August 12, 2006

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) 2006 Energy and Water Development Appropriations Act, House Reports 109-86 and 109-275, directed the U.S. Nuclear Regulatory Commission (NRC) to provide a quarterly report on the status of its licensing and other regulatory activities. Previous reports were provided to you on a monthly basis, in accordance with the FY 2005 Energy and Water Development Appropriations Act, House Reports 108-554 and 108-792. 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 submit this report, which covers the quarter April through June 2006. This is the first quarterly report that I have submitted to Congress during my tenure as the NRC Chairman. I look forward to providing future reports and working closely with the Congress over the next five years.

I am also providing in this cover letter the following additional information in order to keep you fully and currently informed of NRC's regulatory activities.

On June 23, 2006, the NRC staff issued a license to Louisiana Energy Services (LES) to construct and operate a gas centrifuge enrichment plant in Lea County, New Mexico. This license is the first issued by the NRC for a full-scale uranium enrichment facility that uses gas centrifuge technology. The proposed National Enrichment Facility is authorized to enrich uranium up to 5 percent of the fissile isotope uranium-235 for use in the manufacture of fuel for commercial nuclear power plants. LES plans to begin construction in August 2006, with operations commencing in 2008, reaching full capacity in 2013. The process that led to the approval of the LES license was a significant undertaking for the NRC and serves as a good example of the NRC staff's ability to complete complex licensing actions efficiently.

Since the issuance of the last report, the nuclear industry has expressed increased interest in the construction of new reactors. The NRC expects to receive a significant number of new reactor Combined License (COL) applications for these new reactors over the next several years and is continuing to develop the infrastructure necessary to support the application reviews as well as the associated inspection activities. At this time, the NRC has received letters of intent from potential applicants for a total of 19 site specific COLs for up to 27 nuclear units.

To prepare for the expected increase in workload, the NRC is hiring staff at a pace that is allowing replacement of losses and hiring of additional staff to support new reactor work. The NRC is positioned to meet hiring challenges for the next couple of years and has already exceeded its FY 2006 hiring goals. The agency is also continuing to implement the provisions of the Federal Workforce Flexibility Act of 2004 and the Energy Policy Act of 2005 regarding annual leave enhancements; expanded use of recruitment, relocation, and retention incentives; pension offset; and student scholarships and fellowships in critical skills areas.

With the increase in staff, NRC headquarters has exceeded the capacity of its White Flint Complex in Rockville, Maryland. Although temporary space has been identified that is sufficient for the near term, it is not sufficient to address long term needs. Operational efficiency at headquarters will be essential to the success of the design-centered approach to licensing of new reactors. This includes a contiguous organizational structure and availability of conference rooms for frequent meetings with applicants, vendors, and support contractors. NRC has been working with the General Services Administration and the Office of Management and Budget to acquire permanent new space that would be in close proximity to the White Flint Complex.

On July 21, 2006, the Commission approved a significant organizational realignment to position the NRC to accommodate the expected new reactor licensing workload. The Commission has approved the creation of a separate Office of New Reactors with responsibility for new reactor licensing, while maintaining an Office of Nuclear Reactor Regulation whose primary responsibility will continue to be ensuring the safe operation of current operating reactors. I am convinced that the reorganization will enhance the effectiveness of the agency in carrying out its mission to protect the public health and safety.

As part of the NRC's restructuring to prepare for the new reactor workload, the Commission approved the establishment of a dedicated organization in the NRC's Region II office in Atlanta, Georgia, to be the center of all construction inspection activity for new nuclear power plants. The Region II office, through the conduct of the Construction Inspection Program, will be responsible for the day-to-day on-site inspections and specialized inspection resources supporting the agency's oversight of all new nuclear power plant construction for the entire country. The Commission established this program to ensure that inspection methods are consistent for all new nuclear power plants and to allow the NRC to incorporate lessons learned more quickly.

On June 16, 2006, the Commission approved the reorganization of the Office of Nuclear Materials Safety and Safeguards (NMSS) and the Office of State and Tribal Programs. The Office of State and Tribal Programs and the current NMSS divisions of Industrial and Medical Nuclear Safety, Waste Management and Environmental Protection will merge and integrate their functions to form the new Office of National Materials Program. The new NMSS will focus on fuel cycle issues and will retain the divisions of Fuel Cycle Safety and Safeguards, High-Level Waste and Repository Safety, and the Spent Fuel project Office. The reorganization is a

result of significant growth in the Agreement State Program, which places a greater importance on NRC's cooperation with the states, especially in the area of enhancing controls over radioactive materials. In addition, the NRC will face several regulatory challenges regarding the nuclear fuel cycle in coming years, including the review of a license application for a high-level waste repository and involvement in the Department of Energy's Global Nuclear Energy Partnership for recycling spent fuel.

The NRC continues to address the issue of unintended releases of radioactive material into the groundwater from nuclear power plants and is ensuring that plant operators take appropriate corrective action. Most U.S. commercial nuclear reactors release liquid effluents containing some radioactive material in a controlled manner. These controlled releases are conducted in accordance with strict regulatory limits. Limits on these releases ensure that any radiation dose that could be received by a member of the public is a small fraction of normal background radiation. In a few cases, contaminated water has leaked into groundwater migrating off the plant site. Although all available information continues to show public health and safety are unaffected by these instances, the agency is addressing the issue of unintended releases of radioactive material, even in non-hazardous amounts. On June 30, 2006, NRC issued a finding to Exelon Generation Company for multiple failures to evaluate properly the radiological impacts of unplanned releases from a pipe which goes from the Braidwood Nuclear Power Plant to the Kankakee River. The NRC's findings were based on the assessment of deficiencies in Braidwood's environmental control programs.

On July 11, 2006, the NRC approved an increase in the licensed steady-state power at the R.E. Ginna Nuclear Power Plant from 1520 megawatts thermal (MWt) to 1775 MWt, (~16.8 percent). The NRC staff determined that the licensee could safely increase the reactor's output primarily by upgrading certain plant systems and components, such as a new high pressure turbine rotor and condensate pump motors. The licensee intends to begin operating Ginna at the higher power level following its fall 2006 refueling.

The NRC renewed the operating licenses for Browns Ferry Units 1, 2, and 3 on May 4, 2006, and Brunswick Units 1 and 2 on June 26, 2006. The licenses for Browns Ferry Units 1, 2, and 3 were extended until December 20, 2033, June 28, 2034, and July 2, 2036, respectively. The licenses for Brunswick Units 1 and 2 were extended until September 8, 2036, and December 27, 2034, respectively. With the issuance of these licenses, the NRC has now renewed the operating licenses for 44 of the 104 reactors in the United States. It should be noted that Tennessee Valley Authority (TVA) shut down all three Browns Ferry units in 1985 to address management and technical issues. Upon successful resolution of these issues, Unit 2 was restarted in 1991. Unit 3 was restarted in 1995. TVA has stated that it will not restart Unit 1 without prior approval from the NRC. With the exception of Unit 1 systems and components that are required to be in-service to support the current de-fueled status of Unit 1 or to support the operation of Units 2 and 3, Unit 1 has remained shutdown with key systems and components placed in maintained storage. TVA has initiated a restart plan to return Unit 1 to service. A regulatory framework for Unit 1 restart has been proposed by TVA as part of this plan.

The agency has also made progress in implementing the Energy Policy Act of 2005. On May 25, 2006, the NRC approved a final rule to relieve certain individuals from the requirements for fingerprinting and criminal history checks. The regulatory relief, authorized by the Atomic Energy Act, was necessary for the NRC to continue to share Safeguards Information (SGI) with certain categories of international and domestic government representatives. The Commission plans to revise and republish a proposed SGI rule to address fingerprinting and criminal history checks more fully; however, immediate relief from these checks for certain individuals was necessary. Individuals covered by this final rule include Federal, State, and local officials involved in security planning and incident response, certain Agreement State employees, and members of Congress who request access to SGI as part of their oversight function. Interrupting access to this information pending the NRC's completion of the overall revision of the SGI rule would impair the agency's day-to-day implementation of its regulatory programs and hamper communications should an emergency occur.

On June 30, 2006, the NRC extended the comment period on the change in the basis of the National Source Tracking rule from promoting the common defense and security to protecting the public health and safety. This rule will require materials licensees to report transactions of Category 1 and 2 radioactive sources, as defined by the IAEA Code of Conduct, to the National Source Tracking System (NSTS). The NRC is developing and will maintain the NSTS, which will be a web-based system that will allow licensees to input source transactions directly. Such sources are widely used in industrial, medical, research, and academic activities throughout the Nation. Should the final rule be implemented under a public health and safety basis, the NRC Agreement States would be responsible for issuing to their licensees legally binding requirements to report radioactive source transactions (manufacture, transfer, receipt, disposal, and disassembly) directly to the NSTS. The Agreement States would also be responsible for oversight (i.e., inspection and enforcement) of their respective licensees' implementation of these requirements. Conversely, should the rule be issued under a common defense and security basis, the oversight role for all affected materials licensees in the U.S. would be the responsibility of the NRC. The comment period was extended until July 28, 2006; comments have been received and are currently being evaluated for resolution.

