May 15, 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 transmit the eighty-sixth report, which covers January - March 2006.

I am also providing in this cover letter additional information on several issues in order to keep you fully and currently informed of NRC's licensing and regulatory activities. The NRC recently identified several instances of unintended tritium releases from a few nuclear power plants. Even though information provided to date indicates there was no threat to the public health and safety, the NRC is reviewing these incidents to ensure that nuclear plant operators have taken appropriate action and to determine what, if any, changes are needed to the agency's rules and regulations. In March, the NRC assembled a task force to examine the issue of inadvertent, unmonitored releases of radioactive liquids containing tritium from U.S. commercial nuclear power plants. The task force is required to address several topics, including a general assessment of the potential public health impact from these releases; how the issue was communicated to the public, state and local officials, other Federal agencies, Congress, and other interested groups; a review of other inadvertent releases of tritium at nuclear power plants, including decommissioning sites, from 1996 to the present; industry actions in response to the releases, including the timing of remediation efforts; and NRC oversight of inadvertent releases, both under the Reactor Oversight Process (ROP) and the process in place prior to the ROP. A written report summarizing the task force's findings will be issued later this year. The NRC has also conducted and participated in several public meetings to discuss tritium levels in groundwater and the safety of public drinking water.

In FY 2001 and FY 2002 appropriations acts (P.L. 106-377 and P.L. 107-66), Congress provided funding to the NRC to provide financial assistance to the States for the remediation of formerly NRC-licensed sites. Subsequently, the NRC established a grant program to execute this financial assistance program for the purposes of reviewing files, conducting surveys, and characterizing and remediating (including regulatory oversight by States) sites formerly licensed by the Commission. All of the former sites under the grant program are located in States with which the NRC has entered into Agreements under Section 274 of the Atomic Energy Act.

Through cooperative efforts with the nine Agreement States eligible for grant assistance, action on the 133 former sites located in these States has been successfully completed. The NRC has been working to bring to closure the remaining four sites identified as contaminated, three of which are located in California and one in Colorado.

On February 1, 2006, the NRC issued Generic Letter 2006-02, "Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power. The objective of the generic letter is to request information from nuclear power plant licensees to determine if compliance is being maintained with NRC regulatory requirements governing electric power sources and associated personnel training. The NRC staff is currently evaluating the responses and will report to the Commission on the results by the beginning of June.

On February 9, 2006, the National Academy of Sciences released a report on the transportation of spent nuclear fuel. The report, "Going the Distance? The Safe Transport of Spent Nuclear Fuel and High-Level Radioactive Waste in the United States," was released by the National Research Council, part of the National Academies. It was compiled by the Council's Committee on Transportation of Radioactive Waste. The report's principal finding is that there are "no fundamental technical barriers to the safe transport of spent nuclear fuel and high-level radioactive waste in the United States." Shipment of spent fuel by rail or truck is "a low-radiological-risk activity with manageable safety, health, and environmental consequences when conducted in strict adherence to existing regulations." The report also concluded that "the radiological risks associated with the transportation of spent fuel and high-level waste are well understood and are generally low." It attributed this conclusion in part to "rigorous international standards and U.S. regulations for the design, construction, testing, and maintenance of spent fuel packages." The committee recommended that the NRC conduct further research into the health and safety risks of long-duration fires engulfing spent fuel transportation casks. The report also recommended that "full-scale package testing should continue to be used as part of integrated analytical, computer simulation, scale model, and testing programs to validate package performance." This recommendation is also consistent with the goals of the NRC's Package Performance Study, which is now under development.

On February 16, 2006, the NRC announced the public release of its 2005 Safety Culture and Climate Survey results. According to the survey results, the NRC improved in essentially all areas as compared to the 2002 survey, with the largest gains in communication, mission and strategic planning, employee engagement, recruiting, developing and retaining staff, and management leadership. According to the survey, which had an impressive 70 percent response rate, workload and stress continue to be challenges for employees. Better knowledge transfer from staff who are retiring and use of the Differing Professional Opinion program are also areas of opportunity for continued improvement. The survey was conducted by the NRC's Office of Inspector General (OIG) with assistance from a contractor research firm to gain a better understanding of NRC's safety culture and climate. The 2005 survey is the third survey conducted to date; previous surveys were conducted in 1998 and 2002. The NRC is committed to taking additional actions to address the results of the 2005 survey.

As discussed in Section VI of the enclosed report, the NRC, having concluded its environmental and safety reviews and the adjudication of all contested issues, and having taken all other actions necessary for issuance of a license, issued Materials License No. SNM-2513 to Private Fuel Storage, L.L.C. (PFS) by letter dated February 21, 2006. That action constitutes the final agency action with respect to the PFS license application. Because final agency action has been taken on the PFS application, the NRC does not plan to provide future report updates on this topic.

