

June 10, 2005

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

Dear Mr. Chairman:

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

The previous report provided information on a number of significant activities. These activities included: (1) issuance of a Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$5,450,000 to FirstEnergy Nuclear Operating Company based on its failure to implement the boric acid corrosion control and corrective action programs properly at Davis-Besse; (2) the results of the NRC's confirmatory testing of the Hemyc fire-resistant material used at some nuclear power plants and the NRC staff's determination that licensees have taken necessary appropriate actions to ensure that plants can continue to operate safely with Hemyc fire-resistant material; and (3) the NRC's response to the April 17, 2005 event at Millstone Unit 3 that resulted in the declaration of an Alert, the second lowest of four emergency classifications.

I want to provide you additional information on the NRC's activities related to the Millstone Unit 3 event. The NRC special inspection team that was dispatched to the Millstone 3 nuclear power plant to review the April 17th shutdown has preliminarily concluded that the event was caused by an apparent failure of a circuit card in a computerized reactor protection system (RPS). The team has also determined that the unit was safely removed from service by operators, that any radiological releases were well below regulatory limits, and that there were no public health and safety consequences. However, the team identified several issues involving the failure of a turbine-driven pump that is part of a system sometimes used to help cool down the plant, control-room indicator design issues, minor operator response issues, a delay in the activation of a computer program used to evaluate plant conditions, and problems with the company's boric acid control program. The NRC has preliminarily determined these findings to be "green" and will make a final determination in a future inspection report. The

special inspection team has also noted, that in response to the event, Dominion made a timely assessment of radiological conditions and has since launched a review of the shutdown by its own evaluation team, implemented multiple corrective actions, and planned additional evaluations. The NRC presented the preliminary results of the special inspection team in a public forum at a meeting of the Connecticut Nuclear Energy Advisory Council (NEAC) on May 18, 2005. The NRC special inspection team will document its findings and conclusions in a report in the coming weeks.

The NRC staff is also following up as a potential generic matter the "tin whiskers" phenomenon that led to the RPS circuit card failure at Millstone Unit 3. The growth of "tin whiskers" has previously caused circuit board failures in satellites and other aerospace systems. It had not previously been observed in a nuclear power plant system. The staff intends to issue an information notice to all nuclear power plant licensees and will follow-up with additional generic communications, as appropriate.

With respect to the Davis-Besse plant, on May 19, 2005, the NRC terminated the special panel established under NRC Inspection Manual Chapter 0350, "Oversight of Operating Reactor Facilities In an Extended Shutdown as a Result of Significant Performance Problems," which provided substantially increased regulatory oversight of the plant. Regulatory oversight of the plant will now be conducted under NRC's Reactor Oversight Program and will continue to provide a level of inspection that exceeds the baseline inspection program requirements. The NRC inspection strategy provides for special inspections in areas that were the subject of the March 8, 2004 Confirmatory Order issued concurrent with NRC's decision to allow the plant to restart. Focused special inspections are planned in the areas of operational performance, the quality of engineering activities, the corrective action program implementation, and the effectiveness of the safety culture improvement initiatives, as well as for those NRC performance indicators which were not providing useful insights due to the extended shutdown. The NRC will continue supplementing its resident inspector staffing at the Davis-Besse site with an additional resident inspector.

The NRC has approved new regulations to require specific licenses for the export or import of radioactive materials that could be used in so-called "dirty bombs" or other terrorist weapons, making the U.S. the first country to implement international export controls on these materials. The regulations are based on export-import provisions of the Code of Conduct on the Safety and Security of Radioactive Sources adopted in September 2003 by the International Atomic Energy Agency (IAEA). The effective date of the final rule is December 31, 2005. The U.S. played a key role in developing the Code of Conduct and, at U.S. urging, the Group of Eight Industrial Nations agreed at their June 2004 summit in Sea Island, Georgia, to implement the Code's export-import provisions by December 2005.

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

- published in the Federal Register on June 2, 2005 (70 FR 32224), a final rule that broadens the scope of existing regulations applicable to persons who may require access to classified information, to include persons who may need access in connection with licensing and regulatory activities under the regulations that govern the disposal of high-level radioactive waste in geologic repositories and persons who may need access in connection with other activities as the Commission may determine, such as vendors of advanced reactor designs. The rule also broadens the scope of existing regulations applicable to procedures for obtaining facility security clearances, to include persons who may need to use, process, store, reproduce, transmit, transport, or handle NRC classified information in connection with the above-identified activities.
- published in the Federal Register on May 26, 2005 (70 FR 30525), a final rule to reflect the licensing, inspection, and annual fees NRC will charge applicants and licensees for FY 2005. These fees are contained in NRC regulations 10 CFR Part 170 (fees for licensing and inspection services) and 10 CFR Part 171 (annual fees).
- published in the Federal Register on May 25, 2005 (70 FR 29934), a final rule amending NRC export/import regulations to remove Syria from the list of restricted destinations and add it to the list of embargoed destinations. This amendment is necessary to conform the NRC's regulations with U.S. law and foreign policy.
- issued on May 24, 2005, a decision by the Atomic Safety and Licensing Board denying the State of Utah's Motion for Reconsideration of the Board's February 24, 2005 Final Partial Initial Decision on the spent nuclear fuel storage facility proposed for Skull Valley, Utah, by the Private Fuel Storage (PFS) consortium. The February 24th decision rejected the State's assertion that there is too high a probability that the accidental crash of an F-16 traveling through Skull Valley from Hill Air Force Base could puncture the internal canister of a storage cask, causing a radiological release.
- terminated on May 23, 2005, the license for the Trojan Nuclear Power Plant and released for unrestricted use the area where the plant was formerly operated. The facility was located in Columbia County, Oregon, about 42 miles north of Portland. Portland General Electric's NRC license to store spent fuel removed from the reactor at an independent installation on another portion of the site will remain in effect and is not affected by this action.

