October 16, 2003

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) 2003 Energy and Water Development Appropriations Act, House Reports 107-681 and 108-10, directed the Nuclear Regulatory Commission (NRC) to continue to provide a monthly report on the status of its licensing and regulatory duties and expanded the scope of the report to include information on the status of the Davis-Besse Nuclear Power Station. 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-seventh report, which covers the month of August 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 included NRC's participation in the U.S.-Canadian task force looking into the power grid disturbance which caused nine nuclear power plants in the U.S. to shut down; issuance of a license to CFC Logistics, Inc., for the operation of a commercial underwater irradiator at its cold storage facility located in Milford Township (Bucks County), Pennsylvania; and the issuance of NRC Bulletin 2003-03 "Potentially Defective 1-inch Valves for Uranium Hexafluoride Cylinders," which notified addressees of potential problems with these valves.

I would like to update you on the status of the Davis Besse nuclear power plant. On September 22, 2003, Davis-Besse achieved normal operating pressure and no-load normal operating temperature using only reactor coolant pump heat to conduct a leak test of the reactor pressure boundary. The reactor remained subcritical during the test. The plant was placed in Hot Standby, and the licensee – FirstEnergy Nuclear Operating Company – maintained this pressure and temperature for seven days and then returned to Hot Shutdown. Normally, a nuclear plant is required to conduct a 4-6 hour test of the reactor cooling system following an outage, but FirstEnergy conducted a seven-day test to provide added assurance that the reactor coolant system is free of leaks. The licensee conducted a thorough inspection for any indications of reactor pressure boundary leakage, particularly for leakage from the reactor vessel bottom head nozzles and from the reactor vessel top head. No pressure boundary leakage was identified; however, there were several operational issues identified as a result of the test. During test preparations, plant operators failed to adequately monitor reactor coolant system pressure and accidently drained about 1000 gallons of water from a core flood tank to another holding tank. After the seven-day test period was completed, plant operators failed to properly control pressure conditions in the reactor coolant system, which led to the automatic insertion of the one withdrawn group of control rods. Licensee management concluded that plant operators were not well briefed in preparing for the pressure test, the

written procedures used to conduct the test were not well written, and that operator performance during the test was not up to industry standards. An NRC special inspection team observed the test and will issue a report about 30 days after the completion of the inspection. The resident inspectors will be reviewing the operational incidents and the licensee's corrective actions. The licensee also conducted a public meeting on October 1, 2003, to discuss their long-term plans to address their safety conscious work environment and organizational effectiveness. We continue to closely monitor the licensee's startup preparations and will provide further updates on FirstEnergy's restart plans in subsequent monthly reports.

Since our last report, the NRC, together with the Department of Energy and the Department of State, took a leadership role in the international group drafting the IAEA Code of Conduct on the Safety and Security of Radioactive Sources to ensure it provides appropriate guidance for the safe and secure use of radioactive materials that present the greatest risk if used in a radiological dispersal device. On September 19, 2003, the 47th session of the IAEA General Conference passed Resolution 7, "Measures to Strengthen International Co-operation in Nuclear, Radiation and Transport Safety and Waste Management." Section B of the resolution welcomed the approval by the Board of Governors of the revised Code of Conduct on the Safety and Security of Radioactive Sources. The resolution also urged each member State to inform the Director General of their commitment to implement the Code.

Also since our last report, we consolidated the NRC's nation-wide nuclear fuel cycle inspection program by assigning inspection and event response functions at commercial nuclear fuel manufacturing facilities to the NRC Region II office in Atlanta, effective October 1. The move is designed to concentrate and improve the agency's fuel cycle inspection program, formerly conducted by different NRC offices from our headquarters in Rockville, Maryland; Region II office in Atlanta, Georgia; Region III office in Lisle, Illinois; and Region IV office in Arlington, Texas. We also transferred Region II's material and licensing inspection activities to Region I in King of Prussia. This realignment is consistent with Congressional direction contained in the FY 2003 Appropriations Act report to continue to streamline NRC business processes to improve regulatory efficiency.

Recently, the Commission and the NRC staff also:

- renewed the operating license of the St. Lucie Nuclear Plant, Units 1 and 2, for an additional 20 years. The plant is located southeast of Fort Pierce, Florida, and is operated by Florida Power & Light Company (FPL).