On March 2, 2006, the NRC staff completed its review of the Vermont Yankee (VY) extended power uprate (EPU) application and approved the 20 percent power uprate. The licensee has begun power ascension of VY to the new EPU power level. Specific details on the uprate can be found in Section IX of the enclosed report.

The NRC has completed an Agreement with the State of Minnesota to assume part of the NRC's regulatory authority over certain radioactive materials in the state. The Agreement became effective March 31, 2006. The NRC transferred approximately 150 licenses, most for medical and industrial uses of radioactive material, to Minnesota's jurisdiction. Before approving the agreement, NRC reviewed Minnesota's radiation control program to ensure that it was adequate to protect public health and safety and was compatible with NRC's program for regulating the radioactive materials covered in the agreement. An announcement of the proposed agreement was made in November inviting comments from the public. No comments were received.

Effective April 1, 2006, the NRC has updated its Reactor Oversight Process (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 on refining the MSPI through a pilot program since 2002. 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.

On April 5, 2006, the NRC staff issued its final environmental impact statement on the proposed Early Site Permit (ESP) for the Grand Gulf site, about 25 miles south of Vicksburg, Mississippi. The report contains the NRC's finding that there are no environmental impacts that would prevent issuing the ESP. The ESP process allows an applicant to address site-related issues, such as environmental impacts, for possible future construction and operation of a nuclear power plant at the site. The Grand Gulf ESP application was filed on October 21, 2003, by System Energy Resources Inc. (SERI), a subsidiary of Entergy Nuclear. If approved, the permit would give SERI up to 20 years to decide whether to build a new nuclear unit on the site and to file an application with the NRC for approval to begin construction. The NRC staff's conclusion is based on its independent review of a report submitted by SERI, taking into account consultations with Federal, State, tribal, and local organizations and consideration of comments received during the public scoping process. Before the Commission can reach a final decision on issuing the permit, the NRC staff must complete revisions to the ESP's safety evaluation report. The Atomic Safety and Licensing Board Panel must also conduct a mandatory hearing on the matter.

I also want to inform you of the agency's progress in implementing the Energy Policy Act of 2005. On January 31, 2006, the NRC issued a Confirmatory Order requiring that backup power be available for the emergency notification system in accordance with Section 651(b). On February 10, 2006, NRC published in the <u>Federal Register</u> (71 FR 7349) its proposed fiscal year (FY) 2006 fee rule (10 CFR Part 170) in accordance with Section 623. On March 1, 2006,

the NRC assigned Federal Security Coordinators and alternates in each NRC Region in accordance with Section 651(a)(3). On March 30, 2006, the NRC amended its Memorandum of Understanding with the State Department to cover health services for employees and dependents serving in foreign countries in accordance with Section 651(c)(3).

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

Sincerely,

# /RA/

Nils J. Diaz

Enclosure: Quarterly Status Report on the Licensing Activities and Regulatory Duties of the U.S. NRC, January - March 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

# JANUARY - MARCH 2006

Enclosure

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<sup>&</sup>lt;sup>1</sup><u>Note</u>: The period of performance covered by this report includes activities occurring between the first day of January and last day of March 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 progress toward riskinforming 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 Regulatory Guide 1.201, "Guidelines for Categorizing Structures, Systems and Components in Nuclear Power Plants According to Their Safety Significance," for trial use in January 2006. After receiving comments on the Regulatory Guide, the NRC staff began to clarify the guidance. A public meeting is planned for April 19, 2006, to discuss these revisions.

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, with a 90-day public comment period. In response to a request from several industry groups, the NRC extended the comment period by 30 days to March 8, 2006. The NRC is now evaluating public comments and developing 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 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 (LWRs) in 10 CFR Part 50. A March 22, 2006 Commission directive instructed the staff to prepare an advance notice of proposed rulemaking seeking public input on ways to make the technical requirements for power reactors more risk-informed and performance-based. The notice will solicit public feedback on whether the focus should be on "technology-specific frameworks" for non-LWRs, whether development of a technology-neutral licensing framework is "premature," and how to prioritize rulemaking for various non-LWR technologies.

# II Reactor Oversight Process

The NRC continues to implement the Reactor Oversight Process (ROP) at all nuclear power plants. The NRC continues to meet with interested stakeholders on a periodic 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 Mitigating Systems Performance Index (MSPI) public meetings on January 25, February 22, and March 22, 2006. Meeting attendees discussed MSPI guidance clarifications and revisions, resolution of several open technical issues, and a process for conducting and resolving MSPI component outliers and generic issues. Attendees also discussed a schedule and timeline

for completing the remaining milestones and activities before the scheduled April 1, 2006 implementation date of the MSPI.