- published in the Federal Register on May 13, 2005 (70 FR 25622), a notice of availability for public comment a draft regulatory issue summary (RIS) the NRC intends to issue to clarify regulatory requirement issues associated with post-fire safe-shutdown circuit analyses and protection. Feedback is being solicited particularly with regards to the requirements of Title 10 of the Code of Federal Regulations, Part 50 (10 CFR 50), Appendix R, which have been interpreted by licensees in a manner that is not consistent with regulatory expectations. The industry and NRC regional inspectors have requested clarification of regulatory expectations with respect to post-fire safe-shutdown circuits. In addition, clarification of these requirements will assist licensees in evaluating the transition to a risk-informed, performance-based fire protection program.
- renewed, on May 12, 2005, facility operating licenses for the Farley Nuclear Plant, Units 1 and 2, for an additional 20 years. The Farley plant is located about 18 miles southeast of Dothan, Alabama. The licensee, Southern Nuclear Operating Co., submitted the license renewal application for both reactors on September 15, 2003. With the renewal, the licenses for Units 1 and 2 are extended until June 25, 2037, and March 31, 2041, respectively.
- received on May 4, 2005, a letter from Constellation Energy (corporate licensee for Calvert Cliffs, Nine Mile Point, and Ginna nuclear power plants) notifying the NRC of Constellation Energy's commitment to participate with Framatome ANP (FANP), the vendor of the EPR advanced power reactor design, as a potential future owner in support of FANP's pre-application submittal to the NRC for design certification under 10 CFR Part 52.
- published in the Federal Register on April 27, 2005 (70 FR 21684), a notice that NRC and the Department of Transportation (DOT) are jointly seeking comments on proposed changes to the IAEA Regulations for the Safe Transport of Radioactive Material (referred to as TS-R-1). The proposed changes were submitted by the U.S. and other IAEA member states and International Organizations, and might necessitate subsequent domestic compatibility rulemakings by both the NRC and the DOT. The comment period for this action closes July 1, 2005.
- headed the U.S. Government delegation to the April 11-22, 2005, Third National Report Review Meeting of Contracting Parties to the Convention on Nuclear Safety (CNS). The objective of the convention is to achieve and maintain a high level of nuclear safety worldwide through enhancement of national measures and international cooperation. Contracting Parties demonstrated strong interest in U.S. programs for ensuring safety at civilian nuclear power plants, as evidenced by the large attendance at the U.S. National Report presentation. The U.S. Delegation, which was headed by Commissioner Jeffrey S. Merrifield and included other NRC staff and Department of State representatives, gained valuable insights about the status of nuclear safety in other countries.

- posted the revised NUREG-0728, "NRC Incident Response Plan," on the NRC's internal and public web sites on April 14, 2005. As a signatory to the National Response Plan, the NRC committed to implement the Plan by that date. Accordingly, the staff revised the NRC Incident Response Program, including the NUREG. The revised NUREG will be the principal document for communicating the agency's incident response program to the Department of Homeland Security, other Federal departments/agencies, State/tribal/local agencies, licensees, and other stakeholders.

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

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

Sincerely,

/RA/

Nils J. Diaz

Enclosure:
Monthly Status Report on the Licensing Activities
and Regulatory Duties of the U.S. NRC, April 2005

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

APRIL 2005

Enclosure

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

I Implementing Risk-Informed Regulations

The staff continues to make progress on tasks involving the use of probabilistic risk information in many areas; however, there were no reportable milestones scheduled or completed during the month of April 2005. The Commission is continuing to consider the staff's proposal to risk-inform 10 CFR 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light-water Nuclear Power Reactors."

II Revised Reactor Oversight Process

The NRC continues to implement the Reactor Oversight Process (ROP) at all nuclear power plants. The NRC also 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 April 27, 2005, NRC staff hosted the monthly public meeting on the Mitigating Systems Performance Index (MSPI) at NRC headquarters. Meeting attendees discussed the industry's position regarding the appropriate Probabilistic Risk Assessment (PRA) quality requirements as set forth by the joint industry-staff MSPI PRA Task Group. The staff also discussed how it plans to identify MSPI outlier plants and the process it will use to disposition unresolved issues prior to full implementation.
- On April 28, 2005, NRC staff hosted the monthly public meeting on the ROP at NRC headquarters. Meeting participants discussed Significance Determination Process (SDP) issues; status updates on the Scrams with Loss of Normal Heat Removal and the Reactor Coolant System Leakage Performance Indicator Task Forces; ROP security issues; and Performance Indicator Frequently Asked Questions.

III Status of Issues in the Reactor Generic Issue Program

In April 2005, the NRC staff held public meetings with industry representatives to discuss the staff's safety evaluation of Generic Safety Issue (GSI)-191, "Assessment of Debris Accumulation on PWR Sump Performance," which supports Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors." Industry representatives discussed implementation approaches based on the NRC's safety evaluation and use of the Nuclear Energy Institute's guidance document.

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 fiscal year (FY) 2005 NRC Performance Plan incorporates three output measures related to licensing actions -- number of licensing actions completed per year, age of the licensing action inventory, and size of licensing action inventory.