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

Sincerely,

/RA/

Dale E. Klein

Enclosure:
Quarterly Status Report on the Licensing Activities
and Regulatory Duties of the U.S. NRC, April - June 2006

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 J. 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

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

APRIL - JUNE 2006

TABLE OF CONTENTS[1]

I Implementing Risk-Informed Regulations 2

II Reactor Oversight Process 2

III Status of Issues in the Reactor Generic Issue Program 3

IV Licensing Actions and Other Licensing Tasks 4

V Status of License Renewal Activities 9

VI Enforcement Process and Summary of Reactor Enforcement by Region 10

VII Power Reactor Security Regulations 15

VIII Power Uprates 17

IX New Reactor Licensing 18

[1]Note: The period of performance covered by this report includes activities occurring between the first day of April and last day of June 2006. 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 U.S. Nuclear Regulatory Commission (NRC) continues to make significant progress toward risk-informing its regulations for nuclear power reactors. On November 22, 2004, the NRC published a final rule, 10 CFR 50.69, "Risk-Informed Categorization and Treatment of Structures, Systems, and Components for Nuclear Power Reactors." This risk-informed regulation establishes an alternate set of requirements incorporating up-to-date analytic tools and risk insights to enhance plant safety by enabling nuclear power plant licensees to determine more precisely the safety significance of reactor systems, structures, and components and maintain these structures, systems, and components in a manner commensurate with their safety significance. To ensure the new regulation is properly implemented, the NRC published Revision 1 to Regulatory Guide 1.201, "Guidelines for Categorizing Structures, Systems and Components in Nuclear Power Plants According to Their Safety Significance," in May 2006.

Risk-informed requirements for emergency core cooling systems are also being developed. The NRC published a proposed rule for risk-informing these requirements on November 7, 2005. The NRC is resolving open issues related to this rulemaking as it develops the final rule.

Broad efforts to transform the overall deterministic structure of NRC regulations into a new format based on the use of risk information are also in progress. Since 2003, the NRC has been working on a regulatory structure for new plant licensing that would result in risk-informed, technology-neutral regulations for licensing of future nuclear power reactor designs. The NRC is also investigating whether this risk-informed, technology-neutral regulatory structure should apply or be available to risk-inform the current regulations on light water reactors in 10 CFR Part 50.

In March 2006, the Commission approved the NRC staff's recommendation to issue an Advanced Notice of Proposed Rulemaking (ANPR) on approaches for making technical requirements for power reactors risk-informed, performance-based, and technology neutral (10 CFR Part 53). The ANPR was published in the *Federal Register* on May 4, 2006, (71 FR 26267) with a comment period open until December 2006. The staff held a public meeting June 15, 2006, to discuss with stakeholders the questions on the topics in the ANPR and to inform stakeholders of the changes made to the technology neutral framework document. A public workshop on the framework is planned for September 2006.

II Reactor Oversight Process

The NRC continues to implement the Reactor Oversight Process (ROP) at all nuclear power plants. Effective April 1, 2006, the NRC updated its ROP with the introduction of the Mitigating Systems Performance Index (MSPI), which tracks the availability and reliability of systems used to reduce the severity of incidents at a nuclear power plant. The NRC has worked with stakeholders since 2002 on refining the MSPI through a pilot program. The development of the new indicator has included multiple public meetings and public comments as well as input from the Advisory Committee on Reactor Safeguards and other nuclear regulators interested in using similar methods. The NRC and stakeholders have established a risk assessment methodology and have developed software and databases to provide the raw data necessary for evaluating the index.

Meetings with interested stakeholders continue to be held on a monthly basis to collect feedback on the effectiveness of the process and to consider feedback for future ROP

refinements. Recent activities include the following:

- The staff hosted monthly ROP and MSPI public meetings on April 20, May 17, and June 14, 2006. Meeting attendees discussed ROP cross-cutting issues, the safety culture initiative, significance determination process timeliness improvements, performance indicator (PI) improvements, and open/new frequently asked questions on the PIs. The meetings also addressed MSPI guidance clarifications and revisions, MSPI training issues, and a regulatory issues summary (RIS) to be issued concurrent with MSPI implementation.

- The staff traveled to Toronto, Canada, during the week of May 1, 2006, to attend the Nuclear Energy Agency's Working Group on Inspection Practices workshop. The purpose of the workshop was to identify quality inspection practices for international regulatory bodies in their oversight role.

III Status of Issues in the Reactor Generic Issue Program

During the reporting period, the staff has achieved progress in resolving the following generic issues (GI):

Generic Issue 163, "Multiple Steam Generator Tube Leakage"

The staff and the industry have reached agreement on new generic requirements for maintaining steam generator (SG) tube integrity. The industry submitted, and the staff has approved, a generic template, referred to as Technical Specification Task Force (TSTF)-449, for these requirements. In response to Generic Letter 2006-01, "Steam Generator Tube Integrity and Associated Technical Specifications," issued on January 20, 2006, all pressurized-water reactor (PWR) licensees have submitted license amendment applications to change their Technical Specifications in accordance with TSTF-449. These new Technical Specifications are performance-based and will improve the effectiveness of regulatory requirements in maintaining SG tube integrity since they are more directly focused on tube integrity than the earlier, more prescriptive requirements.

Generic Issue 191, "Assessment of Debris Accumulation on PWR Sump Performance"

The NRC completed testing and analysis associated with the initial phase of the chemical effects research; four related NUREG or NUREG/CR reports describing this work are expected to be published by the end of fiscal year (FY) 2006. Additionally, the NRC completed containment material head loss testing and the development of a head loss correlation model, which was calibrated and validated using the testing program data.

All other GIs continue to be on track in accordance with the schedules previously established.

IV Licensing Actions and Other Licensing Tasks

Operating power reactor licensing actions are defined as orders, license amendments, exemptions from regulations, relief from inspection or surveillance requirements, topical reports submitted on a plant-specific basis, notices of enforcement discretion, or other actions requiring NRC review and approval before they can be implemented by licensees. The FY 2006 NRC Performance Plan incorporates two output measures related to licensing actions -- number of licensing actions completed per year and age of the licensing action inventory.

Other licensing tasks for operating power reactors are defined as licensee responses to NRC requests for information through generic letters or bulletins, NRC responses to 2.206 petitions, NRC review of generic topical reports, responses by the Office of Nuclear Reactor Regulation to regional office 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 licensees. The FY 2006 NRC Performance Plan incorporates one output measure related to other licensing tasks -- the number of other licensing tasks completed.

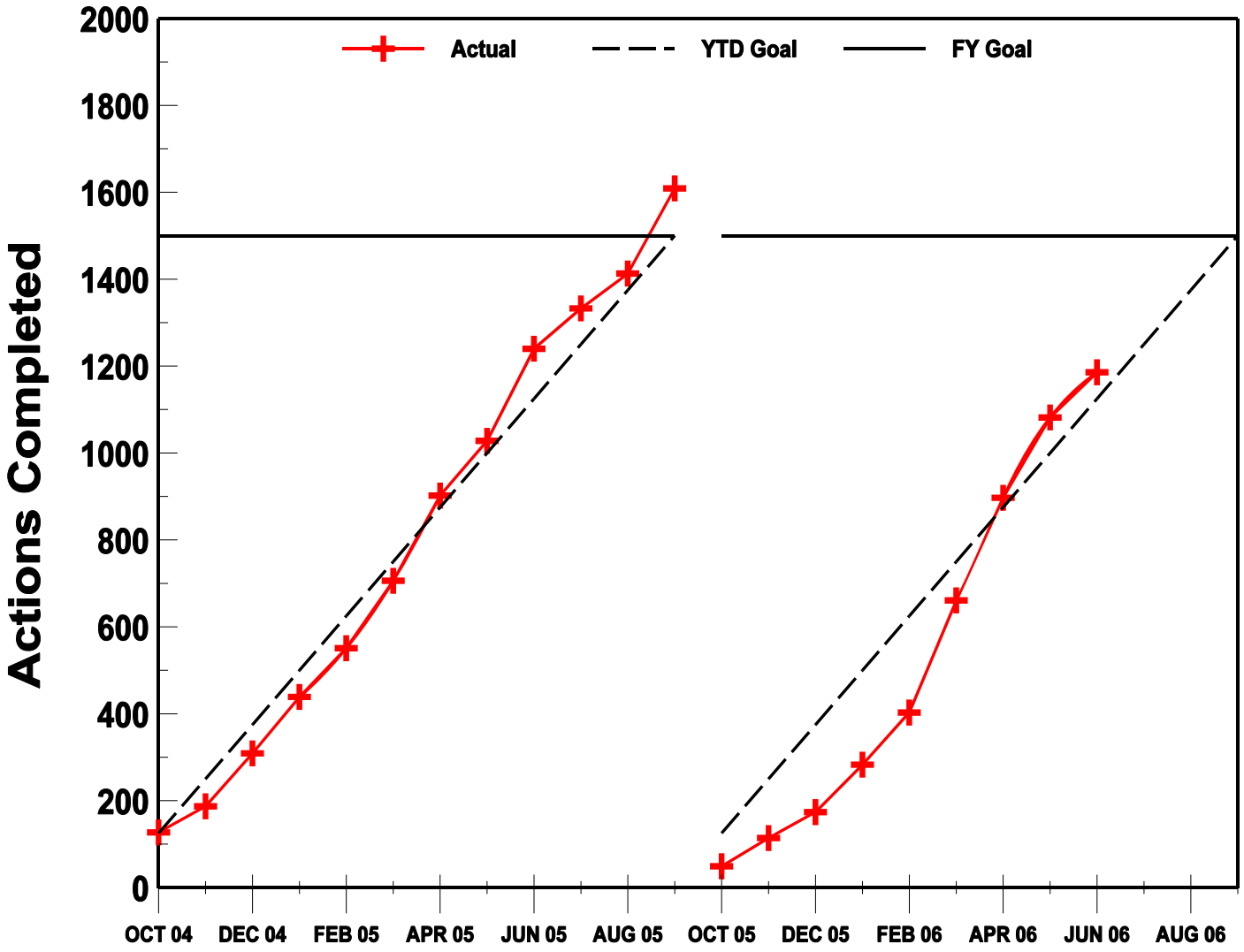
The actual FY 2004 and FY 2005 results, the FY 2006 goals, and the actual FY 2006 results for the three NRC Performance Plan output measures for operating power reactor licensing actions and other licensing tasks are shown in the following table.

