signed an amendment to the Agreement between the NRC and the State of Utah as authorized by section 274b of the Atomic Energy Act of 1954, as amended (Act). The amendment became effective when Governor Olene S. Walker of the State of Utah signed the amendment to the Agreement on August 16, 2004. The amendment provides for the NRC to discontinue its regulatory authority and for the State to assume regulatory authority over the possession and use of byproduct material as defined in section 11e.(2) of the Act in Utah.

On August 31, 2004, the Atomic Safety and Licensing Board ruled that the Department of Energy's (DOE's) certification that it had made available all DOE documentary material on its proposed Yucca Mountain high-level waste repository failed to meet NRC regulations. Specifically, the Licensing Board unanimously found that DOE failed to make publicly available substantial quantities of documentary material in DOE's possession at the time of certification and that the manner in which DOE made the material publicly available on its own Internet web site failed to meet the regulations. The Board's decision was in response to a July 12 motion to the Licensing Board from the State of Nevada. The Board ruled that Nevada and other potential participants in this proceeding concerning the expected future application of DOE to build a repository for high-level radioactive waste at Yucca Mountain, Nevada, are not required to make their documents available until 90 days after DOE re-certifies that it has made all of its documents available on the central Licensing Support Network site. DOE has appealed the Board's decision to the Commission. The Commission expects to rule on the appeal expeditiously.

Since our last report, the NRC has achieved significant progress in support of the United States Government's efforts to strengthen the control of radioactive sources and materials globally, including those sources that could be used in a radioactive dispersal device or "dirty bomb." Under the leadership of Secretary Abraham and coincident with the 48th Regular Session of the International Atomic Energy Agency (IAEA) General Conference, the NRC participated as a member of the U.S. delegation in the Global Threat Reduction Initiative (GTRI) Conference held at Vienna, Austria, on September 18-20, 2004. The mission of the GTRI is to remove and/or secure high-risk nuclear and radiological materials and equipment around the world that pose a threat to the United States and to the international community. In addressing the plenary session, I emphasized the NRC's initiatives related to the IAEA Code of Conduct on the Safety and Security of Radioactive Sources. In particular, I noted that, on September 16, 2004, NRC published in the Federal Register (69 FR 55785) a proposed rule amending 10 CFR Part 110 that will enhance U.S. import/export controls of high-risk radioactive materials consistent with the IAEA Code of Conduct. Issuance of this proposed rule at this time enables the United States to continue to lead the world by example in strengthening international controls over high-risk radioactive sources and amplifies the United States commitment – domestically and abroad – to keep high-risk radioactive sources out of the hands of terrorists.

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

- issued, on August 18, 2004, an Order in the Louisiana Energy Services hearing related to the gas centrifuge uranium enrichment plant proposed to be located in Eunice, New Mexico. In the Order, the Commission dismissed four of the five contentions referred to it by the NRC Atomic Safety and Licensing Board because the contentions did not meet all of the contention rule criteria. These four contentions had been submitted by the New Mexico Environment Department and the New Mexico Attorney General. The fifth contention had been jointly submitted by Nuclear Information and Resource Service and Public Citizen, two public interest organizations, and concerned the disposal of the depleted uranium hexafluoride that is a byproduct of the enrichment process. The Commission decided to review the fifth contention further and requested briefs on the issue of whether depleted uranium can be considered low-level radioactive waste under 10 CFR 61.

- terminated the Special Nuclear Material License issued to Babcock and Wilcox Company, Pennsylvania Nuclear Service Operation, on August 24, 2004. The licensee used radioactive material at its facility in Parks Township, Pennsylvania, for conducting fuel fabrication, research and development, and service work from 1960 until 1996. On January 26, 1996, the licensee requested a license amendment authorizing it to decommission the Parks Township facility. The licensee has completed site decommissioning and the post-decommissioning groundwater monitoring of the site. Based on the remedial actions taken by the licensee, the NRC staff's review of the licensee's termination surveys, and the results of the NRC staff's confirmatory surveys, the NRC concluded that the licensee has completed the decommissioning activities and that the site is suitable for unrestricted release.