Other licensing tasks for operating power reactors are defined as licensee responses to NRC requests for information through generic letters or bulletins, NRC responses to 10 CFR 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 Final Safety Analysis Report (FSAR) updates, or other licensee requests not requiring NRC review and approval before they can be implemented by licensees. The FY 2005 NRC Performance Plan incorporates one output measure related to other licensing tasks -- number of other licensing tasks completed.

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

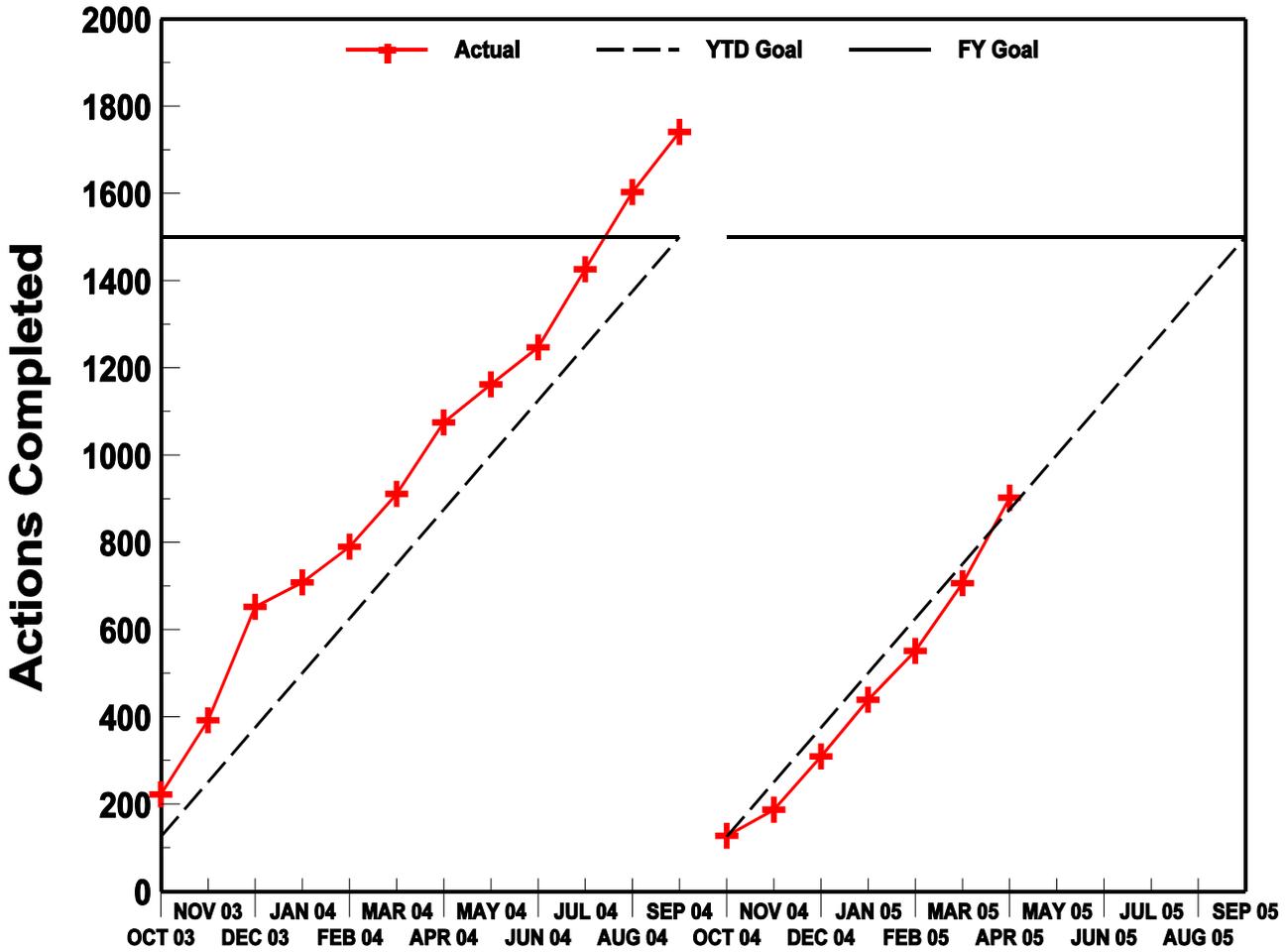
The actual FY 2003 and FY 2004 results, the FY 2005 goals, and the actual FY 2005 results, as of April 30, 2005, for the four NRC Performance Plan output measures for operating power reactor licensing actions and other licensing tasks are shown in the table below.

PERFORMANCE PLAN				
Output Measure	FY 2003 Actual	FY 2004 Actual	FY 2005 Goals	FY 2005 Actual (thru 04/30/2005)
Licensing actions completed/year	1774	1741	\$ 1500	902
Age of licensing action inventory	96% # 1 year; and 100% # 2 years	91%# 1 year; and 100% # 2 years	90% # 1 year; and 100% # 2 years	82%# 1 year; and 99 % # 2 years
Size of licensing action inventory	1296	1135	# 1200	1161
Other licensing tasks completed/year	500	671	\$ 500	328