- received on September 25, 2003, an early site permit application (ESP) from Dominion Nuclear North Anna, LLC, for a location in Central Virginia identified as the North Anna ESP site. If an ESP were granted, it would allow the site to be used for one or more nuclear reactors. The NRC's ESP process allows resolution of issues relating to the site before the company decides whether to file an application for permission to actually build and operate a nuclear reactor at that location. The NRC's formal review will address site safety, environmental protection, and emergency planning issues. Dominion requested an ESP with a duration of twenty years. NRC will perform an acceptance review of the application to determine if it contains enough information for a formal review.

- received on September 25, 2003, an ESP application from Exelon Generation Company, LLC, for a property co-located with the existing Clinton Power Station facility in Illinois. Exelon requested an ESP with a duration of twenty years. NRC will perform an acceptance review of the application to determine if it contains enough information for a formal review.

- dispatched an Augmented Inspection Team (AIT), which was later reclassified as a special inspection, to review the circumstances surrounding an August 28, 2003 shutdown and alert declaration at Unit 1 of the Tennessee Valley Authority's Sequoyah nuclear power plant. On September 4, 2003, a public meeting was held to discuss the inspection results. The team concluded that an incorrectly isolated turbine control pressure switch was the cause of the event and that plant systems responded as designed and expected.

- dispatched an AIT to the Peach Bottom Atomic Power Station to review the circumstances surrounding the causes of, and the plant response to, the shutdown of the Unit 2 and Unit 3 reactors on September 15, 2003. An electrical grid disturbance has been identified as the initiating cause of the shutdowns. The two-reactor facility is located near Delta, Pennsylvania, and operated by Exelon. While on site, the team also observed in real time the licensee's actions taken in response to Hurricane Isabel. The team's findings will be made public in an inspection report to be issued within about 30 days after the completion of its on-site reviews.

- published in the Federal Register on September 17, 2003 (68 FR 54503), a notice of availability of NUREG-1757, "Consolidated NMSS Decommissioning Guidance." As part of NRC's effort to redesign the materials license program, this three-volume set consolidates numerous decommissioning guidance documents into a single guidance document for use by NRC staff, NRC licensees, and other stakeholders in planning and implementing license termination under the License Termination Rule (10 CFR Part 20, Subpart E). NUREG-1757 also incorporates the risk-informed and performance-based alternatives of the rule.

- published in the Federal Register on September 16, 2003 (68 FR 54123), a final rule amending regulations for combustible gas control in power reactors to reflect information from the agency's research program and significant advances in NRC's understanding of the risk to nuclear power plant operations associated with combustible gas. The final rule stems from the Commission's ongoing efforts to use risk information in its regulations. The companion regulatory guidance document has also been updated to address changes in the rule.

- published in the Federal Register on September 16, 2003 (68 FR 54143), a final rule amending licensing requirements for dry cask modes of storage of spent nuclear fuel, high-level radioactive waste, and power reactor-related Greater than Class C waste in an independent spent fuel storage installation or in a U.S. Department of Energy monitored retrievable storage installation. These amendments update the seismic siting and design criteria, including geologic, seismic, and earthquake engineering considerations.

- approved a request by the Arizona Nuclear Power Project to increase the generating capacity of Unit 2 at the Palo Verde nuclear power plant by 2.9 percent. The power uprate at the plant, located near Phoenix, Arizona, increases the net generating capacity of the plant from 1270 to 1325 megawatts electric.

- approved a request by the Southern Nuclear Operating Co. to increase the generating capacity of Units 1 and 2 at the Edwin Hatch nuclear power facility by 1.5 percent. The power uprate at the plants, located near Baxley, Georgia, increases the generating capacity for each unit from 2763 to 2804 megawatts thermal, resulting in an output of 935 megawatts electric for Unit 1 and 950 megawatts electric for Unit 2.

- dispatched a special inspection team to examine of the circumstances surrounding a fuel handling incident which occurred September 26 during refueling activities at Unit 1 of the Byron Nuclear Power Station. The two-reactor facility near Byron, Illinois, is operated by Exelon Generation Company. During refueling, a fuel assembly was being moved from the reactor to the spent fuel storage pool when it struck equipment in the fuel transfer area. There was no evidence of damage to the fuel assembly, which was contained inside a fuel handling tool, and there was no release of radioactivity associated with the incident.

