

November 6, 2002

The Honorable Harry Reid, Chairman  
Subcommittee on Transportation,  
Infrastructure, and Nuclear Safety  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510

Dear Mr. Chairman:

The Fiscal Year (FY) 2002 Energy and Water Development Appropriations Act, House Report 107-258, 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. The FY 2000 Energy and Water Development Appropriations Act, House Report 106-253, expanded the scope of the report requirement to include regulatory reform efforts affecting power reactor operations beyond 10 CFR Part 50, particularly NRC efforts to evaluate NRC security regulations. In FY 2000, we also expanded the monthly report to include the status of all license renewal applications that are under active review and other NRC initiatives in developing implementation guidance for the license renewal rule. In response to increased Congressional interest, in the May 2001 report we began to provide information regarding the status of activities involving power uprate licensing actions. On behalf of the Commission, I am pleased to transmit the forty-sixth report, which covers the month of September 2002 (Enclosure 1).

The August report provided information on a number of significant NRC activities, including an update of our actions taken following the terrorist attacks of September 11, 2001, and a status report on the reactor vessel head corrosion at the Davis-Besse Nuclear Power Station in Oak Harbor, Ohio.

We would like to update you on both of these issues. In regard to the physical security and safeguards for NRC-licensed facilities, the NRC continues to closely monitor the current threat environment and work extensively with other government agencies in developing coordinated threat assessments, and coordinating security and emergency plan responsibilities. The NRC has developed a new Threat Advisory and Protective Measures System in response to Homeland Security Presidential Directive-3. On October 3 and 16, respectively, the NRC issued Orders to licensees who ship spent nuclear fuel by highway and rail and to licensees of Independent Spent Fuel Storage Installations to implement interim compensatory security measures for the current threat environment. These Orders formalize a series of security measures that NRC licensees have taken in response to NRC advisories that were issued following the September 11 terrorist attacks. Additional security enhancements resulting from the NRC's ongoing comprehensive security review are also spelled out in the Orders. The requirements will remain in effect until such time as the Commission determines that the level

of threat has diminished, or that other security changes are needed. The NRC will continue to monitor the Nation's threat condition and will promptly notify our licensees accordingly, as changes to the national threat condition occur.

In regard to Davis-Besse, the NRC special oversight panel, established to coordinate the Agency's activities in assessing the performance problems associated with the corrosion damage to the reactor vessel head at the Davis-Besse Nuclear Power Plant, continues to monitor licensee activities. The plant will not restart until the NRC is satisfied that all safety concerns have been resolved. In addition, the NRC Senior Management Review Team continues to evaluate the findings and recommendations set forth in the lessons-learned task force report that was issued on October 9. The recommendations by the Senior Management Review Team are expected by the end of November 2002. We will continue to keep you informed of the status of this issue.

Since our last report, the Commission and the NRC staff also:

- issued a license amendment for Grand Gulf Nuclear Station, Unit 1, which increased the maximum allowable thermal power level (licensed power level) by 1.7 percent from 3,833 megawatts thermal (MWth) to 3,898 MWth. The licensee's application took credit for the highly accurate feedwater flow determination provided by the Leading Edge Flow Meter technology utilized for plant calorimetric calculations.
- issued an information notice to inform addressees of recent occasions when the controls or designs of safety-related systems incorporating non-safety-related air-operated controls were less than adequate. It is expected that recipients will review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems.
- published in the Federal Register (67 FR 66578) on November 1, 2002, a proposed rule that would amend fire protection requirements for nuclear power plants to allow licensees to voluntarily adopt a new set of requirements that incorporate risk insights. The proposed rule would permit reactor licensees to use the fire protection requirements contained in the National Fire Protection Association (NFPA) Standard 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants, 2001 Edition" (NFPA 805).
- published in the Federal Register (67 FR 62628) on October 8, 2002, a final rule on unlikely events at a potential nuclear waste repository at Yucca Mountain, Nevada. The rule sets out numerical values for deciding when a geological, hydrological, or climatological feature, event, or process is unlikely and therefore need not be considered in determining whether the repository would meet radiation dose standards for groundwater protection and human intrusion. Unlikely events would still have to be considered in determining whether the repository would meet the overall 15-millirem radiation dose limit for protection of individuals.
- published in the Federal Register (67 FR 62403) on October 7, 2002, a proposed rule that would require certain licensees using substantial quantities of nuclear materials to increase funding for decommissioning costs after the facility shuts down permanently.