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

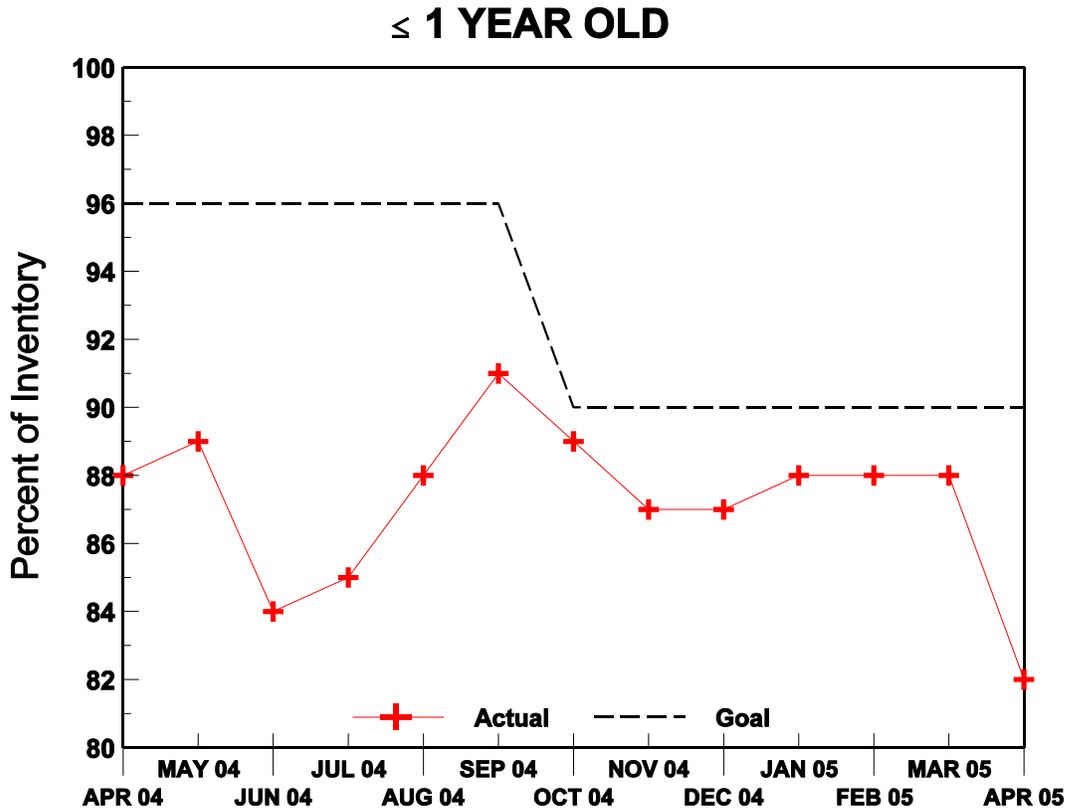
Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Completed Licensing Actions



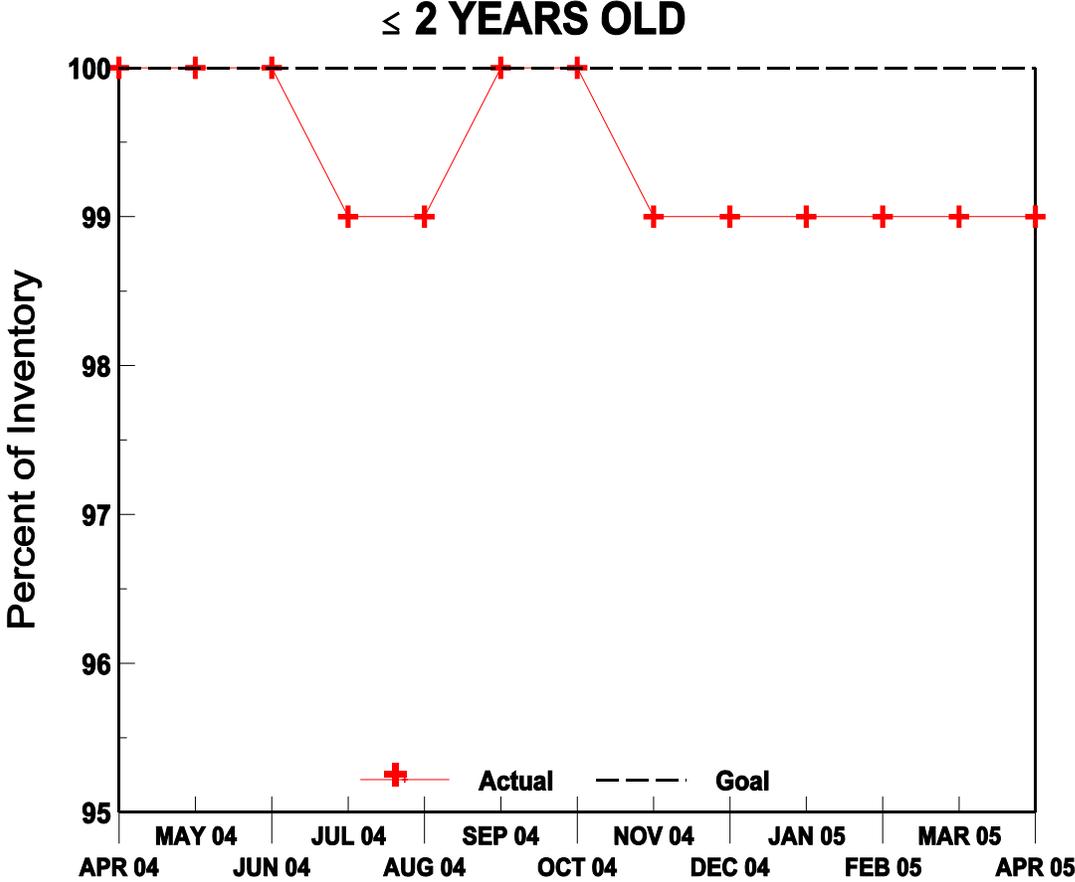
Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Age of Licensing Action Inventory