- published in the Federal Register on September 29, 2003 (68 FR 55905), a denial of a petition for rulemaking submitted by the Nuclear Energy Institute that requested the NRC to amend its regulations to remove requirements that applicants and licensees analyze, and the NRC evaluate, alternative energy sources and the need for power with respect to the siting, construction, and operation of nuclear power plants. The NRC denied the petition because the NRC must continue to consider alternative energy sources and the need for power to fulfill its responsibilities under the National Environmental Policy Act of 1969, as amended.

- published in the Federal Register on October 3, 2003 (68 FR 57383) denial of a petition for rulemaking submitted by the Nuclear Energy Institute that requested the NRC amend its regulations to allow applicants seeking an early site permit and a combined license to use existing information from prior licensing actions as resolved information that has been approved by the NRC and has been subject to a public hearing. The Commission denied the petition, in part, because most of the efficiencies, regulatory stability, and predictability that are the object of the petitioner's proposal can be achieved under existing regulations and the guidance that the Commission has directed the NRC staff to prepare.

Please do not hesitate to contact me if I can 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

August 2003

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 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

Final Risk-Informed Rule for Control of Combustible Gases (10 CFR 50.44)

On August 28, 2003, the Commission approved the final risk-informed rule for control of combustible gases. In September, the staff will publish the final rule in the *Federal Register*.

Proposed Rule on Risk-Informed Special Treatment Requirements (10 CFR 50.69)

The comment period for proposed 10 CFR 50.69 closed on August 30, 2003. As part of the next major task on this rulemaking effort, the staff has begun reviewing and assessing the stakeholder comments.

II Reactor Oversight Process

The NRC continues to implement the Reactor Oversight Process (ROP) at all operating 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 considers the feedback in making refinements to the ROP. Recent activities include the following:

- On August 6, 2003, Inspection Manual Chapter (IMC) 2509, “Browns Ferry Unit 1 Restart Project Inspection Program,” was issued to address the inspection program at Browns Ferry Unit 1 during the restart. The ROP will be temporarily discontinued during the Browns Ferry Unit 1 Restart Project until all ROP cornerstones of safety are able to be monitored.

- On August 11, 2003, a web-based program was implemented to provide information and training to inspectors in the regions and at the sites. The first of two topics covered was a Davis-Besse lessons learned item on the effects of boric acid corrosion and primary water stress corrosion cracking of nickel based alloy nozzles. The second topic covered changes to Inspection Procedure 71152, "Problem Identification and Resolution," that will require inspectors to implement different sampling requirements.

- On August 27, 2003, a public meeting was held to solicit comments on the Draft 10 CFR Part 52 Construction Inspection Program (CIP) Framework Document. The draft CIP framework document describes the construction inspection program planned for future reactors which will be built under the 10 CFR Part 52 process. The staff received several comments and questions on the document which the staff agreed to resolve before issuing the final CIP framework document. The framework document was issued for public comment in May of 2003 and the public comment period on the document ends on September 15, 2003.

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 to you.

Generic Safety Issue 168, “Environmental Qualification of Electrical Equipment,” was closed in August 2003.

In resolving the issue, the NRC reviewed the results of single conductor tests and bonded-jacket cable tests, and considered the voluntary initiatives that were taken by the industry to address the safety concern. After review and analysis, the NRC concluded that the existing equipment qualification process is adequate for assuring that instrumentation and control cables will perform their intended function. In May 2003, Regulatory Issue Summary 2003-09 was issued to document the NRC findings.

IV Licensing Actions and Other Licensing Tasks

Licensing actions are defined as requests for 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 licensee requests requiring NRC review and approval before they can be implemented by the licensee. The FY 2003 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 updates, or other licensee requests not requiring NRC review and approval before they can be implemented by the licensee. The FY 2003 NRC Performance Plan incorporates one output measure related to other licensing tasks -- number of other licensing tasks completed.