The changes would affect materials licensees, but not nuclear power plants, which are covered by separate regulations.

- issued a Confirmatory Order to Exelon Nuclear Generation Company on October 4, 2002, documenting the utility's corrective actions being taken as a result of discrimination against a former employee at the company's Byron Nuclear Power Station in Illinois. NRC regulations prohibit licensees from discriminating against a worker for raising safety issues involving the facility.
- sent an Augmented Inspection Team (AIT), on September 26, 2002, to review the circumstances surrounding an apparent radiation over-exposure of 31 workers at Schlumberger Technology Corporation's temporary well drilling site near Havre, Montana, that occurred in May 2002. The NRC had previously conducted a special inspection in May 2002. The AIT was dispatched to review additional information, received on August 30, 2002, indicating that the potential existed for several workers to have received exposures greater than estimated.

I have enclosed (Enclosure 2) the update to the Tasking Memorandum which delineates the schedules for accomplishing high priority initiatives.

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

Sincerely,

**/RA/**

Richard A. Meserve

Enclosures:

1. Monthly Report
2. Tasking Memorandum

cc: Senator James M. Inhofe

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

**SEPTEMBER 2002**

Enclosure 1

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<sup>1</sup>Note: The period of performance covered by this report includes activities occurring between the first and last day of September 2002. 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 assessment techniques in many areas. The milestone schedule for significant risk-informed activities is included in the Chairman's Tasking Memorandum (Enclosure 2). Recent activities include the following:

### 10 CFR 50.69 Risk-Informing Special Treatment Requirements

On September 30, 2002, the NRC staff forwarded for the Commission's consideration (SECY-02-0176) a proposed new rule that would allow licensees to adopt voluntarily an alternative set of requirements for the treatment of structures, systems and components (SSCs) in nuclear power reactors commensurate with their safety significance.

### Risk-Informed Revisions to 10 CFR 50.44 (Combustible Gas Control)

On August 2, 2002, a proposed rulemaking was published in the Federal Register (67 FR 50374) that risk-informs the Commission's regulations for combustible gas control in light water reactor containments. The proposal was published for a 75-day comment period.

### Risk Management Technical Specifications (RMTS), Initiative 3 on Mode Change Flexibility

On August 2, 2002, the NRC staff issued a Federal Register notice (67 FR 50475) announcing the opportunity to comment on the proposed model safety evaluation supporting additional mode change flexibility in technical specifications. The proposed generic change is to be adopted through individual license amendments using the Consolidated Line Item Improvement Process (CLIP). The RMTS Initiative 3 proposal extends the existing capability to transition up in power, while relying on compliance with action statements, to a wider range of plant configurations, subject to the performance of a risk assessment analysis and the consideration of risk management prior to the mode change. This will be the second risk management technical specification initiative to be offered through the CLIP.

## **II. Revised Reactor Oversight Process**

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

The Office of Nuclear Reactor Regulation (NRR) has developed some strategies and associated action plans for improving the Significance Determination Process (SDP). Implementation of these strategies is expected to provide for continued improvement in the timeliness, consistency, and usefulness of SDP tools and should result in greater effectiveness of the SDP.

In response to a number of concerns raised by the NRC staff, and the results of an Inspector General Audit report of August 21, 2002, the NRC has established a task group to perform a comprehensive review of the effectiveness of the SDP. The review is expected to be

completed in November 2002, and the results will be incorporated into the SDP Improvement Plan, as appropriate.

### 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.

### 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; review of 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 2002 NRC Performance Plan incorporates the following three output measures related to licensing actions: 1) number of licensing action completions per year; 2) age of the licensing action inventory; and 3) size of licensing action inventory. In January 2002, the goal for the size of the licensing action inventory was restored to the Performance Plan and the goal for the percent of licensing action inventory less than or equal to one year old was increased from 95% to 96%.

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 FSAR updates; or other licensee requests not requiring NRC review and approval before they can be implemented by the licensee. The FY 2002 NRC Performance Plan incorporates one output measure related to other licensing tasks, which is the number of other licensing tasks completed.