PERFORMANCE PLAN				
Output Measure	**FY 2004 Actual**	**FY 2005 Actual**	**FY 2006 Goals**	**FY 2006 Actual (thru 06/30/2006)**
Licensing actions completed/year	1741	1609	≥ 1500	1185
Age of licensing action inventory	91% ≤ 1 year; and 100% ≤ 2 years	92.6%≤ 1 year; and 99.9% ≤ 2 years	96% ≤ 1 year and 100% ≤ 2 years	86.9%≤ 1 year; 99.0% ≤ 2 years
Other licensing tasks completed/year	671	715	≥ 500	528

The charts on the following pages show NRC's FY 2006 trends for the three operating power reactor licensing action and other licensing task output measure goals:

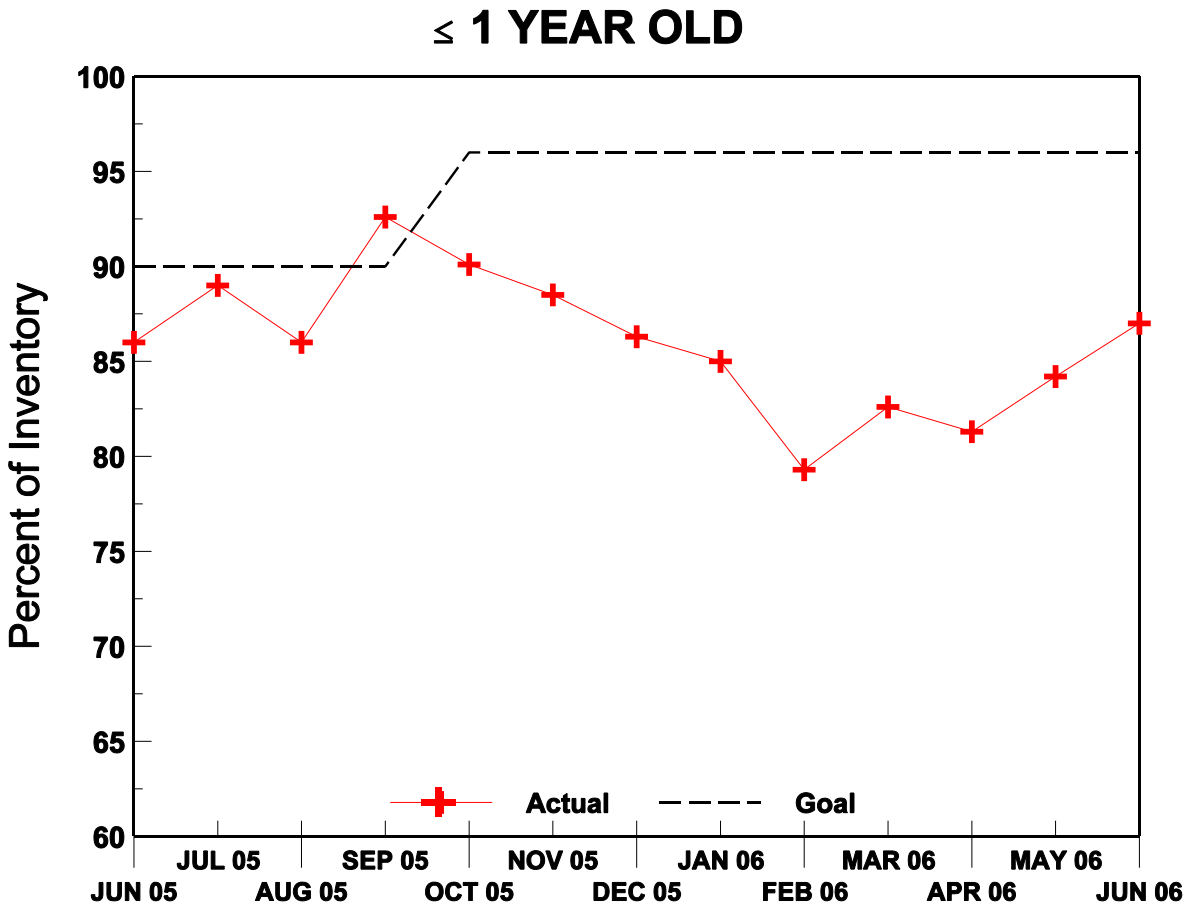
Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Completed Licensing Actions



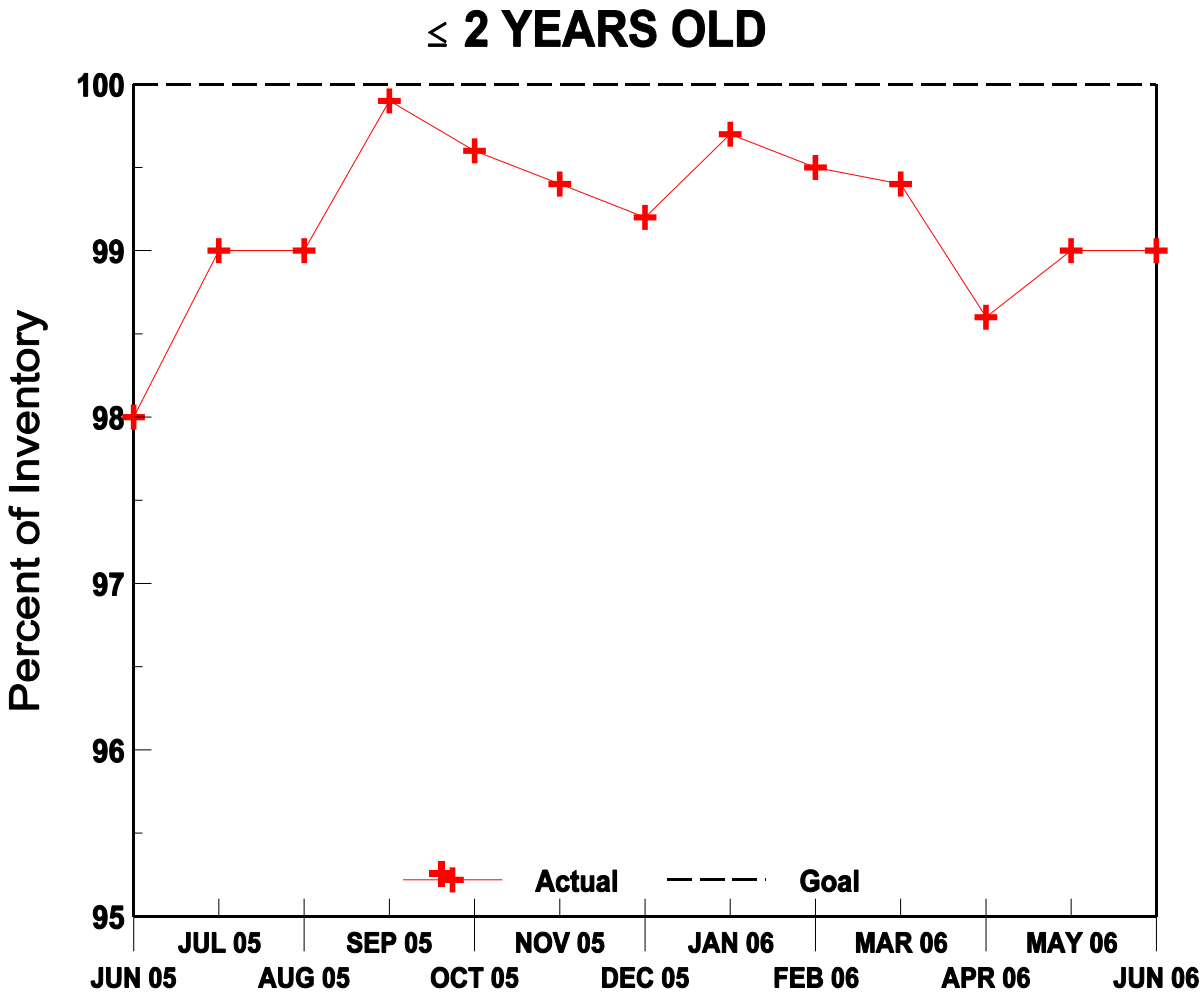
Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Age of Licensing Action Inventory