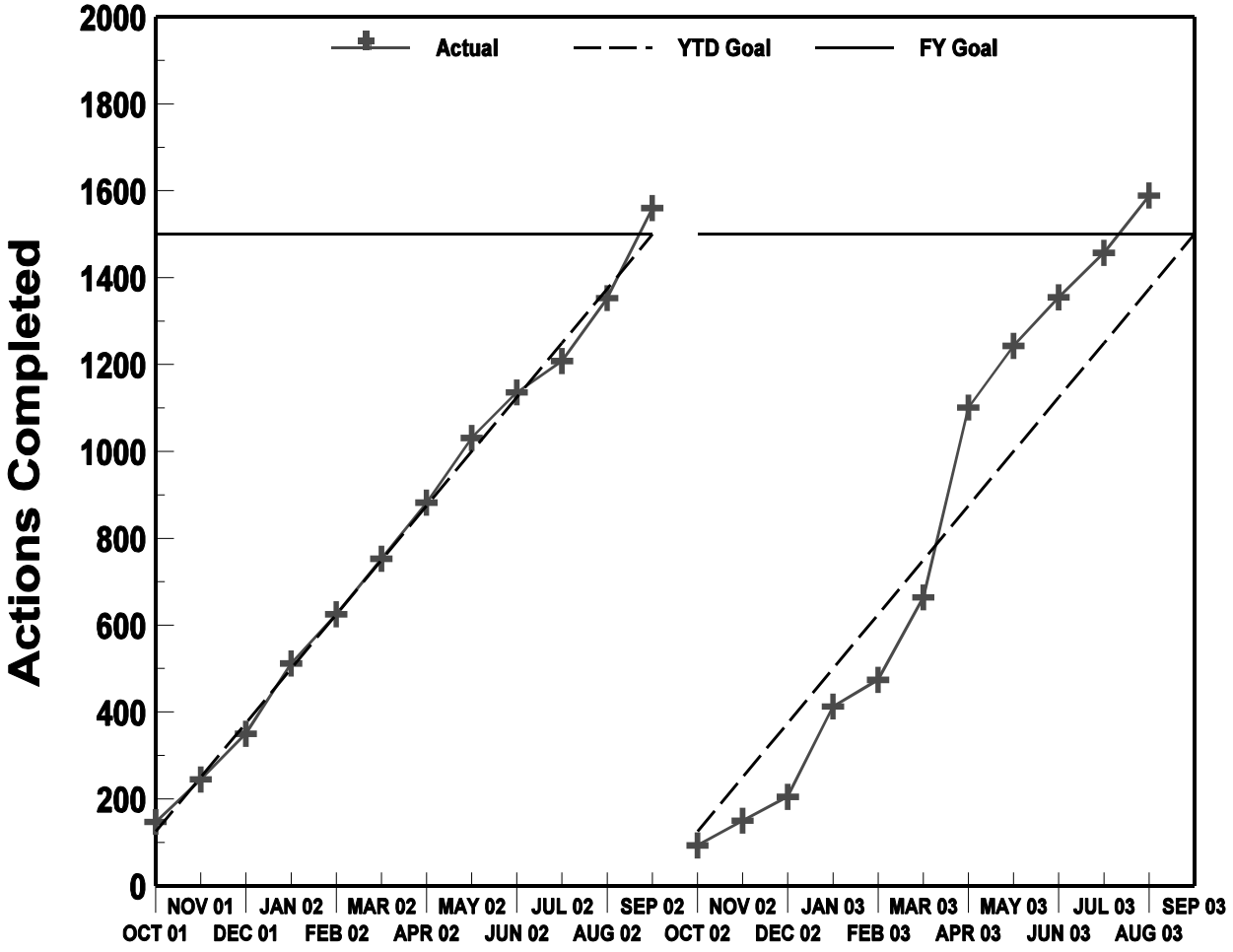
The actual FY 2001 and FY 2002 results, the FY 2003 goals, and the actual FY 2003 results, as of August 31, 2003, for the four NRC Performance Plan output measures for licensing actions and other licensing tasks are shown in the table below:

PERFORMANCE PLAN				
Output Measure	**FY 2001 Actual**	**FY 2002 Actual**	**FY 2003 Goals**	**FY 2003 Actual (thru 08/31/2003)**
Licensing actions completed/year	1617	1560	≥ 1500	1589
Age of licensing action inventory	96.9% ≤ 1 year; and 100% ≤ 2 years	96.6%≤ 1 year; and 100% ≤ 2 years	96% ≤ 1 year and 100% ≤ 2 years old	92% ≤ 1 year; 100% ≤ 2 years
Size of licensing action inventory	877	765	≤ 1000	1345
Other licensing tasks completed/year	523	426	≥ 350	470

The following charts demonstrate NRC's FY 2003 trends for the four licensing action and other licensing task output measure goals:

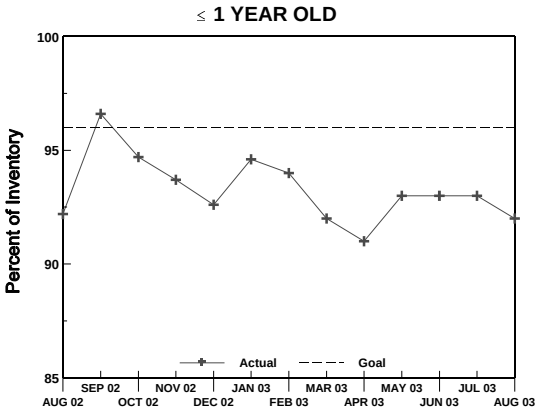
Nuclear Reactor Safety - Reactor Licensing

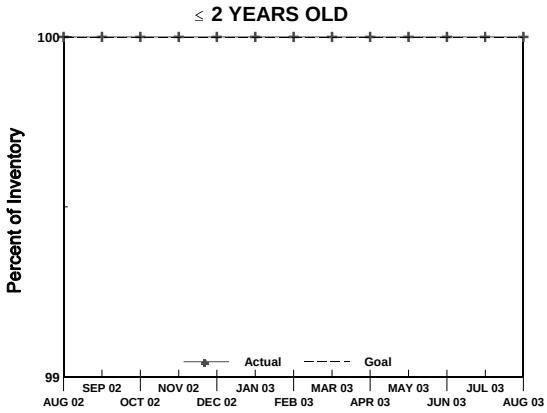
Performance Plan Target: Completed Licensing Actions



Nuclear Reactor Safety - Reactor Licensing

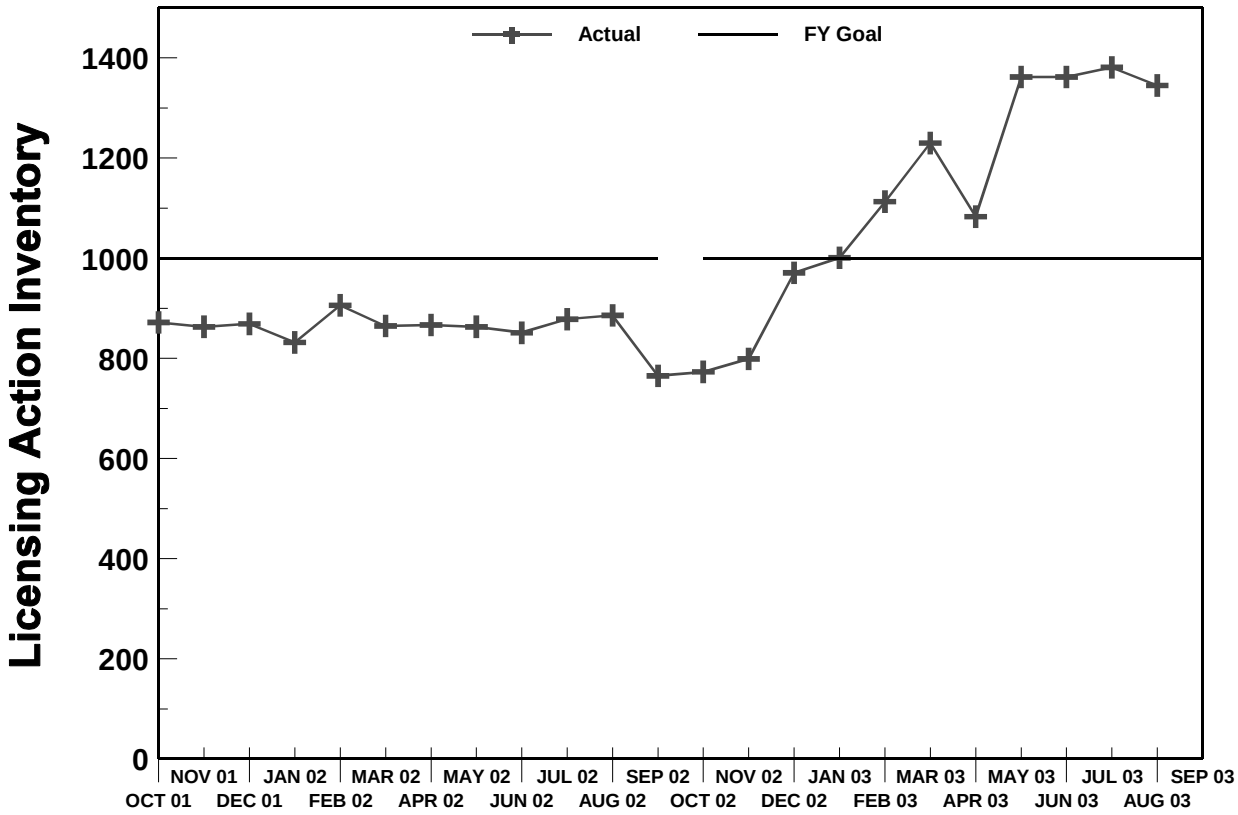
Performance Plan Target: Age of Licensing Action Inventory