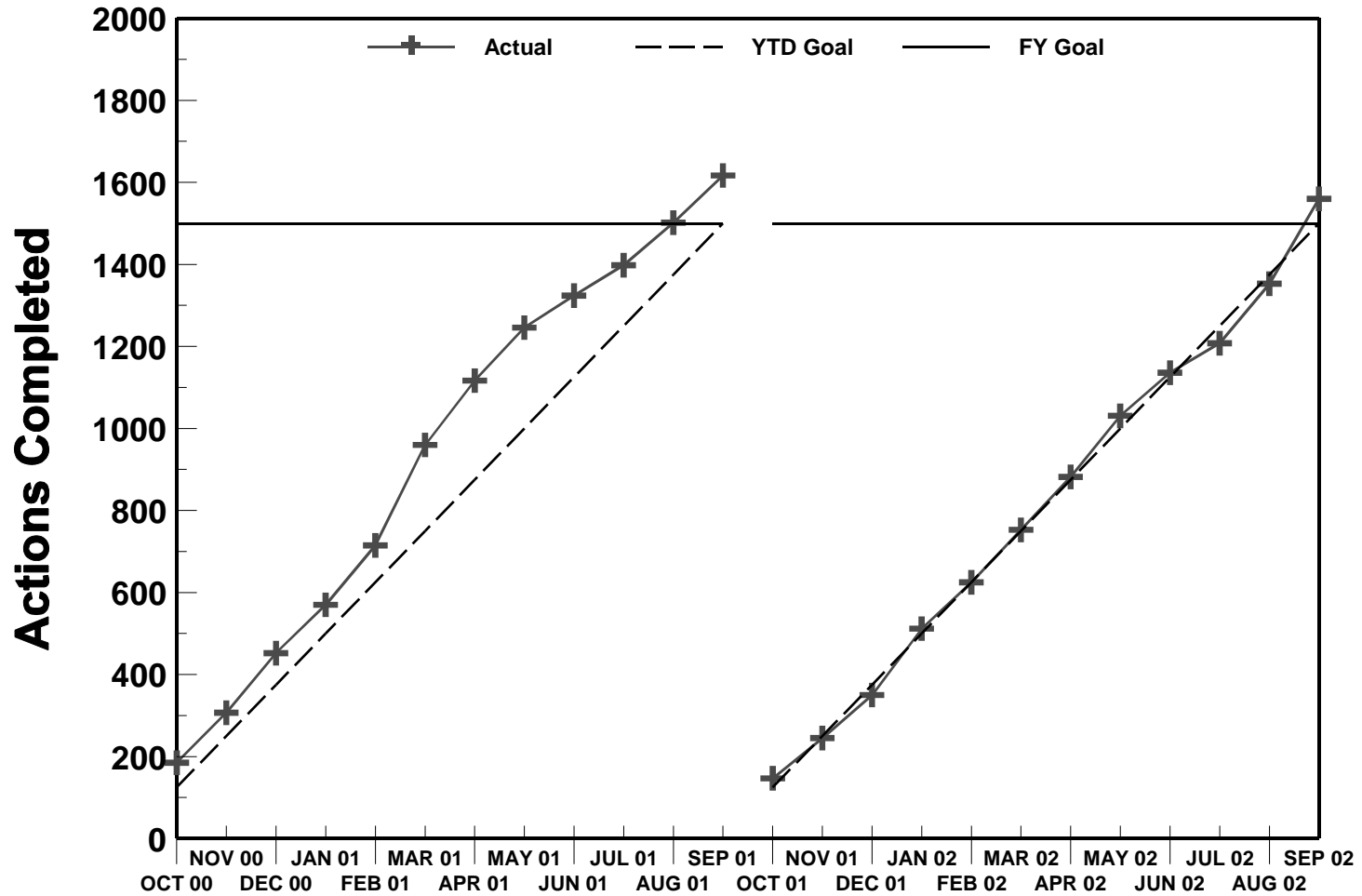
The actual FY 2000 and FY 2001 results, the FY 2002 goals and the actual FY 2002 results for the four NRC Performance Plan output measures for licensing actions and other licensing tasks are shown in the table below.