- The staff hosted monthly ROP public meetings on January 26, February 23, and March 23, 2006. The meeting attendees discussed the ROP cross-cutting issues, the safety culture initiative, the significance determination process timeliness improvements, the performance indicator (PIs) improvements, and the open/new frequently asked questions on the PIs.
- The staff incorporated the recommended staff actions regarding agency guidance in the areas of Safety Conscious Work Environment and Safety Culture into NRC inspection procedures on March 24, 2006. The inspection procedures were sent out to NRC's regional offices for comments in accordance with the review process IMC 0040, "Preparing, Revising, and Issuing Documents for the NRC Inspection Manual."
- During the week of February 6, the staff participated in the NRC regional offices' end-of-cycle review meetings. The licensee's performance at each reactor site was assessed by utilizing the most recent quarterly performance indicators and inspection findings compiled over the previous twelve months. The output of these meetings was an end-of-cycle letter that communicates to the licensee which column of the Action Matrix the licensee is in during the assessment period, any substantive cross-cutting issues, and the inspection plan consisting of approximately 18 months of inspection activities.

#### III Status of Issues in the Reactor Generic Issue Program

On January 20, 2006, the NRC issued Generic Letter (GL) 2006-01, "Steam Generator Tube Integrity and Associated Technical Specifications," to all holders of operating licenses for pressurized-water reactors (PWRs), except those who have permanently ceased operations and have certified that fuel has been permanently removed from their reactor vessels. The letter was issued because of the NRC concern that current Technical Specifications (TS) requirements may not be sufficient to ensure that steam generator tube integrity can be maintained in accordance with the current licensing and design basis. The Generic Letter requested that the affected plants either submit a description of their program for ensuring steam generator tube integrity for the interval between inspections or adopt alternative TS requirements for ensuring steam generator tube integrity. (Alternative TS requirements that address NRC concerns about the existing TS were previously developed by the industry and found acceptable by the NRC).

On January 17, 2006, the NRC issued Information Notice (IN) 2005-25, Supplement 1, "Additional Results of Chemical Effects Tests in a Simulated PWR Sump Pool Environment," to all holders of operating licenses for PWRs, except those who have permanently ceased operations and have certified that fuel has been permanently removed from their reactor vessels. The Supplement was issued to inform the affected licensees of recent NRC-sponsored research results related to chemical effects in a simulated PWR sump pool environment. It specifically provided information regarding test results related to chemical effects in environments containing dissolved phosphate and dissolved calcium.

# 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) 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 10 CFR 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 03/31/2006)					
Licensing actions completed/year	1741	1609	≥ 1500	661					
Age of licensing action inventory	91% ≤ 1 year; and 100% ≤ 2 years	92.6%≤ 1 year; and 99.9% ≤ 2 years	$96\% \le 1$ year and $100\% \le 2$ years old	82.6% $\leq$ 1 year and 99.4% $\leq$ 2 years					
Other licensing tasks completed/year	671	715	≥ <b>500</b>	400					

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. The completion of licensing actions does not typically follow a straight line trend due to the inherent variability associated with the level of effort needed to complete individual licensing actions. For FY 2006, the value of completed licensing actions identifies a slight decrease relative to the value completed at this time in FY 2005. The increase identified in completed licensing actions in the second quarter of FY 2006 is attributable to increased management attention to avert an adverse trend.



Performance Plan Target: Age of Licensing Action Inventory



≤ 1 YEAR OLD

Performance Plan Target: Age of Licensing Action Inventory





# V Status of License Renewal Activities

The NRC has completed the review of license renewal applications for 39 of the 104 units licensed to operate. The extension of the licenses for these 39 units results in approximately 34 gigawatts-electric maximum dependable capacity remaining available for an additional 20 years past the initial license expiration dates.

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

The staff issued the final supplemental environmental impact statement (SEIS) in June 2005 and the final safety evaluation report (SER) in January 2006. A supplement to the SER is scheduled to be issued in April 2006. A decision on whether to issue the renewed licenses is scheduled for May 2006.

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

The staff is addressing the comments received on the draft SEIS and anticipates issuing the final SEIS in May 2006. The draft SER, identifying any remaining open items, was issued in March 2006, and the applicant's responses to the open items are due in April 2006.

#### Brunswick, Units 1 and 2, License Renewal Application

The staff is addressing comments received on the draft SEIS and anticipates issuing the final SEIS in April 2006. The initial draft SER was issued in December 2005, and the licensee's comments were received in January 2006. The final SER is scheduled to be issued in April 2006. A decision on the renewed licenses is scheduled for June 2006.