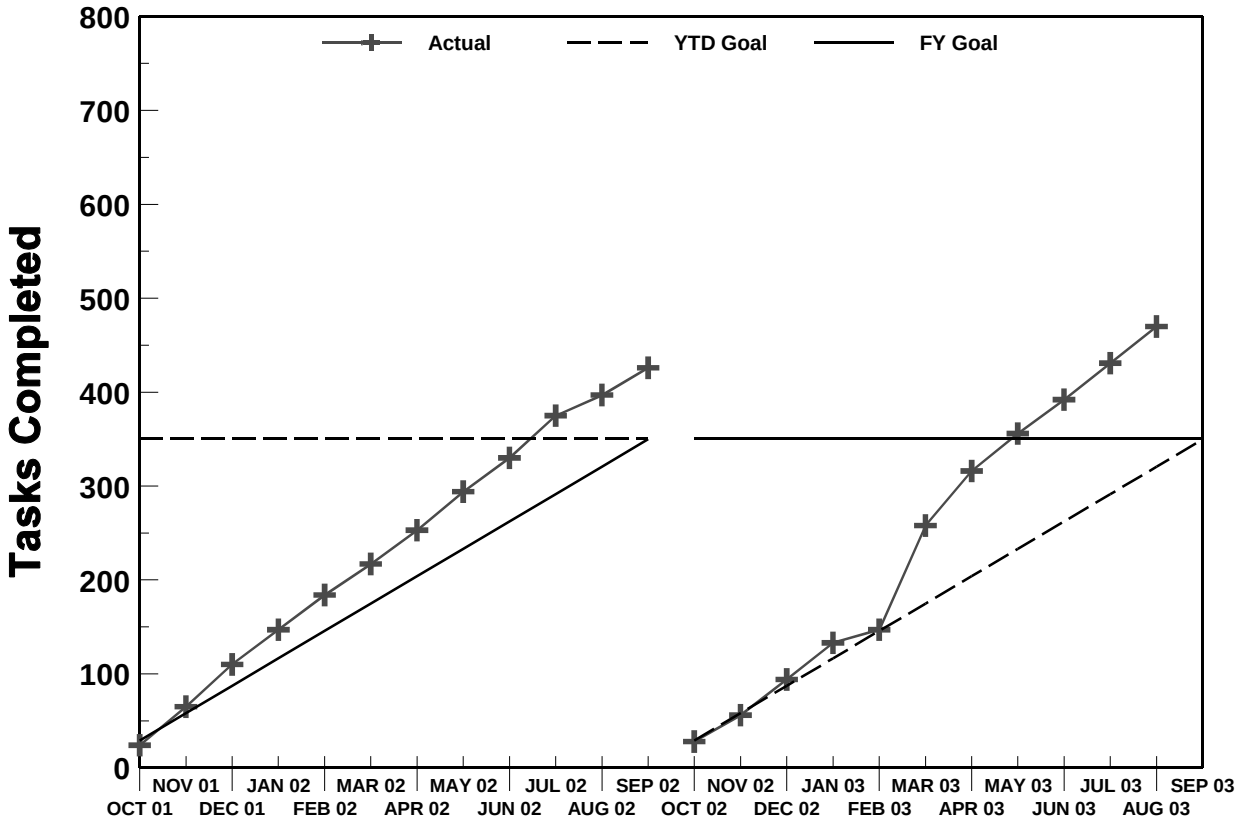
Nuclear Reactor Safety - Reactor Licensing

Performance Plan: Size of Licensing Action Inventory



Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Completed Other Licensing Tasks



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. The safety evaluation report resolving the open items was issued in January 2003. The staff is supporting completion of the hearing process. A decision on the renewal of the licenses is scheduled for December 2003.