- issued the mid-cycle plant performance assessment letters for 102 of the nation's 103 operating commercial nuclear power plants on August 30, 2004. The Davis-Besse nuclear facility in Ohio was excluded because it is currently under a special NRC oversight program (NRC Manual Chapter 0350 process). Every six months, each plant receives either a mid-cycle review letter or an annual assessment letter along with an NRC inspection plan. The next annual assessment letters will be issued in March 2005. The assessment letters sent to each licensee are available on the NRC web site: http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/listofasmrpt.html. As a result of the mid-cycle plant performance assessments, NRC placed the Perry nuclear facility in Ohio in the Multiple/Repetitive Degraded Cornerstone Column of the five-column system NRC uses to determine its response to nuclear plant performance. The placement of the Perry plant in this category is the result of the plant's cumulative performance issues that were discussed in the July monthly report rather than any single recent event. Point Beach Units 1 and 2 in Wisconsin remained in the Multiple/Repetitive Degraded Cornerstone Column as the result of a previous assessment. Of the remaining 99 plants, 79 were in the Licensee Response Column (the normal performance range) and 20 were in the Regulatory Response Column (acceptable performance but outside the normal performance range). The next monthly report (September 2004) will include a semi-annual status update on Davis-Besse.

- issued on September 13, 2004, Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," to all holders of operating licenses for pressurized-water nuclear power reactors, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel. The generic letter asks licensees of pressurized-water reactors to perform an evaluation and provide information that enables the NRC staff to verify whether licensees can demonstrate that their emergency core cooling systems and containment spray systems are capable of performing their intended post-accident mitigating functions following a design basis accident requiring recirculation operation.

- issued on September 16, 2004, the preliminary Accident Sequence Precursor (ASP) analysis of multiple conditions that existed at the Davis-Besse nuclear power plant from February 2001 until the plant was shutdown in February 2002. The NRC staff's calculations estimated how the reactor vessel head damage, combined with design

problems in certain high-pressure pumps and issues affecting a water recirculation system component (containment sump), could have led to damage to the reactor core in the year preceding discovery of the head damage. The ASP analysis concluded the combination of issues at Davis-Besse had 6 chances in 1,000 of damaging the core during that one-year period. The ASP determination does not estimate the likelihood of a radioactivity release, since the power plant reinforced concrete containment structure and other safety systems were capable of protecting public health and safety. Based on the preliminary analysis, this event rates as a ''significant'' precursor, which is the NRC's highest category for a precursor. Since 1979, 18 events have been rated as "significant," four of which had higher risk estimates than this situation, and there were two in the past 10 years which were roughly equivalent to Davis-Besse.

- published in the Federal Register on September 17, 2004 (69 FR 56101), a notice of issuance of final design approval (FDA) to Westinghouse Electric Company for the AP1000 reactor standard design pursuant to 10 CFR part 52, Appendix O. This FDA allows the AP1000 standard design to be referenced in an application for a construction permit or operating license under 10 CFR part 50, or an application for a combined license under 10 CFR part 52. In addition, the NRC issued the Final Safety Evaluation Report (FSER) that supports issuance of the FDA. The next step will be to certify the design using a rule-making process. This process includes review by the Commission and an opportunity for public comment. Three other standard reactor designs have already been certified by the NRC.

- published in the Federal Register on September 20, 2004 (69 FR 56462), notice of acceptance for docketing of the National Institute of Standards and Technology application and notice of opportunity for hearing regarding renewal of the National Bureau of Standards Reactor (NBSR) Facility Operating License for an additional 20-year period. The licensee submitted its license renewal application for the NBSR on April 9, 2004. The current operating license for the NBSR (TR-5) expired on May 16, 2004; however, because the NBSR license renewal application was filed in a timely manner under NRC regulations, the license will not be deemed to have expired until the license renewal application has been acted on by the NRC. The NBSR reactor is authorized to operate at 20 megawatts thermal power.

- issued Revision 9 of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors,'' which provides policy and guidance for the development, administration, and grading of written examinations and operating tests used to determine the qualifications of individuals who apply for reactor operator and senior reactor operator licenses at nuclear power plants pursuant to the Commission's regulations in 10 CFR part 55, "Operators' Licenses." NUREG-1021 also provides guidance for periodically verifying the continued qualifications of licensed operators.

- received the Office of Management and Budget (OMB) Program Assessment Rating Tool (PART) score results for the Nuclear Materials Users Licensing and Inspection program, which is NRC's program to regulate users of radioactive material for industrial, medical, and academic purposes. The program received a score of 93 percent, and OMB's review determined this program to be effective. The Commission understands that this is among the higher scores issued by OMB to date.