PERFORMANCE PLAN				
Output Measure	FY 2000 Actual	FY 2001 Actual	FY 2002 Goals	FY 2002 Actual (thru 09/30/2002)
Licensing actions completed/year	1574	1617	≥ 1500	1560
Age of licensing action inventory	98.3% ≤ 1 year 100% ≤ 2 years	96.9% ≤ 1 year 100% ≤ 2 years	96% ≤ 1 year 100% ≤ 2 years	96.6% ≤ 1 year 100% ≤ 2 years
Size of licensing action inventory	962	877	≤ 1000	765
Other licensing tasks completed/year	1100	523	≥ 350	426

The following charts demonstrate NRC's FY 2002 trends for the four licensing action and other licensing task output measure goals.

# Nuclear Reactor Safety - Reactor Licensing

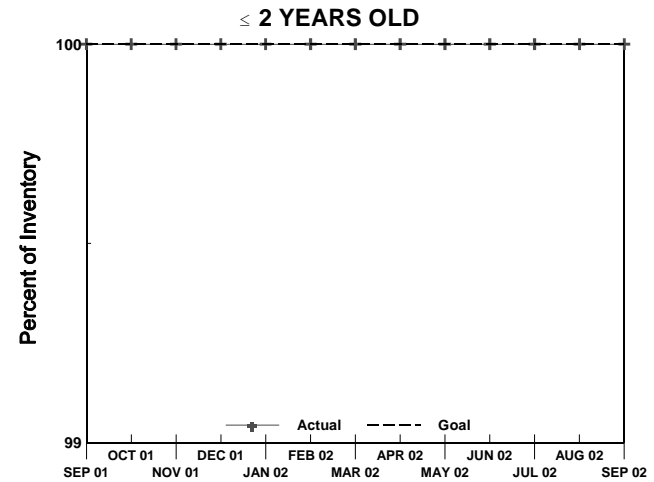
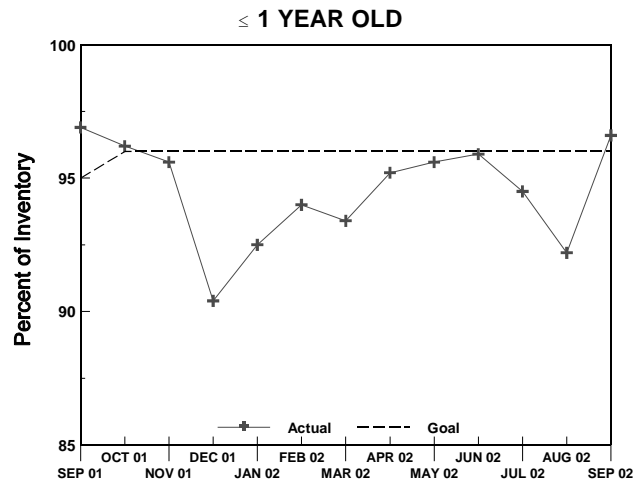
Performance Plan Target: Completed Licensing Actions