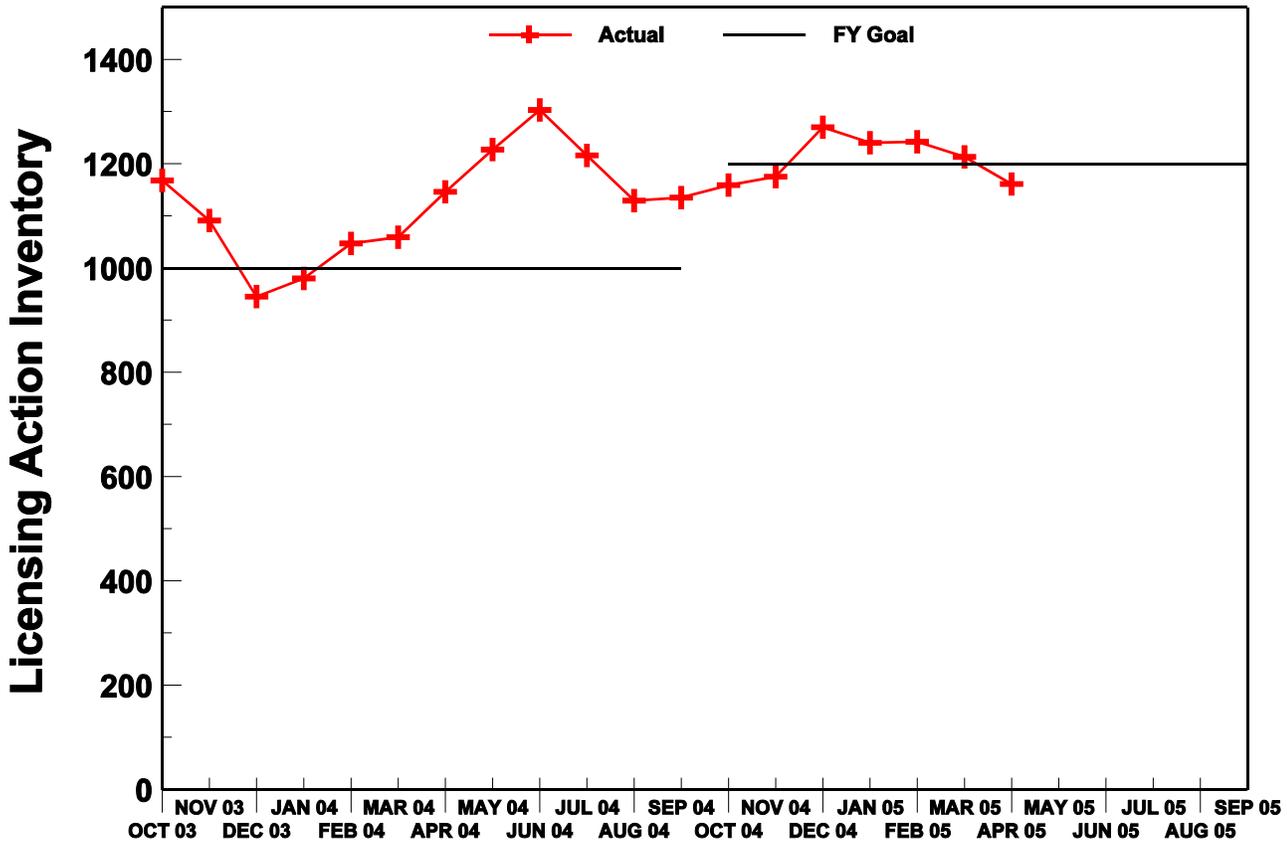
Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Age of Licensing Action Inventory