- activated the NRC's Region II Incident Response Center in Atlanta, Georgia, to monitor and assist the nuclear power plants in Florida (Crystal River, St. Lucie, and Turkey Point) in response to Hurricane Charley and Hurricane Frances. Also, additional NRC personnel were dispatched to the plants and to the State's Emergency Response Center in Tallahassee. The Headquarters Operations Center and the Region II Incident Response Center closely monitored plant conditions throughout the duration of each hurricane. NRC coordinated with the Federal Emergency Management Agency and the State in allowing restart of the Crystal River and St. Lucie plants. Similar activities were conducted by the Headquarters Operations Center and the Region II and Region IV (Arlington, Texas) Incident Response Centers in response to Hurricane Ivan and Hurricane Jeanne. There was no damage of any consequence to the nuclear power plants, and they have either restarted or are preparing to restart.

  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 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

AUGUST 2004

Enclosure

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[1]Note: The period of performance covered by this report includes activities occurring between the first and last day of August 2004. 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 August 2004.

II Reactor Oversight Process

The NRC continues to implement the Reactor Oversight Process (ROP) at all nuclear power plants and 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 August 18, 2004, NRC staff hosted the monthly ROP Working Group public meeting at the NRC Headquarters Office. Major topics of discussion included Significance Determination Process (SDP) timeliness; Safety System Functional Failures; Reactor Coolant System (RCS) Leakage Performance Indicator Improvement initiative; suggested improvements to the frequently asked question (FAQ) process; changes to NEI 99-02, "Regulatory Assessment Performance Indicator Guidelines," revision 2; and open FAQs.

- On August 19, 2004, NRC staff hosted the monthly Mitigating System Performance Index (MSPI) public meeting at the NRC Headquarters Office to discuss MSPI implementation issues with industry representatives. Among these issues are the need to define the conditions on when to use a front stop (i.e., risk limiter) and the need for a probabilistic risk assessment (PRA) standard and guidelines. These issues among others were outlined in a staff position that was presented to industry during the July 2004 public meeting. Other discussion items included performance indicator (PI) issues, including action plans for the subcommittee task groups for Scrams w/Loss of Normal Heat Removal and Barrier Integrity PIs, and open FAQs.

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

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 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 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 2004 NRC Performance Plan incorporates one output measure related to other licensing tasks -- number of other licensing tasks completed.

Recently, 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, have resulted in the NRC's reprogramming of resources to accommodate the additional work. One of the programs affected by the reprogramming of resources is operating power reactor licensing actions. As a result, by the end of FY 2004, the size of the licensing action inventory will most likely exceed the goal of $\leq$ 1000 and the goal of having at least 96 percent of the licensing action applications less than one year old will not be met. Nevertheless, the NRC staff has met its goal of completing more than 1500 licensing actions in FY2004. The NRC is working with the licensees on prioritizing the licensing action workload.