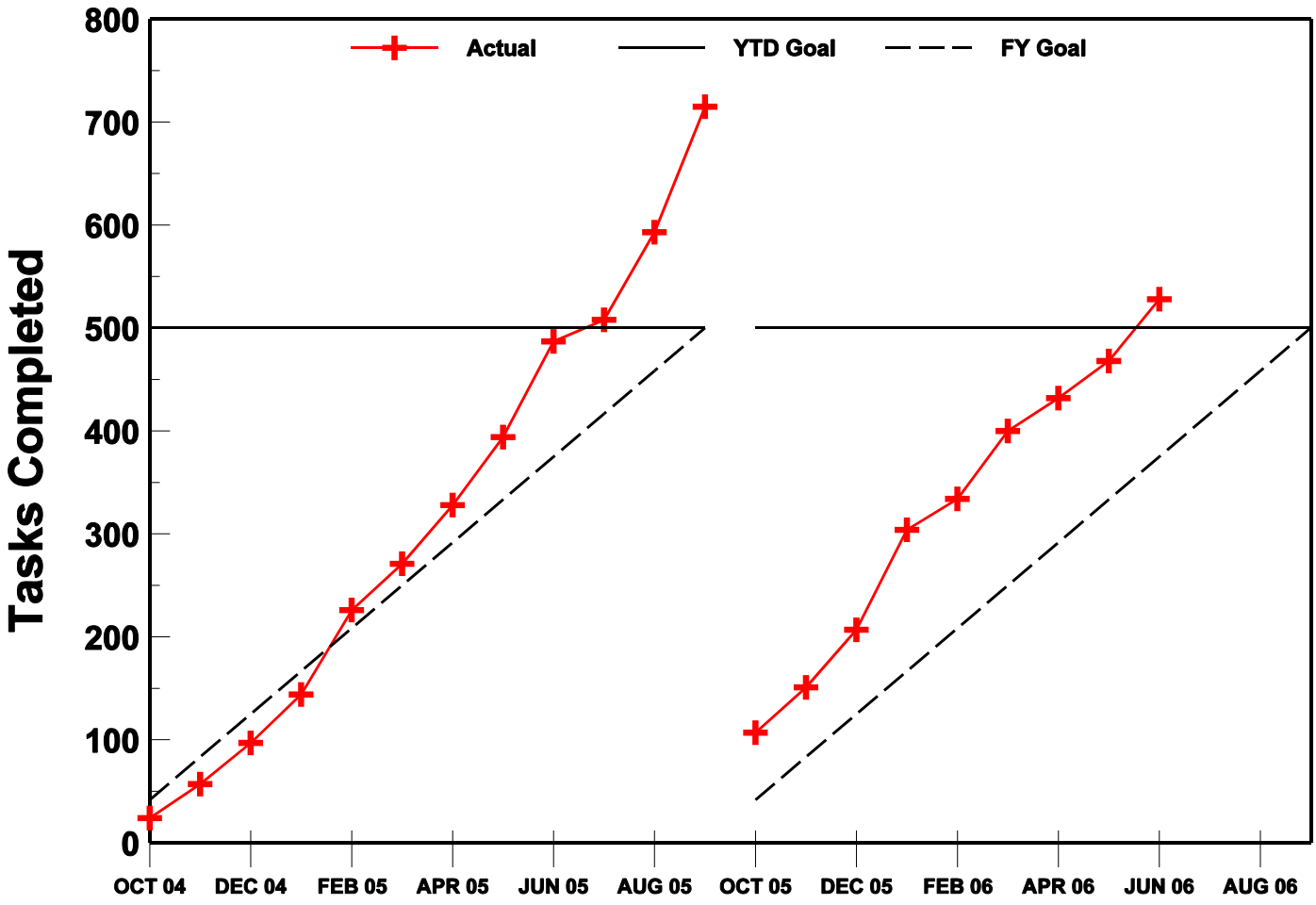
Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Age of Licensing Action Inventory



Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Completed Other Licensing Tasks



V Status of License Renewal Activities

The NRC has completed the review of license renewal applications for 44 of the 104 units licensed to operate.

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

On May 4, 2006, the Office Director signed the renewed licenses for Browns Ferry Units 1, 2, and 3.

Brunswick, Units 1 and 2, License Renewal Application

On June 26, 2006, the Office Director signed the renewed licenses for Brunswick Units 1 and 2.

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

The staff issued the final supplemental environmental impact statement (SEIS) on May 19, 2006, and the Safety Evaluation Report (SER) on June 1, 2006. The staff anticipates a decision on the renewed licenses in October 2006.

Monticello License Renewal Application

The draft SEIS was issued in January 2006, and the draft SER, identifying remaining open items, was issued on April 26, 2006. A request for hearing was received in response to the NRC's notice of opportunity for hearing, and an Atomic Safety and Licensing Board (ASLB) was established. The proceeding was terminated by the ASLB for lack of standing by the petitioners and inadmissable contentions. A subsequent appeal to the Commission was rejected.

Palisades License Renewal Application

The draft SEIS was issued in February 2006, and the draft SER, identifying remaining open items, was issued on June 1, 2006. A request for hearing was received in response to the NRC's notice of opportunity for hearing, and an ASLB was established. The ASLB determined that the petitioner did not submit an admissible contention and terminated the proceeding. The petitioner has appealed the ASLB's decision to the Commission.

Oyster Creek License Renewal Application

The Oyster Creek license renewal application is currently under review. The draft SEIS was issued on June 8, 2006, and the draft SER, identifying any remaining open items, is scheduled to be issued in August 2006. A request for hearing was received in response to the NRC's notice of opportunity for hearing, and an ASLB was established. The Board has admitted one contention and the hearing process is proceeding.

Pilgrim License Renewal Application

On January 27, 2006, the NRC received an application for renewal of the operating license for Pilgrim Nuclear Power Station. The staff has completed its acceptance review and has found the application acceptable for docketing and review. The staff received two contentions in response to the publication of opportunity for hearing -- one from a group called Pilgrim Watch, and another from the Attorney General, State of Massachusetts.

Vermont Yankee License Renewal Application

On January 27, 2006, the NRC received an application for renewal of the operating license for Vermont Yankee Nuclear Power Station. The staff has completed its acceptance review and has found the application acceptable for docketing and review. Until it is determined whether a hearing will be conducted, a 30-month review schedule has been established with a final decision on issuance of the renewed license scheduled for July 2008.

VI Enforcement Process and Summary of Reactor Enforcement by Region

In the interest of providing a clearer picture of NRC enforcement actions, the following tables have been redesigned to separate the non-escalated and escalated reactor enforcement data. The data is now being depicted in the following three tables: "Non-Escalated Reactor Enforcement Actions," "Escalated Reactor Enforcement Actions Associated with Traditional Enforcement," and "Escalated Reactor Enforcement Actions Associated with the Reactor Oversight Process." Overall totals have also been added at the end of each table to help ensure accuracy.

Reactor Enforcement by Region

NON-ESCALATED REACTOR ENFORCEMENT ACTIONS						
		Region I	Region II	Region III	Region IV	TOTAL
Cited Severity Level IV or GREEN	Quarter 3 FY 06	4	0	0	0	4
	FY 06 YTD Total	7	0	1	1	9
	FY 05 Total	6	0	4	0	10
	FY 04 Total	1	0	2	3	6
Non-Cited Severity Level IV or GREEN	Quarter 3 FY 06	71	34	57	62	224
	FY 06 YTD Total	[2]175	[3]110	177	189	651
	FY 05 Total	239	197	300	282	1018
	FY 04 Total	271	175	290	301	1037
TOTAL Cited and Non-Cited Severity Level IV or GREEN	Quarter 3 FY 06	75	34	57	62	228
	FY 06 YTD Total	182	110	178	190	660
	FY 05 Total	245	197	304	282	1028
	FY 04 Total	272	175	292	304	1043

NOTE: The non-escalated enforcement data above reflects the cited and non-cited violations either categorized at Severity Level IV or associated with GREEN findings during the referenced time periods. The numbers of cited violations are based on enforcement action tracking system data that may be subject to minor changes following verification. The monthly totals generally lag by 30 days due to inspection report and enforcement development. GREEN findings that do not have associated violations are not included in this data.

[2] The FY 06 YTD Total for Region I and the overall FY 06 YTD Totals were increased by two to reflect a correction in the December 2005 non-cited violation data. (This note was in the Second Quarter FY 06 Congressional Report, but the totals were not increased.)

[3] The FY 06 YTD Total for Region II and the overall FY 06 YTD Totals were increased by 18 to reflect a correction in the January 2006 non-cited violation data.

ESCALATED REACTOR ENFORCEMENT ACTIONS ASSOCIATED WITH TRADITIONAL ENFORCEMENT						
		Region I	Region II	Region III	Region IV	TOTAL
Severity Level I	Quarter 3 FY 06	0	0	0	0	0
	FY 06 YTD Total	0	0	0	0	0
	FY 05 Total	0	0	2	0	2
	FY 04 Total	0	0	0	0	0
Severity Level II	Quarter 3 FY 06	0	0	0	0	0
	FY 06 YTD Total	0	0	0	0	0
	FY 05 Total	0	1	2	0	3
	FY 04 Total	0	1	0	0	1
Severity Level III	Quarter 3 FY 06	[4]1	[5]1	2	0	4
	FY 06 YTD Total	1	1	6	0	8
	FY 05 Total	2	1	3	2	8
	FY 04 Total	1	2	[6]5	0	8
TOTAL Violations Cited at Severity Level I, II, or III	Quarter 3 FY 06	1	1	2	0	4
	FY 06 YTD Total	1	1	6	0	8
	FY 05 Total	2	2	7	2	13
	FY 04 Total	1	3	5	0	9

NOTE: The escalated enforcement data above reflects the Severity Level I, II, or III violations or problems cited during the referenced time periods.

[4] One Severity Level III violation in Region I will not be described because it is related to security.

[5] One Severity Level III violation in Region II will not be described because it is related to security.

[6] Although a Severity Level III violation was correctly documented in the 09/04 Congressional Report, the Severity Level III FY 04 Total for Region III as well as the applicable overall totals were not increased by one in order to reflect this issue. This error was identified during an internal audit, and it was corrected in this Congressional Report.