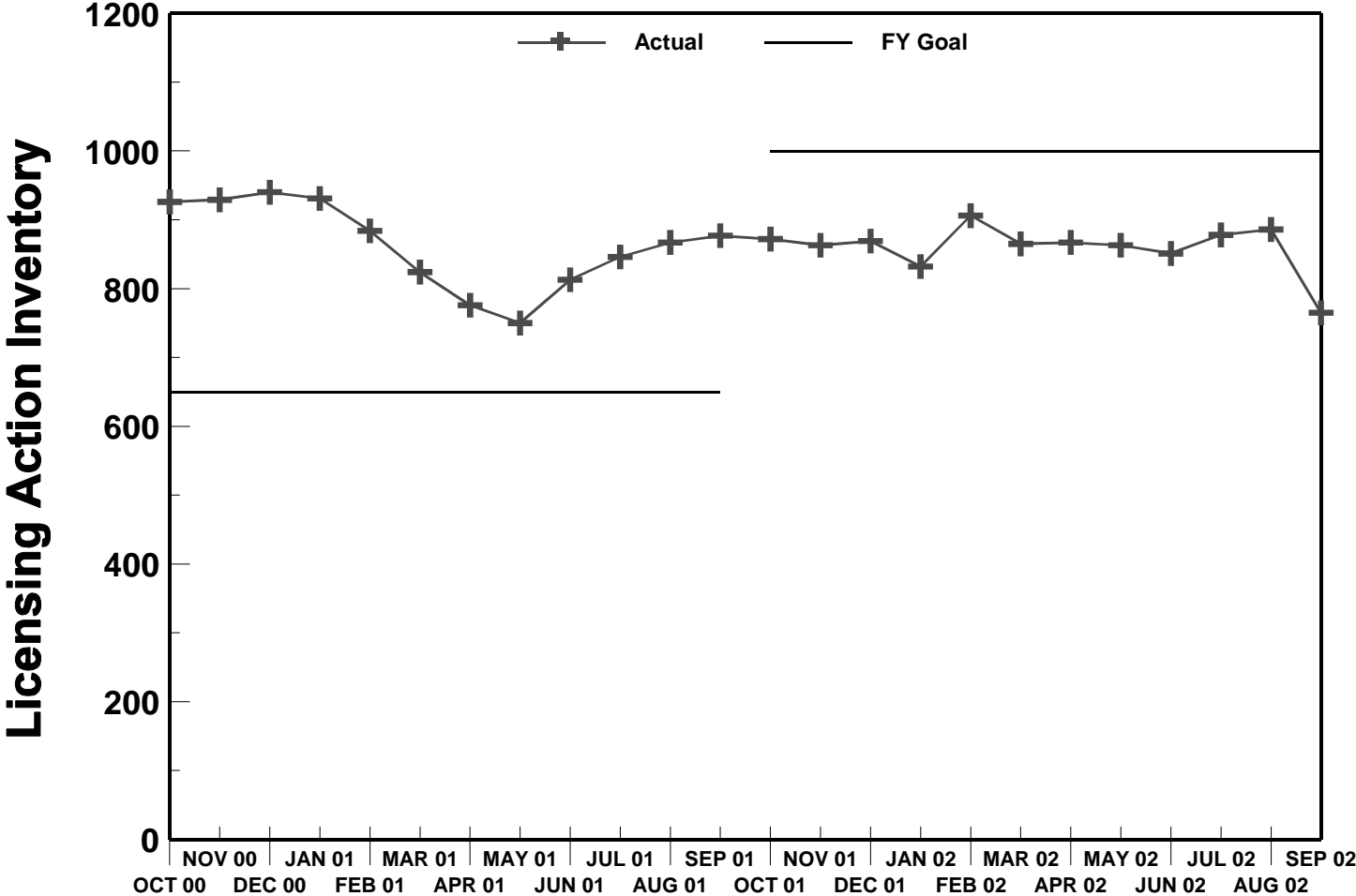
# Nuclear Reactor Safety - Reactor Licensing