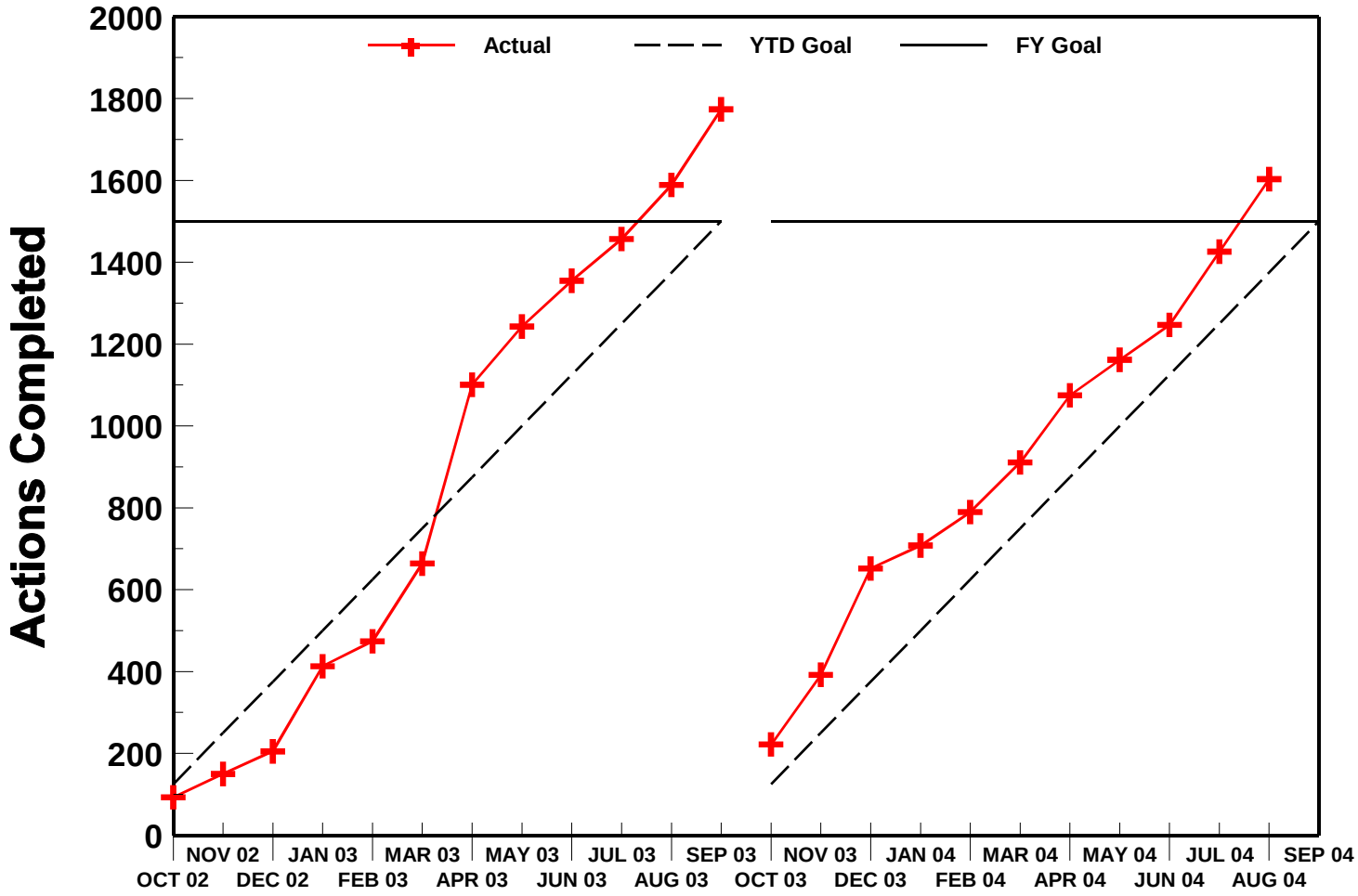
The actual FY 2002 and FY 2003 results, the FY 2004 goals, and the actual FY 2004 results, as of August 31, 2004, for the four NRC Performance Plan output measures for operating power reactor licensing actions and other licensing tasks are shown in the table below.

PERFORMANCE PLAN				
Output Measure	**FY 2002 Actual**	**FY 2003 Actual**	**FY 2004 Goals**	**FY 2004 Actual (thru 08/31/2004)**
Licensing actions completed/year	1560	1774	$\geq$ 1500	1603
Age of licensing action inventory	96.6% $\leq$ 1 year; and 100% $\leq$ 2 years	96%$\leq$ 1 year; and 100% $\leq$ 2 years	96% $\leq$ 1 year and 100% $\leq$ 2 years old	88.0% $\leq$ 1 year; 99% $\leq$ 2 years
Size of licensing action inventory	765	1296	$\leq$ 1000	1129
Other licensing tasks completed/year	426	500	$\geq$ 350	619

The following charts demonstrate NRC’s trends for the four operating power reactor licensing action and other licensing task output measure goals.