ESCALATED REACTOR ENFORCEMENT ACTIONS ASSOCIATED WITH THE REACTOR OVERSIGHT PROCESS						
		Region I	Region II	Region III	Region IV	TOTAL
Violations Related to RED Findings	Quarter 3 FY 06	0	0	0	0	0
	FY 06 YTD Total	0	0	0	0	0
	FY 05 Total	0	0	3	0	3
	FY 04 Total	0	0	1	0	1
Violations Related to YELLOW Findings	Quarter 3 FY 06	0	0	0	0	0
	FY 06 YTD Total	0	0	1	0	1
	FY 05 Total	0	0	0	1	1
	FY 04 Total	0	0	3	0	3
Violations Related to WHITE Findings	Quarter 3 FY 06	[7]1	3	2	0	6
	FY 06 YTD Total	2	3	3	1	9
	FY 05 Total	5	5	5	1	16
	FY 04 Total	3	4	3	6	16
TOTAL Related to RED, YELLOW, or WHITE Findings	Quarter 3 FY 06	1	3	2	0	6
	FY 06 YTD Total	2	3	4	1	10
	FY 05 Total	5	5	8	2	20
	FY 04 Total	3	4	7	6	20

NOTE: The escalated enforcement data above reflects the violations or problems cited during the referenced time periods which were associated with either RED, YELLOW, or WHITE findings. RED, YELLOW, or WHITE findings that do not have associated violations are not included in this data.

[7] One violation associated with a WHITE significance determination process finding in Region I will not be described because it is related to security.

Description of Escalated Reactor Enforcement Actions Associated with Both Traditional Enforcement and the Reactor Oversight Process (as Well as Any Other Significant Actions) Taken During the Third Quarter of Fiscal Year 2006

Tennessee Valley Authority (Watts Bar Nuclear Power Plant) EA-05-169 – On April 7, 2006, a Notice of Violation was issued for a violation associated with a WHITE significance determination process (SDP) finding involving a challenge to reactor coolant system (RCS) integrity by multiple pressurizer power-operated relief valve (PORV) actuations and a challenge to RCS inventory control by loss of RCS coolant via the open PORVs. This occurred on February 22, 2005, during transition to solid plant operations. The violation cited the licensee's failure to raise charging flow slowly to fill the pressure at less than 30 gallons per minute as required by Technical Specification 5.7.1.1 and Procedure GO-6, Unit Shutdown from Hot Standby to Cold Shutdown.

Florida Power and Light Company (Turkey Point Nuclear Plant) EA-06-027 – On April 17, 2006, a Notice of Violation was issued for a violation associated with a WHITE SDP finding involving the licensee's failure to restore the B auxiliary feedwater (AFW) pump to operable status within 30 days, to place the unit in at least Hot Standby during this time, and to identify and correct the condition adverse to quality even though pump bearing vibration levels and oil samples provided indication of the adverse condition. In this case, the B AFW pump was placed in service on September 10, 2003, in an inoperable condition due to a misaligned radial bearing, and the inoperable condition was not identified until November 7, 2005. The violation cited the licensee's failure to implement the requirements in Technical Specification 3.7.1.2 and 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions."

Nuclear Management Company (Duane Arnold Energy Center) EA-04-053 – On May 1, 2006, a Notice of Violation/Exercise of Enforcement Discretion was issued for a willful Severity Level III violation involving a Refueling Floor Supervisor who deliberately directed an operator to relocate irradiated items in the cask pool without notifying health physics or ensuring that health physics personnel were present prior to relocating the irradiated items on July 23, 2003. The NRC determined that the licensee promptly identified the violation and that the corrective actions taken were prompt and complete. Therefore, in recognition of the licensee's self identification of the violation and overall efforts to complete corrective actions, enforcement discretion in accordance with Section VII.B.6 of the Enforcement Policy was exercised to refrain from issuing a civil penalty for the Severity Level III violation.

Nuclear Management Company (Duane Arnold Energy Center) EA-06-047 – On May 1, 2006, a Notice of Violation was issued for a Severity Level III violation involving failure to complete a pre-fuel-move checklist prior to relocating three irradiated fuel bundles in the Duane Arnold spent fuel/cask pool. Specifically, a designated fuel handling supervisor failed to complete the checklist, as required by a Duane Arnold fuel handling procedure, before moving the irradiated fuel bundles.

South Carolina Electric & Gas Company (V.C. Summer Nuclear Station) EA-06-046 – On May 5, 2006, a Notice of Violation was issued for a violation associated with a WHITE SDP finding involving shipment of radioactive material which contained a package with radiation levels on the external surfaces that exceeded applicable regulatory requirements. The violation cited the licensee's failure to design and prepare for shipment properly a package of radioactive material that was transported from the licensee's facility to an off-site waste processing vendor.

Specifically, a package was shipped by V.C. Summer on May 26, 2005, and arrived at a waste processing vendor facility in Oak Ridge, Tennessee, on May 27, 2005, with contact radiation levels of 600 millirem per hour on the side external surface of the package in one specific location that was approximately 10 feet from the ground. This exceeded the regulatory limit of 200 millirem per hour at any point on the external surface of the package per 10 CFR 71.5 and 49 CFR 173.441.

Exelon Generation Company, LLC (Braidwood Nuclear Power Plant) EA-06-081 – On June 29, 2006, a Notice of Violation was issued for a violation associated with a WHITE SDP finding involving multiple failures of the licensee to evaluate adequately the radiological hazards associated with the leaks from the circulating water blowdown line vacuum breakers and to assess the environmental impact of the resultant on-site and off-site tritium contamination. Specifically, the licensee did not perform surveys to ensure compliance with 10 CFR 20.1501 to demonstrate that dose limits for members of the public were met. Contrary to technical specification requirements, the licensee failed to determine the cumulative dose contributions from liquid effluents inadvertently leaked to on-site and off-site locations and to establish an appropriate surveillance and monitoring program to evaluate the relationship between quantities of radioactive material released in effluents and resultant doses to individuals from principal pathways of exposure.

Exelon Generation Company, LLC (Quad Cities Nuclear Power Station) EA-06-112 – On June 29, 2006, a Notice of Violation was issued for a violation associated with a WHITE SDP finding involving licensee's failure to establish measures to ensure that the Unit 1 electromatic relief valves (ERV) remained operable. In this case, the licensee failed to establish measures to ensure that the application of the ERV actuators (which are essential to perform the safety-related reactor vessel depressurization and reactor overpressure protection functions) was reviewed and remained suitable for operation prior to implementing the Unit 1 extended power uprate (EPU) during November 2002. This resulted in multiple ERVs becoming inoperable and unavailable due to being subjected to significantly higher vibration levels during Unit 1 operation at EPU power levels.

VII 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 NRC is codifying through rulemaking the actions taken to enhance security of NRC power reactor licensees. On March 29, 2006, NRC held a public meeting to receive comments on the proposed rule on fitness-for-duty (10 CFR Part 26), which will update the drug and alcohol testing provisions and establish enforceable requirements of the management of worker fatigue. In response to public comments, NRC is preparing revisions to the proposed rule in those two areas. The public comment period for a proposed rule on the Design Basis Threat (DBT) (10 CFR 73.1) ended February 27, 2006. The DBT rulemaking specifies the adversary characteristics that nuclear power plants and certain related facilities must be able to defend against with high assurance and would amend the NRC's regulations to include, among other things, the supplemental security requirements previously imposed by the Commission's DBT Orders of April 29, 2003. This rulemaking is also addressing specific threat attributes identified

in Section 651 of the Energy Policy Act of 2005. Resolution of public comments on the proposed DBT rule is in process. A comprehensive proposed rule on Requirements for Physical Protection (10 CFR 73.55) incorporating safety/security interface requirements is scheduled to be published for public comment later this year.

The NRC is now conducting full force-on-force exercises at each site on a normal, three-year cycle using the 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. On May 1, 2006, NRC issued interim guidance on making cover letters for security-related inspection reports, including force-on-force inspections, publicly available. The cover letters transmitting security-related inspection reports that are issued on or after May 8, 2006, will be placed in ADAMS and will be available to the general public. The cover letters will acknowledge that a security inspection has been conducted and whether any findings were identified. The number of Green (very low significance) findings identified during the inspection will be noted as well as whether any greater-than-Green findings were identified; however the number of greater-than-Green findings will not be noted in the letters. The specific details of findings will not be included in the publicly available cover letters. The details of the inspection findings will continue to be shared with appropriately authorized State officials. Final guidance will be incorporated into IMC-0612, “Reactor Inspection Reports.”

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, the Federal Bureau of Investigation, and others to develop plans to address recommended actions. Working closely with licensees and DHS, the staff also developed Emergency Action Levels (EAL) specifically for events involving credible imminent threats. An emergency preparedness, industry-identified, frequently-asked questions (FAQ) process was implemented in September 2005, and in January 2006, NRC held the initial public meeting with industry representatives to discuss FAQs and proposed resolutions dealing with EAL guidance. On May 4, 2006, NRC conducted a public meeting to discuss the EAL FAQs submitted by Nuclear Energy Institute (NEI) and the industry, and NRC EAL guidance endorsed by Regulatory Guide 1.101. Earlier this year, NRC issued the summary and analysis of more than 700 comments received during the August 31-September 1, 2005, emergency preparedness public meeting held to obtain stakeholder input to enhance emergency preparedness regulations and guidance. As a followup to the August 2005 meeting, the NRC conducted a “Followup Public Meeting with Non-Governmental Organizations Regarding the Review of Emergency Preparedness Regulation and Guidance for Commercial Nuclear Power Plants,” on May 19, 2006, to receive input from non-governmental organizations on topics including security-based action levels, security-based scenarios (no release) drills and exercises, off-site protective action recommendations, and public alert and notification.