In January 2002, the Atomic Safety and Licensing Board (ASLB) admitted contentions filed by two petitioners in the Catawba and McGuire license renewal proceeding. The staff and Duke appealed the ASLB decision, and the contentions were subsequently dismissed. However, in December 2002, the Commission reinstated late-filed contentions that had been submitted in May 2002. In April 2003, the petitioners requested that one of the dismissed contentions be reinstated. These late-filed contentions and the request for reinstatement are currently being reviewed by the ASLB for admissibility. The ASLB is expected to rule on the pending late-filed contentions in October and the request for reinstatement in November.

St. Lucie, Units 1 and 2, Renewal Application

The staff issued the final SEIS in May 2003 and the safety evaluation report in July 2003. The staff is preparing the license package and obtaining the final concurrences to support a decision on issuing the renewed license by October 2003.

Fort Calhoun Renewal Application

The staff issued the draft SEIS for public comment in January 2003. The public comment period ended in April 2003. The staff addressed the comments received and issued the final SEIS in August 2003. The staff issued the safety evaluation report identifying the remaining open items in April 2003, and the applicant's responses were received in July 2003. The staff is working to resolve the open items and issue the revised safety evaluation report in September 2003.

Robinson Unit 2 Renewal Application

The staff issued the draft SEIS for public comment in May 2003. The comment period ended in July 2003. The staff is addressing the comments received and is preparing to issue the final SEIS by December 2003. The safety requests for additional information were issued in February 2003, and the applicant's responses were received in April 2003. The staff reviewed the applicant's responses and issued the safety evaluation report in August 2003, identifying the remaining open items.

Ginna Renewal Application

The staff issued the draft SEIS for public comment in June 2003. The comment period ends in September 2003. The safety requests for additional information were issued in March 2003, and the applicant's responses were received in June 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 October 2003.

Summer Renewal Application

The staff issued the draft SEIS for public comment in July 2003. The comment period ends in October 2003. The safety requests for additional information were issued in March 2003, and the applicant's responses were received in June 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 October 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 are due in October 2003.

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, located in Skull Valley, Utah.

The NRC staff continues its review of the several reports associated with the potential consequences of an F-16 aircraft striking the proposed Private Fuel Storage Facility and issued a request for additional information on August 15, 2003.

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 2003	0	0	0	0	0
	FY 03 YTD	0	0	0	0	0
	FY 02 Total	0	0	0	0	0
	FY 01 Total	0	0	0	0	0
Severity Level II	Aug 2003	0	0	0	0	0
	FY 03 YTD	0	0	0	0	0
	FY 02 Total	1	0	0	0	1
	FY 01 Total	0	1	0	0	1
Severity Level III	Aug 2003	0	0	1	0	1
	FY 03 YTD	2	0	4	0	6
	FY 02 Total	2	0	0	0	2
	FY 01 Total	1	1	1	1	4
Severity Level IV	Aug 2003	0	0	0	0	0
	FY 03 YTD	1	0	2	1	4
	FY 02 Total	0	0	2	0	2
	FY 01 Total	1	0	2	1	4
Non-Cited Severity Level IV or Green	Aug 2003	29	1	3	17	50
	FY 03 YTD	206	158	201	179	744
	FY 02 Total	207	89	201	151	648
	FY 01 Total	279	105	201	139	724

* 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	8/03 Red	0	0	0	0	0
	8/03 Yellow	0	0	0	0	0
	8/03 White	0	0	0	0	0
	FY 03 YTD	6	1	7	1	15
	FY 02 Total	5	4	6	8	22
	FY 01 Total	8	4	4	3	19

**Notices of Violations

Description of Significant Actions taken in August 2003

Exelon Generation Co., LLC (Dresden 2 & 3) EA-03-102

On August 29, 2003, an NOV was issued for a Severity Level III violation involving the failure by Exelon to provide complete and accurate information to the NRC regarding a request to renew a reactor operator license.

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 security of NRC-licensed facilities and control of nuclear materials.