## Performance Plan Target: Age of Licensing Action Inventory



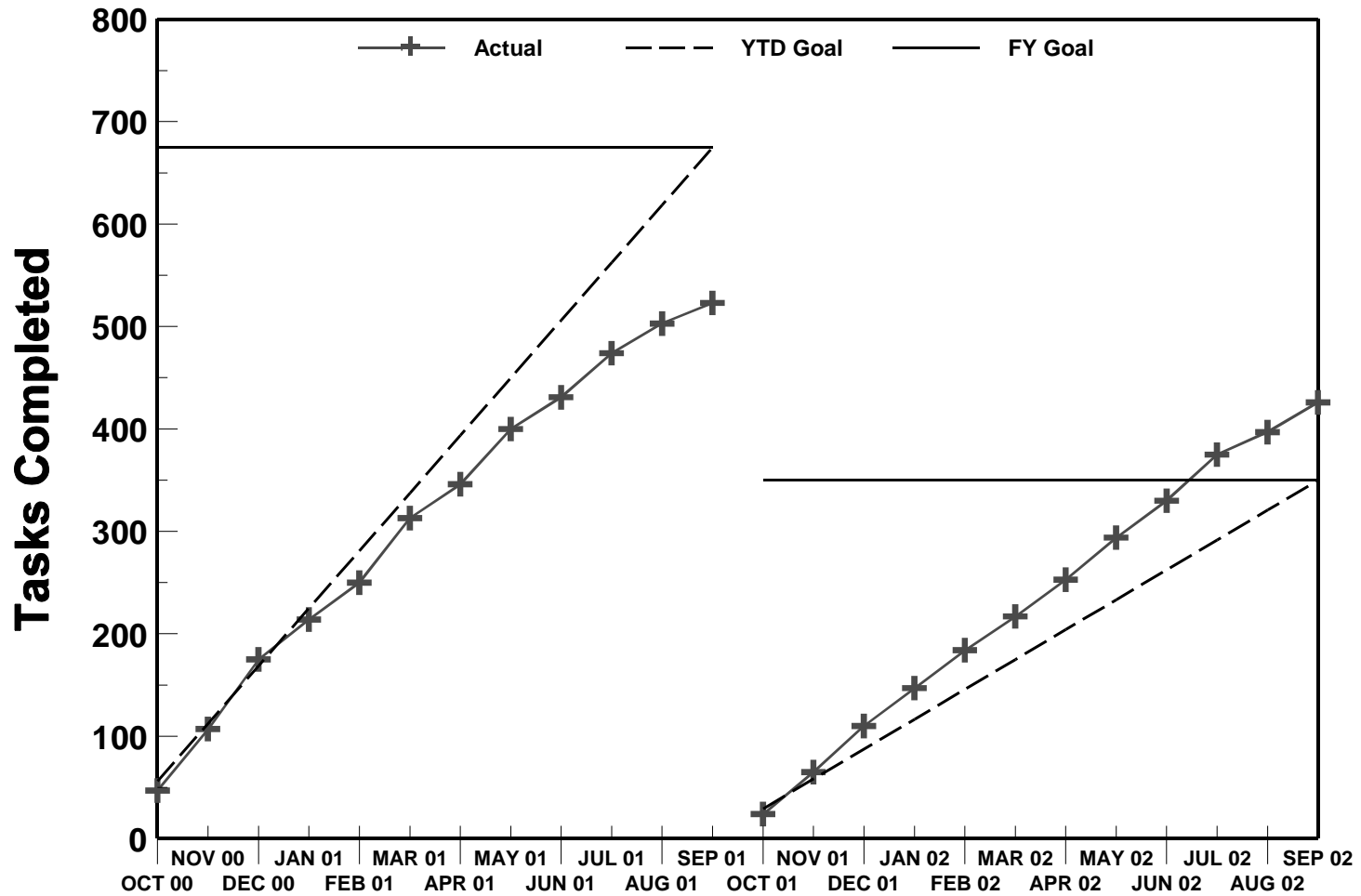
# Nuclear Reactor Safety - Reactor Licensing

## 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**

### Surry, Units 1 and 2, and North Anna, Units 1 and 2, Combined Renewal Applications

The staff issued the draft Supplemental Environmental Impact Statements (SEISs) for Surry in April 2002 and North Anna in May 2002. The public comment period on the draft SEISs has ended and the staff is addressing the comments and is preparing the final SEISs. The safety evaluation report identifying any open items was issued in June 2002. The NRC staff and the applicant are currently working to resolve the open items and issue the revised safety evaluation report.

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

The staff issued the draft SEISs for McGuire and Catawba in May 2002. The public comment period on the draft SEISs has ended and the staff is addressing the comments and is preparing the final SEISs. The safety evaluation report identifying open items was issued in August 2002. The NRC staff and the applicant are currently working to resolve the open items and issue the revised safety evaluation report.

On January 24, 2002, the Atomic Safety and Licensing Board (ASLB) admitted contentions filed by Nuclear Information and Resource Service and the Blue Ridge Environmental Defense League, petitioners in the Catawba and McGuire license renewal proceeding. The petitioners contended that the applicant's severe accident mitigation alternative (SAMA) analysis was incomplete. The Commission admitted to an extent, the SAMA contention. The hearing process is currently in abeyance pending clarification on the contention by the Commission. A certified question from the ASLB relating to the admissibility of a contention pertaining to terrorism is still under review by the Commission.

### Peach Bottom, Units 2 and 3, Renewal Application

The staff issued the draft SEIS in June 2002 and a public meeting to discuss the SEIS was held in July 2002. The public comment period on the draft SEIS ended in September 2002 and the staff is addressing the comments and is preparing the final SEIS. The safety evaluation report identifying any open items was issued in September 2002. Applicant responses to the open items are due by November 2002.