On April 27, 2006, the NRC staff conducted a workshop on “Sustaining Safe Nuclear Operations in an Influenza Pandemic.” The workshop looked at the potential safety consequences at nuclear plants due to high rates of employee absenteeism caused by a flu pandemic. One of the objectives of the workshop was to determine the actions NRC might need to take on an emergency basis to ensure that safety, security, emergency preparedness, and reliable electricity production are all maintained. This workshop brought to light issues affecting the safe production of electricity and security at NRC-licensed facilities during a rapidly spreading pandemic. The workshop was very well attended by industry, State officials, Federal agencies,

and the NRC staff. The NRC staff documented the issues that were identified throughout the workshop and will share them with the participants.

NRC has completed several actions in preparation for the 2006 hurricane season. On May 10, 2006, NRC implemented a standardized Hurricane Response Procedure (IRP 091001) that incorporated the recommendations required by the Hurricane Lessons Learned Task Force. These recommendations provide a streamlined method for hurricane response by addressing Federal coordination, communication tools, and employee safety. Training on this standardized procedure by all applicable staff at NRC headquarters and the Regions was completed on May 31, 2006. In addition, NRC has updated the hurricane tracking software in the Headquarters Operation Center.

On June 7, 2006, NRC management met to discuss roles and responsibilities of the Regional Federal Security Coordinators (FSCs) required by the Energy Policy Act of 2005. The NRC designated Regional FSCs in each of the NRC Regional Offices in December 2005. The primary responsibilities for the FSCs are to communicate with the Commission and other Federal, State, and local authorities concerning threats; monitor classes of facilities; and assist in coordination of security measures among the private security forces. A discussion regarding the purpose and conduct of the Information Assessment Team was also held. Considerations for the implementation of FSC roles and responsibilities are in development. NRC staff will assess effectiveness after one year.

The NRC has completed the site-specific spent fuel pool assessments that were begun on July 5, 2005, and issued the last of the assessment reports on December 16, 2005. NRC conducted these assessments to identify additional mitigation strategies to enhance the spent fuel pool cooling safety function under severe circumstances challenging the functional capabilities of the plant. In January 2006, the industry responded with generic strategies that could be used at all plants. After evaluating the safety benefit of the proposed strategies, the NRC accepted the strategies in June 2006 contingent upon licensees providing adequate means to implement them. In addition, the NRC has completed structural analyses of two additional spent fuel pools to provide further insight into spent fuel pool structural safety margin.

VIII Power Uprates

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 (SPUs) are power uprates that are typically on the order of less than 7 percent and are within the design capacity of the plant. SPUs require only minor plant modification. 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 NRC staff has been conducting power uprate reviews since then and has completed 109 such reviews to date. Approximately 13,858 megawatts-thermal (MWt) or 4,619 megawatts-electric (MWe) to the Nation's electric generating capacity (an equivalent of about 4.6 nuclear power plant units) have been gained through implementation of power uprates at existing plants. The NRC staff currently has nine plant-specific power uprate applications under review. The nine applications under review

include three MUR power uprates, no SPUs, and six EPUs.

Regarding the Calvert Cliffs 1 & 2 and Fort Calhoun MUR power uprates, which were submitted on January 31 and March 31, 2005, respectively, the NRC did not complete the reviews within six months. This is the timeliness goal for MUR power uprates that are based on the use of NRC-approved methodologies for feedwater flow measurement. The scheduled reviews have been extended because the licensees chose not to use NRC-approved methodologies resulting in a more challenging review process.

Based on a survey taken in March 2006 and information provided voluntarily by licensees subsequent to the survey, licensees plan to request power uprates for 23 nuclear power plant units over the next 5 years. If approved, these power uprates will result in an increase of about 3,795 MWt or approximately 1,265 MWe.

IX New Reactor Licensing

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

Design Certifications and Pre-Application Notifications

On January 27, 2006, the AP1000 final design certification rule was issued in the *Federal Register* (71 FR 4464). Applicants or licensees intending to construct and operate an AP1000 design may do so by referencing the AP1000 design certification rule. A revised final design approval based on Revision 15 of Westinghouse's design control document was issued on March 10, 2006. The staff is currently reviewing AP1000 design technical reports. As of June 30, 2006, Westinghouse has submitted 22 of the expected 49 technical reports for the staff's review.

On August 24, 2005, General Electric (GE) submitted its design certification application for the Economic Simplified Boiling Water Reactor (ESBWR) design. By letter dated December 1, 2005, the NRC staff informed GE that the ESBWR design certification application, as supplemented by GE on October 24, 2005, was sufficiently complete to be formally accepted as a docketed application for design certification. The NRC staff also informed GE that a schedule has been established for the design certification review. Based on GE's commitments to provide additional supporting information, a milestone of October 11, 2007, was established for issuance of the SER with open items. The staff review of the application continues, with the staff recently completing several quality assurance audits and inspections at the GE facilities related to piping and structural and seismic design. On March 23, April 19, and June 28-29, 2006, the staff met with GE to discuss development of ESBWR Technical Specifications. On June 19, 2006, NRC and GE management met to discuss the status of the ESBWR design certification review. Discussions focused on late submittals from GE. GE presented a schedule for completing all outstanding licensing topical reports. GE also presented proposals to improve the timeliness of its responses to NRC requests for additional information. NRC informed GE that NRC intended to meet our published schedule for completing an SER with open items; however, continued late or incomplete submittals from GE will result in additional open items in

the SER.

On April 27, 2006, the staff met with AREVA representatives to discuss the instrumentation and control (I&C) systems design for the Evolutionary Power Reactor (EPR). This design will use digital I&C for safety and control functions. This meeting provided an overview of the I&C systems design and is expected to be the first in a series of discussions on digital I&C issues during the EPR pre-application.

Pebble-Bed Modular Reactor (PBMR) (Pty) Ltd. continues to engage the NRC staff for the pre-application review of the PBMR design, with the intention to pursue a design certification under 10 CFR Part 52. The company has also stated that it intends to eventually seek deployment of the PBMR in the U.S. PBMR (Pty) Ltd.'s most recent schedule shows the pre-application phase (consisting of submittal of technical information in the form of white papers) to extend to the end of 2007, followed by a design certification application in 2008. The staff has agreed to review a limited set of documents, focusing on those that enable a better understanding of the PBMR safety approach and the planned format and content for the application.

On May 15, 2006, the staff received a letter of intent from Mitsubishi Heavy Industries, Ltd., informing the staff of its intent to submit a Design Certification application in the 1st quarter of 2008. This application will be for the U.S. APWR design. This letter was initially submitted under 10 CFR 2.390 as proprietary, but was subsequently made public by Mitsubishi on June 20, 2006.

On May 30, 2006, Westinghouse representatives met with the NRC staff to share the current status of the International Reactor Innovative and Secure (IRIS) and to discuss participation in the Multinational Design Approval Program. The planned submittal of a design certification application for IRIS has been changed from Calendar Year (CY) 2008 to CY 2010. Westinghouse discussed the structure and role of various parties engaged in the IRIS design development and testing activities to support design certification. Westinghouse plans to submit topical reports in CY 2006 and CY 2007 related to the planned test programs in support of pre-application interactions. There is currently no domestic interest in the IRIS design; however, Westinghouse cited international interest and involvement with the Global Nuclear Energy Partnership (GNEP).

Early Site Permit (ESP) Reviews

The staff is currently reviewing three ESP applications. Dominion Nuclear North Anna, LLC (Dominion) submitted an ESP application in September 2003 for its North Anna site, located in Louisa County, Virginia. The final SER for the North Anna ESP was issued on June 16, 2005. On October 25, 2005, Dominion notified the staff that it was changing the design of the cooling system for proposed Unit 3 from a once through cooling system to a closed cooling system. The change was made to address the water usage concerns expressed by the Commonwealth of Virginia and local citizens. The change requires revisions to the application, the Environmental Impact Statement (EIS), and the final SER. On April 14, 2006, Dominion submitted Revision 6 of the North Anna ESP application, and on May 4, 2006, the staff issued a letter to Dominion acknowledging receipt of Revision 6 and providing the review schedule for the revised application. On May 24, 2006, Dominion provided a response to NRC's request for additional information (RAI) letter, dated May 10, 2006, related to Revision 6 of the application. Dominion incorporated the RAI responses and issued Revision 7 of the North Anna ESP application on June 21, 2006. This is consistent with the North Anna ESP review schedule

issued by the staff on May 4, 2006. The staff expects to issue the Supplemental Final SER on August 15, 2006, and Final EIS on December 29, 2006, for the North Anna ESP.

On September 25, 2003, Exelon Generation Company, LLC, submitted an ESP application for its Clinton site, located in Harp Township, DeWitt County, Illinois. The NRC staff issued the draft SER for the Exelon ESP application for the Clinton site on February 10, 2005. The staff issued the supplemental draft SER with open items on August 26, 2005. On February 17, 2006, the staff issued its final SER for the Clinton ESP application, and on May 1, 2006, the staff issued its final SER for the Clinton ESP application as NUREG-1844.

System Energy Resources, Inc., submitted an ESP application in October 2003, for its Grand Gulf site located in Claiborne County, Mississippi. On October 21, 2005, the staff issued the final SER for the Grand Gulf ESP application. On April 14, 2006, the staff published the Grand Gulf ESP FSER as NUREG-1840. This NUREG incorporates changes made to FSER Chapter 2 due to concerns previously raised by the ACRS regarding potential hazards along the Mississippi River.