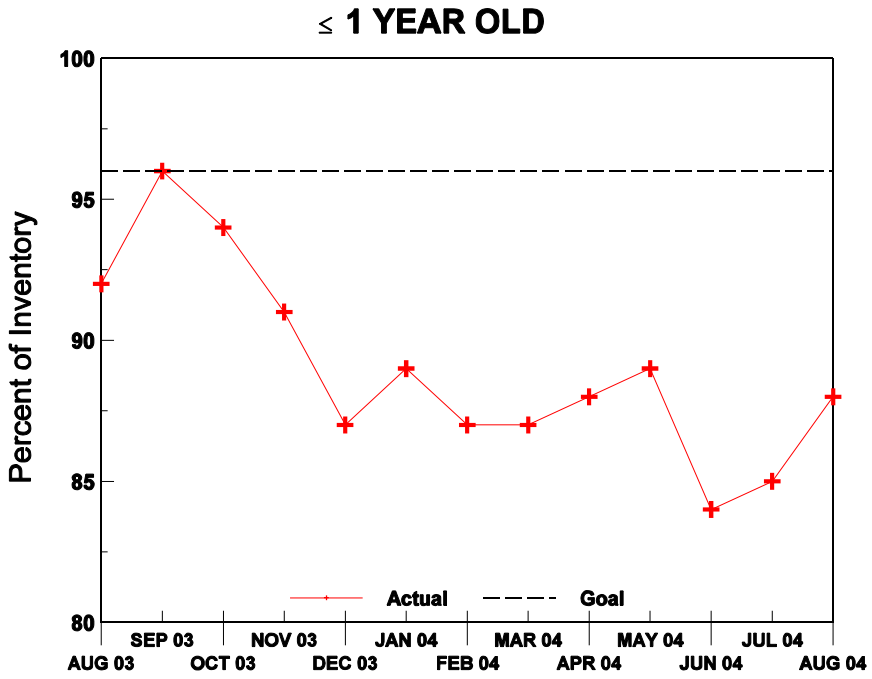
Nuclear Reactor Safety - Reactor Licensing

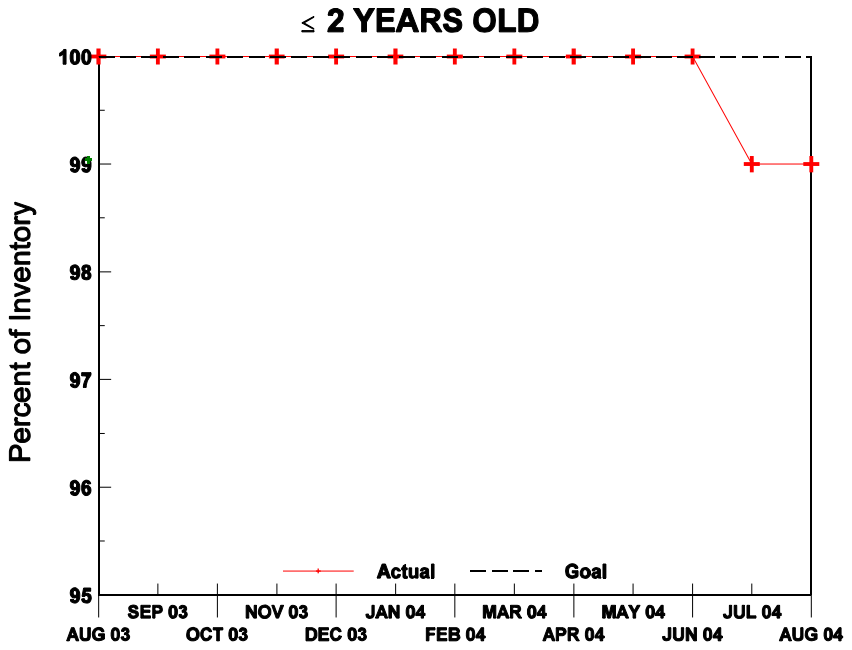
Performance Plan Target: Completed Licensing Actions