### St. Lucie, Units 1 and 2, Renewal Application

Environmental requests for additional information were issued in May 2002 and the responses were received in June 2002. The staff is preparing the draft SEIS to issue for public comment. The safety requests for additional information were issued in July 2002 and the responses were due by October 2002.

### Fort Calhoun Renewal Application

The Fort Calhoun renewal application is currently under review. All environmental requests for additional information were issued in July 2002 and the responses were received in September

2002. The staff is currently reviewing the responses and is preparing the draft SEIS. Safety requests for additional information are scheduled to be issued in October 2002.

#### Robinson Unit 2 Renewal Application

The Robinson renewal application is currently under review and the staff is preparing requests for additional information. All environmental and safety requests for additional information are scheduled to be issued by December 2002, and by February 2003, respectively.

#### Ginna Renewal Application

On August 1, 2002, the NRC received an application for renewal of the Ginna operating license. The staff has completed its acceptance review and has found the application acceptable for docketing and review. The review schedule and notice of opportunity for hearing were issued in September 2002. 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 licenses scheduled for February 2005.

#### Summer Renewal Application

On August 6, 2002, the NRC received an application for renewal of the Summer operating license. The staff has completed its acceptance review and has found the application acceptable for docketing and review. The review schedule and notice of opportunity for hearing were issued in September 2002. 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 licenses scheduled for February 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**

During this reporting period, the NRC staff prepared reply findings to the proposed findings of fact submitted by Private Fuel Storage, LLC (PFS) and the State of Utah on the geotechnical and aircraft contentions. PFS and the State of Utah also prepared reply findings. All reply findings were to be submitted by mid-October. The staff continued its consideration of the response received from PFS in August 2002, regarding the change in Air Force policy regarding altitude restriction for flights over Skull Valley. PFS provided the staff with a copy of a letter from the Wing Commander of the 388th Air Wing at Hill Air Force Base to Leon Bear, Chairman of the Skull Valley Band of Goshute Indians, regarding this question. The staff is considering this letter in its review of the possible impacts of the change in Air Force policy. In addition, NRC staff involved in the PFS review, along with staff from the Office of Congressional Affairs, held a telephone conference with the minority counsel from the Senate Armed Services Committee to discuss the ongoing consideration by the staff of the change in altitude restrictions.

**VII. Enforcement Process and Summary of Reactor Enforcement by Region**

**Reactor Enforcement by Region**

<b>Reactor Enforcement Actions*</b>						
		Region I	Region II	Region III	Region IV**	TOTAL
Severity Level I	August 2002	0	0	0	0	0
	FY 02 YTD	0	0	0	0	0
	FY 01 Total	0	0	0	0	0
	FY 00 Total	0	0	0	0	0
Severity Level II	August 2002	0	0	0	0	0
	FY 02 YTD	1	0	0	0	1
	FY 01 Total	0	1	0	0	1
	FY 00 Total	1	2	0	0	3
Severity Level III	August 2002	0	0	0	0	0
	FY 02 YTD	2	0	0	0	2
	FY 01 Total	1	1	1	1	4
	FY 00 Total	5	0	4	4	13
Severity Level IV	August 2002	0	0	0	0	0
	FY 02 YTD	0	0	2	0	2
	FY 01 Total	1	0	2	1	4
	FY 00 Total	4	1	3	5	13
Non-Cited Severity Level IV	August 2002	9	0	0	8	17
	FY 02 YTD	202	88	197	149	636
	FY 01 Total	279	105	201	139	724
	FY 00 Total	313	190	289	258	1050

\* Numbers of violations are based on enforcement action tracking system (EATS) data that may be subject to minor changes following verification. The number of Severity Level I, II, and 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.

\*\* Violation totals for Regions II & IV reflect a shift from a 6-week inspection period to a quarterly inspection period.