All three ESP applications require an EIS. The North Anna draft EIS was issued on December 10, 2004, the Clinton draft EIS was issued on March 2, 2005, and the Grand Gulf draft EIS was issued on April 21, 2005. The staff issued the final EIS for the Grand Gulf site on April 7, 2006, and is scheduled to issue the final EIS for the Clinton site in July 2006.

On August 17, 2005, Southern Nuclear Operating Company (SNC) notified the NRC staff that Georgia Power Company had directed them to pursue an ESP/COL at the Vogtle Electric Generating Plant site, located near Waynesboro, Georgia. During the week of May 8, the staff participated in a series of public outreach events near the Vogtle site in support of the upcoming SNC ESP application, which is expected to be received in August 2006. On May 10, 2006, the staff conducted a meeting in Waynesboro, Geogia, with local government officials regarding the SNC ESP for the Vogtle site. The purpose of the meeting was to inform the officials on the NRC's ESP review process. On May 11, 2006, the staff conducted an open house followed by a public meeting to inform the public of the NRC's ESP review process and to address any questions or concerns. In support of pre-application activities, the staff participated in a tour of the proposed site.

Combined License Application Notifications and Pre-application Activities

AREVA and Constellation Energy announced on September 15, 2005, the formation of UniStar Nuclear. This joint enterprise is intended to provide a single source for design, construction, and operation of new nuclear plants. UniStar Nuclear will market the EPR reactor design. AREVA and Constellation each own half of UniStar Nuclear. By letter dated November 4, 2005, Constellation Energy and Framatome notified the NRC staff that an application for certification of the EPR is planned at the end of 2007, with a COL application referencing EPR following about 6 months later. An additional COL application is planned about 6 months later. On May 2, 2006, the staff held a public meeting with UniStar Nuclear to discuss early submittal of portions of their COL application. UniStar Nuclear discussed their interest in the early submittal of their Quality Assurance Program, Security, and Emergency Plans -- the information necessary to support limited work authorizations. UniStar Nuclear would like to begin submitting this information in the third quarter of 2006. The staff and UniStar Nuclear agreed that this partial submittal approach may raise legal and/or policy issues. UniStar Nuclear and

staff will continue to dialogue to resolve any identified issues associated with this approach. On June 21, 2006, UniStar Nuclear submitted a letter of intent notifying the NRC of their plans to submit a COL application in the fourth quarter of 2007 for the Calvert Cliffs site (if the site is selected). This date represents an acceleration of their previous schedule of June 2008. UniStar Nuclear also estimated that three additional COL applications would be submitted during the first half of 2008. Finally, UniStar projects that a COL application for the Nine Mile Point site could be submitted in the third quarter of 2008 (if the site is selected). All applications are for the EPR design.

On January 27, 2006, SNC announced that it will pursue the Westinghouse AP1000 as the reactor technology for potential new nuclear units at the Vogtle site. SNC is scheduled to submit a COL application in March 2008.

By letter dated February 1, 2006, Progress Energy notified the NRC staff that it plans to submit two COL applications, one for a site located in the Carolinas and one for a site in Florida, and that it has selected the Westinghouse AP1000 as the reactor technology and the Harris Nuclear Plant as the site for the Carolinas. The Florida site for the COL application will be determined in the near future. Progress is scheduled to submit its first COL application in late September or early October 2007 for the Harris site and a second application for a Florida site in late 2007 or first quarter 2008.

On September 22, 2005, NuStart Energy announced that it had selected Grand Gulf and Bellefonte as the two sites they will use for their applications for COLs for new nuclear plants.

The Grand Gulf site was designated for the GE ESBWR design. In its letter dated November 17, 2005, NuStart announced that it would be preparing a single unit COL application for Grand Gulf site, which is scheduled for fourth quarter 2007 or first quarter 2008. The Grand Gulf application will be a joint venture between Entergy Nuclear and NuStart and will reference its ESP. Entergy stated that it is working with Dominion Nuclear, which is also referencing the ESBWR design, to submit a standardized COL application and is working with GE on the certification of the ESBWR design.

The Bellefonte site was designated for the Westinghouse Advanced Passive 1000 reactor design. In its letter dated November 17, 2005, NuStart announced that it would be preparing a dual unit COL application for the Bellefonte site. The application is scheduled to be submitted during the fourth quarter 2007.

On November 15, 2005, the NRC staff met with Entergy Nuclear to discuss planning related to COL applications for its River Bend site. The River Bend application is scheduled for approximately 6 weeks after the Grand Gulf submittal and will reference the GE ESBWR. Entergy stated that it is working with Dominion Nuclear, which is also referencing the ESBWR design, to submit a standardized COL application and is working with GE on the certification of the ESBWR design.

On December 5, 2005, South Carolina Electric and Gas (SCE&G) submitted a letter of intent to pursue new nuclear capacity. A COL application will be for two units and is targeted for submittal in the third quarter of 2007. In a February 10, 2006 letter to the NRC staff, SCE&G stated that it has chosen the Westinghouse AP1000 as the reactor technology and has selected the existing Virgil C. Summer Nuclear Station site as the location.

On March 13, 2006, the NRC staff received a letter of intent from an unannounced Advanced Boiling Water Reactor (ABWR) applicant. The applicant intends to submit an ESP application before the last quarter of 2007 and a COL application as soon thereafter as practicable. The letter contains proprietary information submitted under 10 CFR 2.390.

On March 16, 2006, Duke Energy announced that it had selected the former Cherokee site, near Gaffney, South Carolina, as the site for the development of a COL application utilizing two AP1000 units. Duke also announced the designation of two additional sites for possible future ESP development in Davie County, North Carolina, and Oconee County, South Carolina. On June 14, 2006, Duke announced that the facilities proposed to be licensed as a part of the Cherokee County project will be named the William S. Lee III Nuclear Station Units 1 and 2, effective immediately, in honor of former Duke Power Company Chairman William States Lee III.

On April 3, 2006, Florida Power and Light informed the NRC that it will be submitting an application for a Combined License for a site in Florida in 2009. The letter stated that the company is evaluating site selection and reactor technology options and will inform the NRC when the evaluations are complete.

On June 19, 2006, NRG Energy submitted a letter of intent notifying the NRC of its plans to submit a COL application in late 2007 for two Advanced Boiling Water Reactor units at the South Texas Project site.

On June 27, 2006, the NRC received a letter of intent from an unannounced applicant notifying the NRC of its plans to submit a Combined License application in the first half of 2008. The applicant has not yet selected a site or technology. The letter was submitted as proprietary in accordance with 10 CFR 2.390.

During the week of May 15, 2006, NRC staff from headquarters accompanied Region II inspectors to the Cherokee and Harris sites to observe geological testing. The inspectors implemented pre-COL inspection procedures to ascertain whether the applicant's quality assurance program is being implemented without substantive deviations. No issues were identified.

On June 12 and 13, 2006, NRC staff from headquarters accompanied Regions I and II inspectors to the Calvert Cliffs pre-COL site to observe geophysics testing. The NRC staff and the applicant discussed site specific attributes that will be of interest during review of the COL application. The inspectors implemented pre-COL inspection procedures to ascertain whether the applicant was implementing a quality assurance program during performance of geophysics data collection to support a COL application – no issues were identified. The NRC staff interfaced with a representative from the Maryland Department of Natural Resources during the site visit. The staff also visited the Grand Gulf site on June 19 - 20, 2006, and the V.C. Summer site on June 22, 2006, to observe geological testing - no issues were identified. A visit to Bellefonte is scheduled on July 10 - 11, 2006.

Regulatory Infrastructure

A reorganization of Divisions within the Office of Nuclear Reactor Regulation (NRR) became effective on April 16, 2006. The organizational changes mostly impacted the Division of New Reactor Licensing (DNRL), which increased from two to five branches. The changes are consistent with the goals of NRR's October 2005 reorganization to prepare the office for the increase in new reactor licensing workload and allow for an increase in first-line supervisory oversight. These organizational changes reflect the growth in anticipated new reactor applications and begin to align the organization towards a design centered review approach. DNRL's five branches include the New Reactor Environmental Projects Branch, AP1000/EPR Projects Branch, ESBWR/ABWR Projects Branch, New Reactor Infrastructure Guidance Development Branch and New Reactor Planning and Scheduling Branch. It is expected that additional organizational changes will be needed in the future consistent with evolving new reactor licensing activities.

In April 2006, the Commission approved an initial approach for implementing the Construction Inspection Program (CIP) for new reactors. This approach will create a dedicated organization in the Region II office in Atlanta, Georgia, that will have total responsibility for all construction inspection activities across the country, including both the day-to-day on-site inspections and the specialized inspection resources needed to support NRC oversight of the construction of any new nuclear power plants. The Regional Administrator will ensure appropriate management oversight of the initial CIP efforts while maintaining focus on the NRC mission in the safety oversight of Region II operating facilities. This approach is intended to ensure consistency in implementing the new inspection program and quickly incorporate ongoing lessons learned into this entire program.