The most recent Orders enhancing security at nuclear power reactors were issued on April 29, 2003. The Orders 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 with licensees 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 fully 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. As of the end of August, pilot force-on-force exercises have been completed at nine

plants. The NRC plans to conduct force-on-force tests at a rate of approximately two per month. Following the completion of the pilot program, force-on-force exercises will be carried out at each nuclear power plant on a three-year cycle instead of the eight-year cycle that had been used prior to September 11, 2001. Additionally, in a letter to the Secretary of the Department of Homeland Security on August 29, 2003, the NRC outlined steps taken since September 11, 2001, to enhance security at licensed nuclear facilities and of radioactive material. The letter is available on the NRC's website: www.nrc.gov.

IX Power Uprates

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

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 96 such reviews. Approximately 12,220 MWt (4073 Mwe), an equivalent of over three nuclear power plant units, has been gained through implementation of power uprates at existing plants. The staff currently has 6 plant-specific applications under review.

In June 2003, 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 and information obtained since the survey, licensees plan to submit 31 additional power uprate applications in the next 5 years. These include 11 measurement uncertainty recapture power uprates (i.e., power uprates of less than 2 percent based on the use of more accurate feedwater flow measurement techniques), 5 stretch power uprates (i.e., power uprates typically on the order of less than 7 percent, within the design capacity of the plant, and thus requiring only minor plant modification), and 15 extended power uprates (power uprates beyond the design capacity of the plant and thus requiring major modification to the plant). Planned power uprates are expected to result in an increase of about 6244 MWt (2082 MWe).

In June 2002 and again in May 2003, following implementation of a 17.8 percent extended power uprate, Quad Cities Unit 2 experienced increases in the moisture content of the steam provided by the reactor to drive the turbine. In both instances, the licensee shut down the plant, identified dryer cracking as the cause, repaired the dryer, and returned the plant to operation. 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 experience does not pose an immediate safety concern. Nevertheless, the NRC continues to follow this event for Quad Cities Unit 2 as well as for its generic implications to other plants. The NRC staff delayed issuance of power uprates for Hatch Units 1 and 2 until the implications of the Quad Cities Unit 2 dryer failure for the Hatch units are better understood.

X Status of Davis-Besse Nuclear Power Station

During the month of August, NRC continued its inspections evaluating issues on the NRC Oversight Panel's Restart Checklist. The NRC issued one inspection report in August 2003 regarding an inspection of a containment integrated leak rate test (IR 50-346/03-05). The plant successfully completed its integrated containment leak rate test, demonstrating that containment vessel and building restoration were adequate following the new reactor head installation. This 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.

FirstEnergy Nuclear Operating Company projects startup of the Davis-Besse plant in the Fall of 2003. The plant completed fuel load on February 26, 2003, and at the end of August was in Cold Shutdown (average coolant temperature less than 200 degrees Fahrenheit). The licensee is making preparations to go to Hot Shutdown (near normal operating temperature and normal operating pressure, but the reactor is not critical) in September 2003 and hold that condition for one week of testing before returning to Cold Shutdown.

On August 26, 2003, Davis-Besse shipped the old reactor vessel head off site toward its destination at Envirocare in Utah. The reactor head had been placed under quarantine, along with its component parts, by the NRC's Confirmatory Action Letter issued on March 13, 2002, to ensure that all testing desired on the old head and its components would be performed. The testing program has been completed by the licensee, and samples desired by the NRC for long-term research purposes have been shipped to the appropriate NRC contractor.

On August 29, 2003, First Energy Nuclear Operating Company responded to a finding issued by the NRC on July 30, 2003, involving the failure to identify promptly and correct significant conditions adverse to quality regarding unqualified coatings and uncontrolled fibrous material and other debris inside containment. The preliminary finding was determined to be "Yellow," which corresponds to an increase in reactor core damage frequency of about four times in 100,000. This finding is described in the resident staff inspection report (50-346/03-15). The licensee did not contest the finding, and the NRC is in the process of issuing a final decision.

The Oversight Panel closed one Restart Checklist item related to a license amendment request involving testing of the high and low pressure injection systems. As of August 31, 2003, the panel has closed 17 of 31 Restart Checklist Items.

The Oversight Panel conducted two public meetings on August 12, 2003, in Oak Harbor, Ohio. Participants at the first meeting included licensee representatives, who discussed plant performance and progress on their Return to Service Plan. At the second meeting, the Oversight Panel discussed the status of the NRC activities and responded to questions and concerns from the public.

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