<b>Escalated Reactor Enforcement Actions Associated with the Reactor Oversight Process</b>						
		Region I	Region II	Region III	Region IV	Total
NOVs Related to White, Yellow or Red Findings	8/02 Red	0	0	0	0	0
	8/02 Yellow	0	0	0	0	0
	8/02 White	1	1	0	0	2
	FY 02 YTD	3	4	5	8	20
	FY 01 Total	8	4	4	3	19
	FY 00 Total	6	1	0	0	7

### **Description of Significant Actions taken in August 2002**

#### Constellation Generation Group (Calvert Cliffs) EA-02-138

On August 19, 2002, a Notice of Violation was issued for a violation associated with a white Significance Determination Process (SDP) finding involving the failure to prepare adequately a radioactive material shipment to a waste processing facility. The violation cited the licensee's failure to meet transportation requirements for preparing radioactive material for shipment such that external radiation levels on the surface of the package do not exceed allowable levels under conditions normally incident to transportation.

#### Duke Energy Corporation (Oconee 1, 2, & 3) EA-02-048

On August 2, 2002, a Notice of Violation was issued for a violation associated with a white SDP finding involving containment integrity upon a possible loss of reactor decay heat removal. The violation cited the licensee's failure to establish adequate procedures to assure that containment closure would be achieved prior to core uncover and fission product release.

### **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. Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC advised nuclear power plant licensees to go to the highest level of security, and all promptly did so.

The NRC has developed a new Threat Advisory and Protective Measures System in response to Homeland Security Presidential Directive-3. When a new Homeland Security Advisory System (HSAS) threat condition is declared, the NRC will promptly notify affected licensees of the condition and refer them to the predefined protective measures that we have developed for each threat level. The new system for NRC licensees was formally communicated to licensees, Governors, State Homeland Security Advisors, appropriate Federal agency administrators, and other appropriate officials on August 19, 2002. The new system supercedes the NRC's 1998

threat advisory system and covers additional classes of licensees not included in the NRC's 1998 system.

The staff is continuing an integrated review of the NRC's safeguards and security program, which includes threat definitions, vulnerability assessments, and regulatory improvements. Appropriate improvements are being made to licensees' security capabilities.

The NRC continues to interact with the FBI, other intelligence and law enforcement agencies, the Department of Defense, and the Office of Homeland Security to ensure any changes to the NRC's programs are informed by pertinent input from all relevant U.S. agencies.

## **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.

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 81 such reviews. Approximately 11,530 MWt (3830 MWe or an equivalent of more than three nuclear power plant units) has been gained through implementation of power uprates at existing plants. During the month of August, the staff withdrew its approval of one General Electric Nuclear Energy topical report for extended power uprates, because General Electric Nuclear Energy planned to apply the constant pressure power uprate approach in a way that did not reflect the NRC staff's understanding and basis for acceptability of the topical report for licensing applications. The staff is continuing the discussion with General Electric on this matter.

The staff currently is currently reviewing 13 plant-specific applications and one General Electric Nuclear Energy topical report for measurement uncertainty recapture power uprates. For two plant-specific applications, the staff denied the request by General Electric for withholding information from public disclosure under 10 CFR 2.790. General Electric can request withdrawal of its documents within 30 days or the documents will be placed in the NRC's Public Document Room.

The staff conducted a survey in July 2002 to obtain information regarding industry's plans related to power uprate applications. The survey requested information for planned power uprates over the next five years. Based on this survey and information obtained since the survey, licensees plan to submit 51 additional power uprate applications in the next five years. These applications include 27 measurement uncertainty recapture power uprates (i.e., power uprates less than 2 percent), 4 stretch power uprates (i.e., power uprates up to about 7 percent), and 20 extended power uprates (i.e., power uprates greater than about 7 percent). Planned power uprates are expected to result in an increase of more than 5900 MWt (1970 MWe). The increase in power generation that will be attributed to planned power uprates is greater than the power output of one large nuclear power plant. Additionally, the utilities for two reactor units indicated that they are currently studying the feasibility of power uprates. The staff will use the July 2002 survey results for future planning.



Identical letter sent to:

The Honorable Harry Reid, Chairman  
Subcommittee on Transportation,  
Infrastructure, and Nuclear Safety  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510  
cc: Senator James M. Inhofe

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 Sonny Callahan, Chairman  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
United States House of Representatives  
Washington, D.C. 20515  
cc: Representative Peter J. Visclosky

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

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

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

The Honorable Pete V. Domenici  
United States Senate  
Washington, D.C. 20510