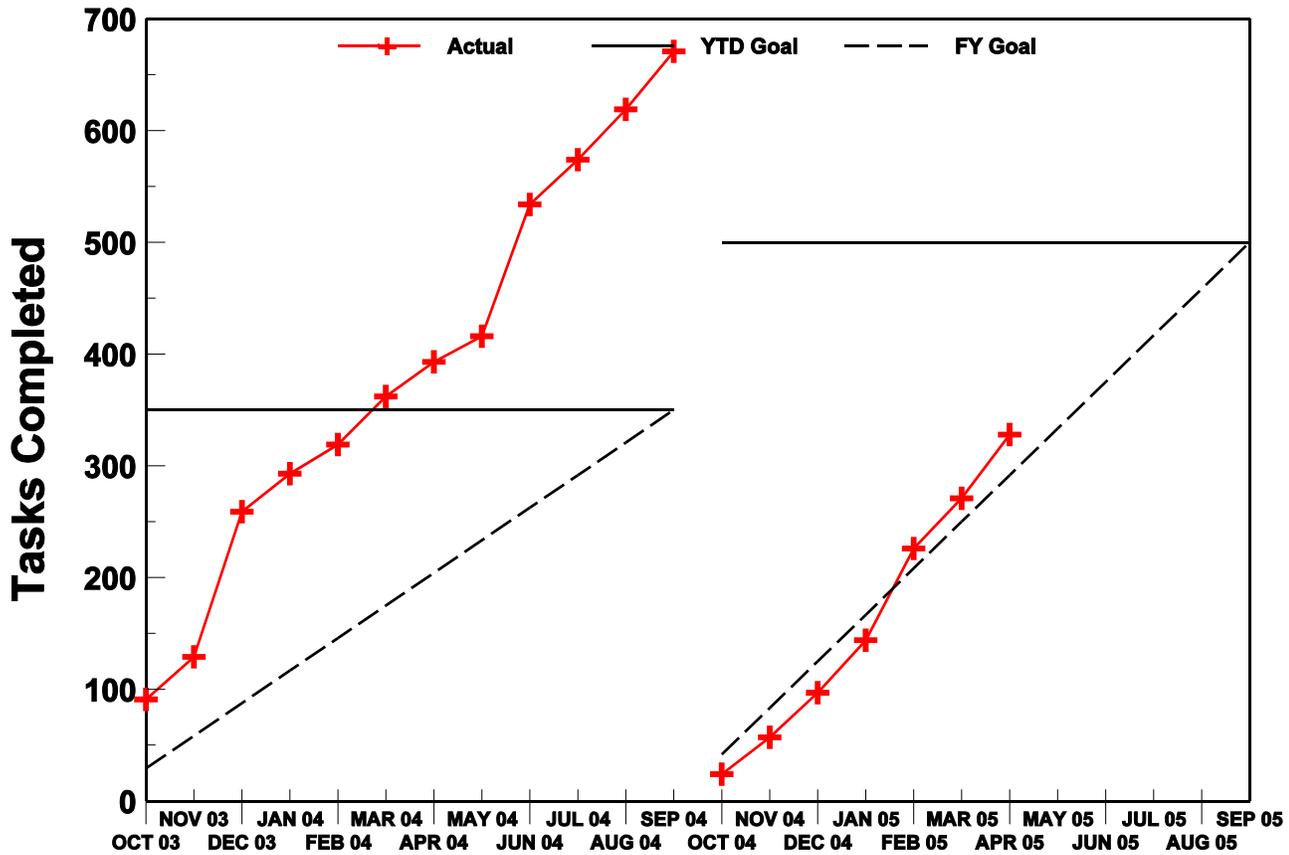
Nuclear Reactor Safety - Reactor Licensing

Performance Plan: Size of Licensing Action Inventory



Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Completed Other Licensing Tasks



V Status of License Renewal Activities

Farley, Units 1 and 2, License Renewal Application

The staff issued the final supplemental environmental impact statement (SEIS) and the safety evaluation report (SER) in March 2005. The staff is completing activities to support a decision on renewing the licenses in May 2005.

Arkansas Nuclear One, Unit 2, License Renewal Application

The staff issued the final SEIS and the SER in April 2005. The staff is completing activities to support a decision on renewing the licenses in July 2005.

D.C. Cook, Units 1 and 2, License Renewal Application

The staff issued the final SEIS in April 2005. The draft SER, identifying any remaining open items, was issued in December 2004. The applicant's responses to the open items were received, and the staff is preparing to issue the SER in May 2005.

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

The Browns Ferry license renewal application is currently under review. The draft SEIS was issued for public comment in December 2004, and the staff is addressing the comments received. The final SEIS is scheduled to be issued in July 2005. The draft SER, which will identify 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. The draft SEIS was issued for public comment in December 2004, and the staff is addressing the comments received. The final SEIS is scheduled to be issued in July 2005. The draft SER, identifying any remaining open items, was issued in February 2005. The applicant's responses to the open items were received in April 2005, and the staff is preparing to issue the SER in August 2005. A petition for late intervention and request for hearing was submitted in February 2005, and an Atomic Safety and Licensing Board (ASLB) has been established to preside over the proceeding.

Point Beach, Units 1 and 2, License Renewal Application

The Point Beach license renewal application is currently under review. The draft SEIS was issued for public comment in January 2005, and the staff is addressing the comments received. The final SEIS is scheduled to be issued in July 2005. The draft SER, which will identify any remaining open items, is scheduled to be issued in May 2005.

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

The review of the Nine Mile Point license renewal application is on hold. The application was submitted in May 2004, and the staff had been reviewing the application. The applicant was informed that the responses to the staff's requests for additional information and the applicant's level of support were not adequate, and the applicant requested that the review be placed on hold in order to address the issues. Assuming a satisfactory submittal and adequate support from the applicant for staff review activities, the staff will resume the review and establish a new schedule to accommodate the additional time needed to complete the application review.

Brunswick, Units 1 and 2, License Renewal Application

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

Monticello License Renewal Application

On March 24, 2005, the NRC received an application for renewal of the operating license for the Monticello Nuclear Generating Plant. The staff is currently performing the required acceptance review of the application and, if found acceptable, will docket the application, notice an opportunity for hearing, and issue the review schedule.

Palisades License Renewal Application

On March 31, 2005, the NRC received an application for renewal of the operating license for the Palisades Nuclear Plant. The staff is currently performing the required acceptance review of the application and, if found acceptable, will docket the application, notice an opportunity for hearing, and issue the review schedule.

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 on the Reservation of the Skull Valley Band of Goshute Indians in Skull Valley, Utah. On February 24, 2005, the ASLB issued its decision on the aircraft crash issue in favor of the Applicant, finding that the probability of an F-16 aircraft crash accident or ordnance impact into the facility that would result in a release of radioactive materials is less than 1×10^{-6} /yr (one in one million per year). Also, on February 24, 2005, the ASLB ruled that the State of Utah's late-filed Contention UU, alleging that the U.S. Department of Energy (DOE) will not accept spent nuclear fuel from the proposed facility, lacked adequate factual foundation and was inadmissible. On February 28, 2005, the Commission offered the parties an opportunity to comment on whether the Commission should direct issuance of an immediately effective license to PFS. The parties filed their comments.