On November 3, 2005, the Executive Director for Operations issued SECY-05-0203, "Revised Proposed Rule to Update 10 CFR Part 52, Licenses, Certifications, and Approvals for Nuclear Power Plants." SECY-05-0203 requests Commission approval to publish in the *Federal Register* revised proposed revisions to 10 CFR Part 52, as well as changes throughout the NRC's regulations to enhance the NRC's regulatory effectiveness and efficiency in implementing the licensing and approval processes in Part 52 and to clarify the applicability of various requirements to each of the regulatory processes in Part 52. This rulemaking to enhance 10 CFR Part 52 is based on lessons learned during design certification and ESP reviews and on discussions with stakeholders about the ESP, design certification, and combined license review processes. This revised proposed rule would withdraw and supersede the Commission's July 3, 2003 (68 FR 40026) proposed rule on 10 CFR Part 52. On January 30, 2006, the Commission issued an SRM approving the withdrawal of the previously proposed rule and publication of the revised notice of proposed rulemaking. The Commission directed the staff to give high priority to complete this rulemaking activity on schedule and provide the proposed final rule to the Commission no later than October 2006. The proposed 10 CFR Part 52 rule was published in the *Federal Register* on March 13, 2006 (71 FR 12781). On April 18, 2006, the NRC staff held a public meeting with stakeholders to discuss the proposed 10 CFR Part 52 changes and rulemaking. The public comment period on the proposed rule ended on May 30, 2006. The NRC received 19 comment letters from industry representatives and members of the public.

The NRC staff is developing a COL application regulatory guide (DG-1145) based, in part, on Regulatory Guide 1.70, "Standard Form and Content of Safety Analysis Reports for Nuclear Power Plants." Work-in-progress versions of each chapter of the regulatory guide were placed on the NRC public web site between February and June 2006. On March 15, April 20-21, May 17-19, and June 13-14, 2006, the NRC staff held public workshops with stakeholders to discuss the draft Regulatory Guide (DG-1145) and its contents. Three additional public meetings are scheduled for July - September 2006. A draft work-in-progress version of the forty sections within the Regulatory Position Section of DG-1145 was posted on the NRC public web site on June 30, 2006.

In January 2006, the NRC staff posted the schedule for updating NUREG-0800, "Standard Review Plan," on the NRC external web site at the following address: http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0800/srp-schedule.pdf.

On March 29, 2006, the New Reactor Infrastructure Planning Branch posted a sources sought notice on the FedBizOpps web site. The listing, "Technical Assistance for New Reactor Licensing Application Reviews for Reactor Design Certifications, ESPs, COL Applications, and New Reactor Pre-application Activities," provides references to the details associated with agency needs in FY 2007 and FY 2008. Forty-five responses from commercial vendors and laboratories were received by the due date of April 28th. These sources are being evaluated to identify specific capabilities and potential conflicts of interest.

On May 4, 2006, the staff briefed staff members from the Committee on Energy and Commerce regarding preparations and time lines for new reactor reviews.

On May 11, 2006, the staff briefed Ms. Caputo, Counsel to the House Committee on Energy & Commerce, regarding the status of the 10 CFR Part 52 rulemaking.

On May 15, 2006, the U.S. Department of Energy (DOE) published their interim final rule and request for comment on "Standby Support for Certain Nuclear Plant Delays" in the *Federal Register*. The interim final rule is effective June 14, 2006, and written comments may be submitted up to June 14, 2006. NRC staff from the DNRL and Office of the General Counsel worked with the Office of Management and Budget and DOE staff to ensure that NRC concerns were addressed by changes to the rule.

On May 31, 2006, the staff issued RIS 2006-06, "New Reactor Standardization Needed to Support the Design-Centered Licensing Review Approach," (ADAMS ML053540251). The RIS explains the agency's design-centered review approach (DCRA) to reviewing design certification and COL applications and its expectations for applicants and vendors to standardize within a design in order to make the DCRA effective. This RIS is intended to promote standardization of COL applications and to facilitate the establishment of a predictable and consistent method for reviewing applications. To this end, the NRC requested voluntary submission of information regarding addressee schedules and plans for standardization.

On June 20, 2006, NRC staff briefed staff from the Senate Environment and Public Works Committee. The NRC staff provided a status update of the new reactor licensing activities and Energy Policy Act of 2005 implementation.

On June 20, 2006, NRC staff met with members of the New Plant Oversight Committee (NPOC)

to discuss strategic planning for new reactor applications and their review. NPOC members include Senior Executives from utilities and vendors participating in new nuclear plant activities and Senior members from the NEI. Topics discussed at the meeting included integrated scheduling and scheduling tools, RIS 2006-06, Limited Work Authorization proposals, Standard Review Plan (NUREG-0800) and COL Regulatory Guide development, and the NRC budgeting process with respect to new reactor licensing activities. NRC and NPOC agreed to establish working groups that would meet on a regular basis to identify and discuss new reactor licensing issues.

On June 21, 2006, NRC staff briefed the DHS's New Reactor Working Group. The staff provided an overview of the scheduling for the multiple new reactor applications and the specific tasks for the upcoming Vogtle Early Site Permit. DHS conducts NRC's safety evaluation of the Offsite Emergency Plans.

On June 27, 2006, staff participated in an interagency meeting with DOE to discuss the status of new reactor programs. NRC staff presented information regarding the status of early site permits, potential combined license submittals, and Part 52 Rulemaking status. DOE staff discussed program prioritization, support for standardization, and Next Generation Nuclear Plant (NGNP) licensing strategy.

Interactions with DOE on Next Generation Nuclear Plants

The Energy Policy Act of 2005 (EPAct), Subtitle C, Section 641, mandated the DOE to establish the NGNP Project. The NGNP Project consists of research, development design, construction, licensing, and operation of a prototype plant, including a very high temperature nuclear reactor, that can be used to generate electricity and/or hydrogen. The NRC has licensing and regulatory authority for any reactor that is authorized under Subtitle C. Within 3 years of the date of enactment of EPAct (August 8, 2005), the Secretary of DOE and the Chairman of the NRC are required jointly to submit to Congress a licensing strategy for the NGNP. Since November 2005, NRC and DOE staff have initiated activities to develop the joint licensing strategy. To that end, NRC drafted a Memorandum of Understanding (MOU) between DOE and NRC and sent the same to DOE in May 2006 for comment. The MOU establishes the guiding principles for interactions between NRC and DOE for developing and documenting the joint licensing strategy for the NGNP. NRC is working closely with DOE to ensure that the MOU is in place shortly and that the DOE transfers funds to NRC immediately thereafter so that the efforts toward the development of the joint licensing strategy can begin in earnest in FY 2006. NRC remains mindful of the congressionally mandated schedule for developing the licensing strategy.

On June 21, 2006, NRC staff were briefed on the status of the GNEP by representatives from DOE. During the meeting, DOE discussed its current progress and pre-conceptual time schedules for GNEP. The meeting started with an overview of GNEP, followed by presentations on the three major system technology demonstration projects that GNEP encompasses: the Engineering Scale Demonstration project for spent fuel separation, the Advanced Fuel Cycle Facility for fuel fabrication operations, and the Advanced Burner Test Reactor. DOE has not determined whether these facilities will require NRC licensing; however, DOE plans to collaborate closely with the NRC to ensure commercial versions of the facilities are licensable.

Organization/ Design*	Sites under Consideration **	Planned Applications	Date	Basis
AP1000 (52-006) Certified Design				
Duke (742)	William S. Lee III Nuclear Station (2) (Cherokee)	COL	Late 2007 or Early 2008	Letters 3/4, 10/25/05, and 3/16/06
NuStart Energy (740)	Bellefonte (2)	COL	4th Qtr 2007	Letters 12/7/2004 and 11/17/2005, press release
Progress Energy (738)	Harris (2) Florida (2)	COL COL	Sept or Oct 2007 Late 2007 or 1st Qtr 2008	Letters 8/24/05 and 2/1/06; 11/1/05 Mtg
South Carolina Electric and Gas (743)	Summer (2)	COL	3rd Qtr 2007	Letters 12/5/05 and 2/10/06
Southern Nuclear Operating Company (737)	Vogtle	ESP and COL	8/2006: ESP 3/2008: COL	Letters 7/26 and 8/17/05 Mtg Summary (ML052710018)
ESBWR (52-010) Design Certification Application submitted 8/24/05				
Dominion (741)	North Anna	COL	9/2007	DOE solicitation award and press release; Letter 11/22/05
Entergy (745)	River Bend	COL	Early 2008	Press release; 11/15/05 Mtg; Letter 12/5/05
NuStart Energy (744)	Grand Gulf	COL	4th Qtr 2007 or 1st Qtr 2008	Letters 12/7/2004 and 11/17/2005, press release
EPR (733) Design Certification Application to be submitted 12/2007				
UniStar Nuclear (746)	Calvert Cliffs TBD Nine Mile Point	COL COLs (3) COL	4th Qtr 2007 1st half of 2008 3rd Qtr 2008	Press Release; 11/2/05 Mtg; Letters 11/4/05, 6/8/06, 6/21/06

* Numbers in parentheses are Docket Number or Project Number
** Numbers in parentheses are the announced number of units to be built at the site

New Reactor Licensing Activities
As of June 30, 2006

Organization/ Design*	Sites under Consideration **	Planned Applications	Date	Basis
ABWR (52-001) Certified Design				
Unannounced Applicant	TBD (2)	ESP and COL	3rd Qtr 2007:ESP (COL: soon after)	Letter 3/13/06
NRG Energy	South Texas Project (2)	COL	Late 2007	Letter 6/19/06
Unannounced Technology				
Florida Power & Light	TBD	COL	2009	Letter 4/3/06
Unannounced Applicant	TBD	COL	1st half 2008	Letter 6/27/06
Duke	Davie County, NC Oconee County, SC	ESP ESP	TBD TBD	Letter 3/16/06
U.S. APWR Design				
Mitsubishi Heavy Industries, Ltd.	N/A	Design Certification	2008	Letters 5/15/06 and 6/20/06

* Numbers in parentheses are Docket Number or Project Number
** Numbers in parentheses are the announced number of units to be built at the site