Nuclear Reactor Safety - Reactor Licensing

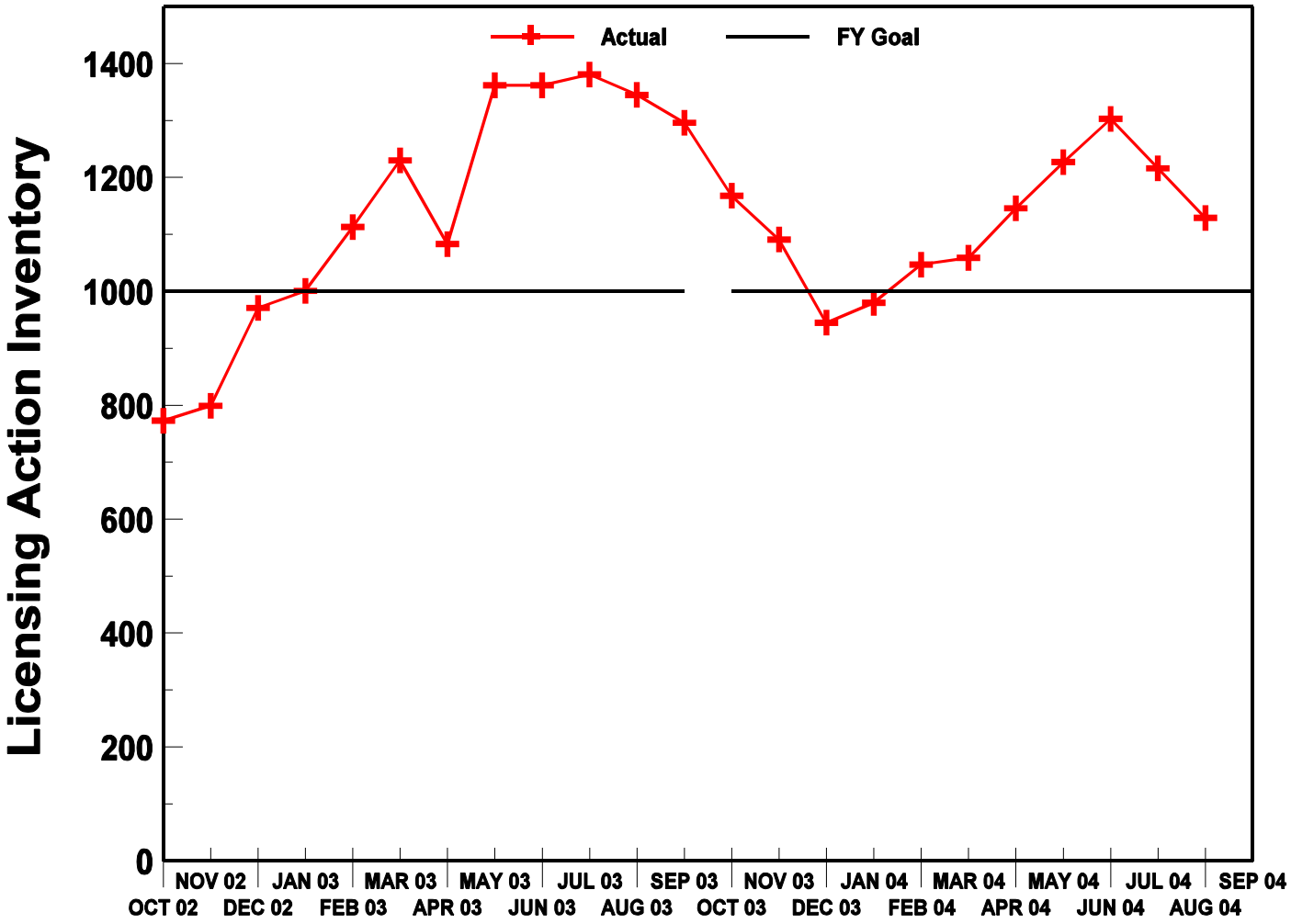
Performance Plan Target: Age of Licensing Action Inventory