In addition, the State of Utah filed a petition for Commission review of the ASLB's decision on Contention UU; that petition is under review by the Commission. The State also filed a motion for reconsideration of the ASLB's aircraft crash decision before the ASLB. On April 6, 2005, the ASLB held oral arguments on the State's motion for reconsideration. The ASLB is expected to issue its ruling on this motion shortly, after which its decision may be appealed to the Commission.

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	April 05	0	0	2	0	2
	FY 05 YTD Total	0	0	2	0	2
	FY 04 Total	0	0	0	0	0
	FY 03 Total	0	0	0	0	0
Severity Level II	April 05	0	0	2	0	2
	FY 05 YTD Total	0	0	2	0	2
	FY 04 Total	0	1	0	0	1
	FY 03 Total	0	0	0	0	0
Severity Level III	April 05	0	0	1	1	2
	FY 05 YTD Total	0	1	2	1	4
	FY 04 Total	1	2	4	0	7
	FY 03 Total	2	0	4	0	6
Cited Severity Level IV or GREEN	April 05	0	0	0	0	0
	FY 05 YTD Total	1	0	0	0	1
	FY 04 Total	1	0	2	2	5
	FY 03 Total	1	0	2	1	4
Non-Cited Severity Level IV or GREEN	April 05	5	39	9	18	71
	FY 05 YTD Total	143	127	151	182	603
	FY 04 Total	271	175	290	301	1037
	FY 03 Total	211	164	253	184	812

* Numbers of violations are based on enforcement action tracking system (EATS) data that may be subject to minor changes following verification. The numbers shown as Severity Level I, II, III or IV listed refers to the number of Severity Level I, II, III and IV violations or problems. The monthly totals generally lag 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 RED, YELLOW, or WHITE Findings	Apr 05 RED	0	0	0	0	0
	Apr 05 YELLOW	0	0	0	1	1
	Apr 05 WHITE	0	1	0	0	1
	FY 05 YTD Total	3	1	0	1	5
	FY 04 Total	3	4	7	6	20
	FY 03 Total	6	1	7	1	15

Description of Significant Actions Taken During April 2005

FirstEnergy Nuclear Operating Company (Davis-Besse) EA-05-071 - On April 21, 2005, a Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$5,450,000 was issued for multiple violations (some willful) related to the significant degradation of the reactor pressure vessel head identified in February and March 2002. The significant violations included: (1) operation with reactor coolant system pressure boundary leakage (associated with a Red SDP finding, \$5,000,000), (2) failure to provide complete and accurate information (Severity Level I, \$110,000), (3) failure to promptly identify and correct a significant condition adverse to quality (Severity Level II, \$110,000), (4) failure to implement procedures (Severity Level II, \$110,000), (5) a second failure to provide complete and accurate information (Severity Level I, \$120,000), (6) a second failure to promptly identify and correct a significant condition adverse to quality (associated with a Red SDP finding, no civil penalty), (7) a second failure to implement procedures (associated with a Red SDP finding, no civil penalty), and (8) a third failure to provide complete and accurate information (Severity Level III, beyond statute of limitations for imposition of civil penalty).

Tennessee Valley Authority (Watts Bar 1) EA-05-036 - On April 11, 2005, a Notice of Violation was issued for a violation associated with a White SDP finding involving the licensee's failure to promptly identify and correct silt blockage of the essential raw cooling water line to the 1A-A centrifugal charging pump. The violation cited the licensee's failure to establish measures to assure that conditions adverse to quality, such as failures and malfunctions, are promptly identified and corrected, as required in 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions."

Arizona Public Service Company (Palo Verde) EA-05-051 - On April 8, 2005, a Notice of Violation and Proposed Imposition of a Civil Penalty in the amount of \$50,000 was issued for a Severity Level III violation. The violation involved the licensee's failure to perform a written safety evaluation and obtain Commission approval prior to making a procedural change which resulted in a change to the facility as described in the Updated Final Safety Analysis Report that increased the probability of a malfunction of equipment important to safety previously evaluated in the safety analysis report.

Arizona Public Service Company (Palo Verde) EA-04-221 - On April 8, 2005, a Notice of Violation was issued for a violation associated with a Yellow SDP finding involving a failure to maintain portions of the emergency core cooling system (ECCS) filled with water in accordance with design control requirements. The violation cited the licensee's failure to establish adequate design control measures to assure that the design basis for the ECCS was appropriately translated into specifications, procedures, and instructions.

VIII Power Reactor Security Regulations

In response to the terrorist attacks on September 11, 2001, the NRC and the nuclear industry have taken many actions to ensure the security at nuclear power plants. A series of Advisories, Orders, and Regulatory Issue Summaries have been and, as needed, continue to be issued to strengthen further the security of NRC-licensed facilities and control of nuclear materials. The latest advisory, which addressed fraudulent use of Social Security numbers, was issued on March 23, 2005.

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

Orders were issued on October 23, 2003, to all nuclear reactor licensees and research reactor licensees that transport spent nuclear fuel. The licensees subject to the Order have been issued a specific license by NRC authorizing the possession of spent nuclear fuel and a general license authorizing the transportation of spent nuclear fuel in a transport package approved by the Commission in accordance with the Atomic Energy Act of 1954, as amended, and 10 CFR Parts 50 and 71. The staff began implementation of a revised baseline inspection program to oversee the enhanced security requirements and the higher threat level. Inspection efforts are focusing on verifying implementation of the revised security plans.