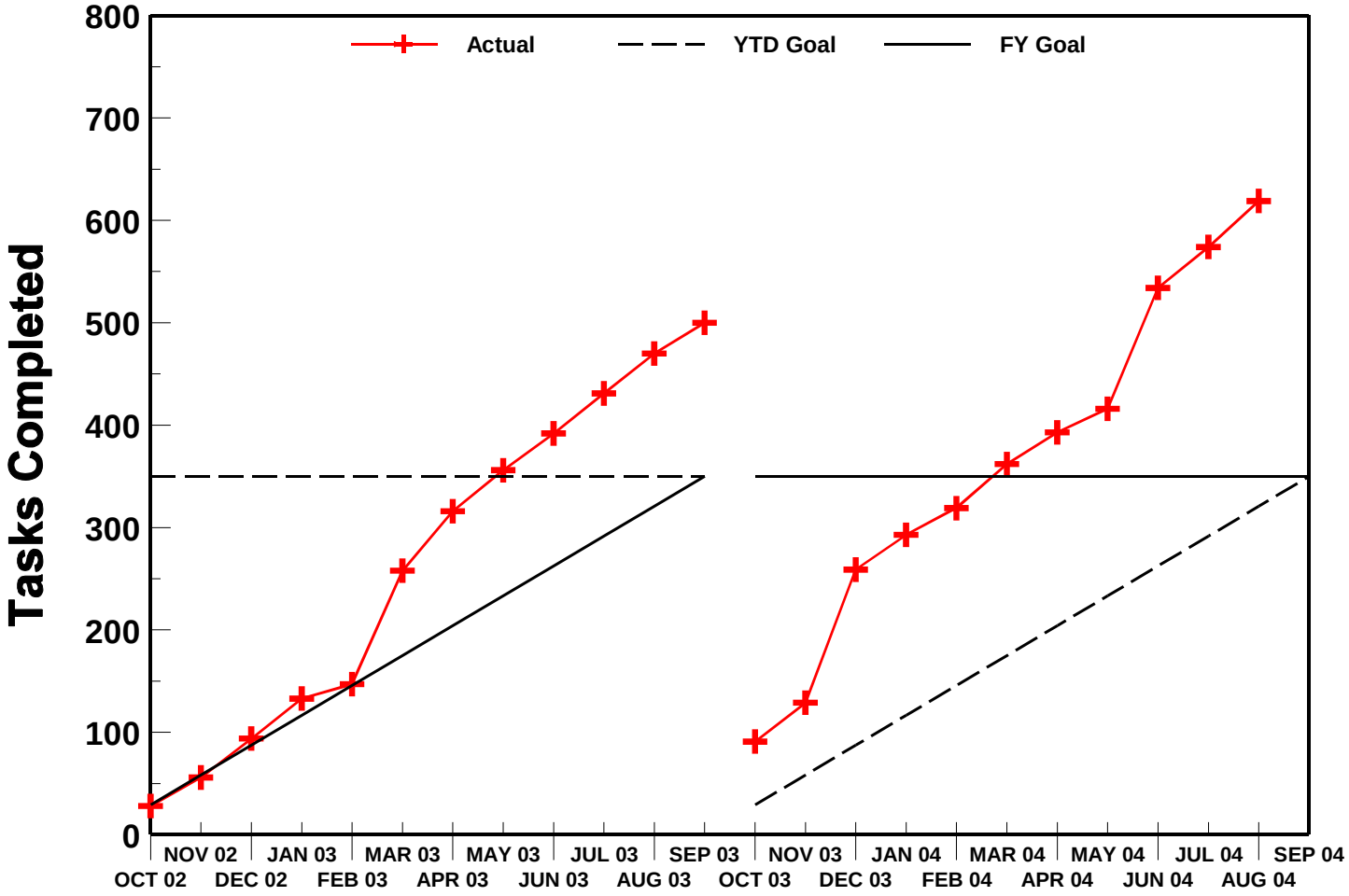
Nuclear Reactor Safety - Reactor Licensing

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

Dresden, Units 2 and 3, and Quad Cities, Units 1 and 2, Combined License Renewal Application

The staff issued the final supplemental environmental impact statement (SEIS) for both Dresden and Quad Cities in June 2004 and the safety evaluation report for both sites in July 2004. The staff is completing activities to support a decision in November 2004 on renewing the licenses.

Farley, Units 1 and 2, License Renewal Application

The Farley license renewal application is currently under review. The draft SEIS was issued in August 2004, and the safety evaluation report, identifying any remaining open items, is scheduled to be issued in October 2004.

Arkansas Nuclear One, Unit 2, License Renewal Application

The Arkansas Unit 2 license renewal application is currently under review. The draft SEIS was issued in August 2004, and the safety evaluation report, identifying any remaining open items, is scheduled to be issued in November 2004.

Cook, Units 1 and 2, License Renewal Application

The Cook license renewal application is currently under review. The draft SEIS is scheduled to be issued in September 2004, and the safety evaluation report, identifying any remaining open items, is scheduled to be issued in December 2004.

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

The Browns Ferry license renewal application is currently under review. The draft SEIS is scheduled to be issued in December 2004, and 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 is scheduled to be issued in December 2004, and the safety evaluation report, identifying any remaining open items, is scheduled to be issued in February 2005. A request for hearing was received in response to the NRC's notice of opportunity for hearing, and an Atomic Safety and Licensing Board (ASLB) was established. The ASLB found that none of the petitioner's contentions satisfied the requirements to be admissible for litigation and denied the petition for hearing. The petitioner has filed a motion with the ASLB to reconsider its decision and has also filed an appeal of the denial to the Commission.

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 is scheduled to be issued in January 2005, and 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.

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 at the proposed facility remains in litigation before the Atomic Safety and Licensing Board (ASLB).