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.

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

The NRC continues to support the U.S. Department of Homeland Security (DHS)/Homeland Security Council (HSC) initiative to enhance integrated response planning for power reactor

facilities. The staff is continuing to work with HSC, DHS, Federal Bureau of Investigation, and others to develop plans to address recommended actions. Additionally, the NRC completed six announced imminent aircraft threat walk-throughs with nuclear power plant licensees, and lessons learned have been incorporated into a Safeguards Advisory. Walk-throughs are scheduled to resume in September 2005, following updates to licensees' implementing procedures and NRC review of those procedures.

The staff is also developing Emergency Action Levels (EALs) specifically for events involving credible imminent threats. The EAL development program includes plans to coordinate issues with other agencies and State and local governments.

IX Power Uprates

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

There are three types of power uprates. A measurement uncertainty recapture (MUR) power uprate is a power uprate of less than 2 percent and is 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 105 such reviews. Approximately 13,250 megawatts-thermal (4,417 megawatts-electric) or an equivalent of about four nuclear power plant units has been gained through implementation of power uprates at existing plants. The staff currently has 11 plant-specific power uprate applications under review. The 11 applications under review include 3 MUR power uprates, 2 stretch power uprates, and 6 EPUs. On April 15, 2005, the NRC approved an eight-percent EPU for the Waterford nuclear plant.

In January 2005, the staff completed a survey of nuclear power plant licensees to obtain information regarding the industry's plans related to power uprate applications. Based on this survey, licensees plan to submit power uprate applications for 28 nuclear power plant units in the next five years. These include 14 MUR power uprates, 3 stretch power uprates, and 11 EPUs. Planned power uprates are expected to result in an increase of about 4,663 MWt (1,379 MWe).

X Status of the Davis-Besse Nuclear Power Station

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

XI New Reactor Licensing

The NRC expects to license the next generation of new light-water reactor nuclear power plants using Part 52 of Title 10 of the *Code of Federal Regulations* (10 CFR Part 52). 10 CFR Part 52 governs the issuance of standard design certifications, early site permits (ESPs), and combined licenses for nuclear power plants.

Design Certifications

In a March 24, 2005 meeting, Framatome ANP presented its plan for pre-application review of the EPR reactor design. Framatome's objective is to standardize the EPR design as much as possible, with consideration of codes, standards, and regulations in each country where it is deployed. Framatome plans to submit a design certification application to the NRC in late 2007 after it completes the engineering analysis necessary to demonstrate compliance with U.S. codes and standards and NRC regulations.

By letter dated April 11, 2005, the NRC informed Pebble Bed Modular Reactor (PBMR), (Pty.) Ltd., that the NRC expects to be able to support meetings in FY 2005 to discuss PBMR pre-application review planning activities, but did not anticipate substantial technical review activities during this fiscal year.

On April 18, 2005, the design certification proposed rule (DCR) for the Westinghouse AP1000 design was published in the Federal Register (70 FR 20062). This proposed rule would amend 10 CFR Part 52 to certify the AP1000 standard plant design. If approved, applicants intending to construct and operate an AP1000 reactor may do so by referencing the AP1000 DCR. The final rulemaking is scheduled to be issued by December 2005. In 2005, General Electric is scheduled to submit its design certification application for the Economic and Simplified Boiling Water Reactor design. The reactor design review and accompanying rule issuance is scheduled to take 42-60 months to complete.

Early Site Permits

The staff is currently reviewing the three ESP applications. In September 2003, Dominion Nuclear North Anna, LLC submitted an ESP application for its North Anna site, located in Louisa County, Virginia. The staff issued the draft SER and the draft environmental impact statement (EIS) for the North Anna site on December 20, 2004. The final SER for the North Anna ESP is scheduled to be issued in June 2005, and the final EIS is scheduled for August 2005.

In September 2003, Exelon Generation Company, LLC submitted an ESP application for its Clinton site, located in Harp Township, DeWitt County, Illinois. The staff issued the draft SER for the Clinton ESP on February 10, 2005, and the draft EIS on March 2, 2005. The final SER is scheduled for August 2005, and the final EIS is scheduled for October 2005.

System Energy Resources, Inc. submitted an ESP application, in October 2003, for its Grand Gulf site, located in Claiborne County, Mississippi. The staff issued the draft SER for the Grand

Gulf ESP on April 7, 2005, and the draft EIS on April 21, 2005. The final SER is scheduled to be issued in October 2005, and the final EIS is scheduled to be issued in December 2005.

In addition to the three ESP applications under staff review, the staff anticipates the submission of an ESP application from Southern Nuclear Operating Company (SNC) during the summer of 2006. SNC has not indicated for which site it will request an ESP.

Combined License

On April 26, 2005, DOE announced that it had finalized a cooperative agreement with NuStart Energy Development, LLC that the industry consortium will use to develop a detailed schedule and budget for selecting up to two potential sites for new power reactors. NuStart plans to submit an application for a combined construction and operating license to NRC in 2008. In March, DOE made a similar announcement about a cooperative agreement with the Dominion-led consortium. DOE is also sponsoring a Tennessee Valley Authority (TVA)-led consortium, which is evaluating a possible new reactor at the TVA's Bellefonte nuclear site.