During this reporting period, the ASLB conducted hearings on the aircraft crash consequence issue at NRC headquarters in Rockville, Maryland. The hearings will continue in September 2004. The ASLB will likely issue its decision on crash consequences no later than January 2005.

Also during this reporting period, the Commission denied the State of Utah's petitions for review of the ASLB's decisions on three environmental contentions. The Commission currently has under consideration certain matters raised on appeal from prior ASLB decisions. These involve PFS's petition for review of an ASLB ruling on a financial assurance contention and the State of Utah's petition for review of the ASLB's rulings on the redaction of proprietary information.

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	Aug 2004	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	Aug 2004	0	0	0	0	0
	FY 04 YTD	0	1	0	0	1
	FY 03 Total	0	0	0	0	0
	FY 02 Total	1	0	0	0	1
Severity Level III	Aug 2004	0	0	0	0	0
	FY 04 YTD	1	2	4	0	7
	FY 03 Total	2	0	4	0	6
	FY 02 Total	2	0	0	0	2
Severity Level IV or Green	Aug 2004	0	0	0	0	0
	FY 04 YTD	1	0	2	2	5
	FY 03 Total	1	0	2	1	4
	FY 02 Total	0	0	2	0	2
Non-Cited Severity Level IV or Green	Aug 2004	37	1	20	62	120
	FY 04 YTD	266	174	275	294	1009
	FY 03 Total	211	164	253	184	812
	FY 02 Total	207	89	207	151	654

* 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.

Escalated Reactor Enforcement Actions Associated with the Reactor Oversight Process						
		Region I	Region II	Region III	Region IV	Total
Notices of Violation Related to White, Yellow or Red Findings	Aug 04 Red	0	0	0	0	0
	Aug 04 Yellow	0	0	0	0	0
	Aug 04 White	0	0	0	0	0
	FY 04 YTD	3	2	7	5	17
	FY 03 Total	6	1	7	1	15
	FY 02 Total	5	4	6	8	23

Description of Significant Actions taken in August 2004*

None taken.

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 issued to strengthen further the security of NRC-licensed facilities and control of nuclear materials.

Orders were issued on April 29, 2003, to revise 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. Licensees are required to implement the Orders no later than October 29, 2004. Implementation of these Orders 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 has endorsed appropriate implementing guidance and provided it to the industry so plant and program changes can be completed on schedule. All licensees submitted the required plans by the April 29, 2004 scheduled date, and the NRC staff is implementing the review and approval process.

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.

*Security related enforcement actions are not included in the statistics in the above Tables or in the Description of Significant Action due to the sensitive nature of security findings.

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 has provided a paper to the Commission 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. In the interim, 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 (DBT) on October 29, 2004, the NRC will implement triennial force-on-force testing at each nuclear power plant site.

During 2003, the staff suspended the physical protection portion of the baseline inspections in the Reactor Oversight Process. Instead, NRC inspections in the reactor security area were focused on licensee implementation of compensatory measures to address the post-9/11 threat environment. These compensatory measures were required by the Commission's February 25, 2002 Order. In late 2003, the staff developed a revised baseline inspection program for reactor security, taking into consideration the enhanced requirements and the higher threat environment. The staff began implementation of the revised baseline inspection program during the first week of March 2004. Until the DBT Orders are fully implemented, the inspections will focus on those elements of the program that have been fully implemented under previous orders, such as access authorization and security force work hour limits. During FY 2005, inspection efforts will focus on verifying implementation of the DBT. Implementation of all elements of the baseline inspection program will commence in 2006.

IX Power Uprates

The staff has assigned power uprate license amendment reviews a high priority. 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 101 such reviews. Approximately 12,548 megawatts-thermal (4183 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 10 plant-specific power uprate applications under review. On June 28, 2004, the NRC staff received an application for a 20-percent power uprate at Browns Ferry Unit 1 in Alabama. This proposed power uprate would increase the generating capacity of the plant from 3293 to 3952 megawatts-thermal, resulting in an output of 1317 megawatts-electric.

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 18 nuclear power plant units in the next 5 years. These include 7 MUR power uprates, 1 stretch power uprate, and 10 EPU. Planned power uprates are expected to result in an increase of about 2841 megawatts-thermal (947 megawatts-electric).

X Status of Davis-Besse Nuclear Power Station

Interim reports to be provided in September 2004, March 2005, and September 2005.