## Monticello License Renewal Application

The draft SEIS was issued in January 2006, and the draft SER, identifying any remaining open items, is scheduled to be issued in April 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 any remaining open items, is scheduled to be issued in June 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, and the staff is preparing requests for additional information and reviewing the licensee's responses. The draft

SEIS is scheduled to be issued in June 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. 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.

#### 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 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

This proceeding involved an application from Private Fuel Storage, L.L.C. (PFS) 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 September 9, 2005, the Commission issued a Memorandum and Order, CLI-05-19, in which it (a) denied the State of Utah's petition for review of ASLB's February 24, 2005, Final Partial Initial Decision and other decisions on aircraft crash issues, and (b) authorized the NRC staff, upon making the requisite findings on all non-contested issues, to issue a license to PFS to construct and operate its proposed facility.

On November 3, 2005, the State of Utah filed a motion with the Commission to reopen the record and to amend late-filed Contention Utah UU, based upon recent statements by officials within the U.S. Department of Energy (DOE) concerning DOE's current intention to accept spent fuel in multipurpose canisters at the proposed Yucca Mountain repository. On January 31, 2006, the Commission issued a Memorandum and Order, CLI-06-03, denying the State's motion in its entirety.

The NRC, the Bureau of Land Management (BLM), the Bureau of Indian Affairs, and the Surface Transportation Board have worked together to fulfill each agency's National Historic Preservation Act (NHPA) Section 106 obligations, leading to the development of a Memorandum of Agreement (MOA) for the protection of historic and cultural resources, and draft treatment and discovery plans to ensure the mitigation of any adverse impact to such resources. All necessary parties have signed the MOA, with the exception of BLM and the Utah State Historic Preservation Officer, who have declined to sign the MOA at this or any time in the foreseeable future. Accordingly, the NRC, by letter dated November 22, 2005, notified the

Advisory Council on Historic Preservation (ACHP) that NRC planned to terminate the Section 106 consultation process, pursuant to 36 C.F.R. § 800.7, and requested comments by the ACHP on such termination. By letter dated January 9, 2006, the ACHP provided its comments; therein, the ACHP concluded, *inter alia*, that the NRC's plan to include a condition in the PFS license to require implementation of the substantive provisions of the MOA constitutes a reasonable and appropriate means of concluding the NRC's responsibilities under the NHPA. In accordance with ACHP regulations, the NRC, by letter dated February 10, 2006, responded to the ACHP comments.

Having concluded its environmental and safety reviews and the adjudication of all contested issues, and having taken all other actions necessary for issuance of a license, the NRC, by letter dated February 21, 2006, issued Materials License No. SNM-2513 to PFS. That action constitutes the final agency action with respect to the PFS license application. Petitions for review of the NRC's issuance of the PFS license have been filed by the State of Utah and another Intervenor before the U.S. Court of Appeals for the District of Columbia Circuit.

Because final agency action has been taken on the PFS application, the NRC does not plan to provide future report updates on this topic.

#### VII Enforcement Process and Summary of Reactor Enforcement by Region

Reactor Enforcement Actions								
		Region I	Region II	Region III	Region IV	TOTAL		
	Quarter 2 FY 06	0	0	0	0	0		
Severity	FY 06 YTD Total	0	0	0	0	0		
Level I	FY 05 Total	0	0	2	0	2		
	FY 04 Total	0	0	0	0	0		
	Quarter 2 FY 06	0	0	0	0	0		
Severity	FY 06 YTD Total	0	0	0	0	0		
Level II	FY 05 Total	0	1 <sup>2</sup>	2	0	3		
	FY 04 Total	0	1	0	0	1		
Severity Level III	Quarter 2 FY 06	0	0	1	0	1		
	FY 06 YTD Total	0	0	4	0	4		

#### Reactor Enforcement by Region

<sup>&</sup>lt;sup>2</sup>The FY 05 Total for Region II and the overall FY 05 Total were both increased by one to reflect a correction for a violation associated with a Severity Level II violation issued during July 2005. The violation and its associated finding will not be described because the issue is security related. This error was identified during an internal audit.

Reactor Enforcement Actions							
	FY 05 Total	2	1	3	2	8	
	FY 04 Total	1	2	4	0	7	
Cited	Quarter 2 FY 06	3	0	1	1	5	
Severity	FY 06 YTD Total	3	0	1	1	5	
Level IV or	FY 05 Total	6	0	4	0	10	
GREEN	FY 04 Total	1	0	2	3	6	
Non-Cited	Quarter 2 FY 06	58	24	40	72	194	
Severity Level IV or GREEN	FY 06 YTD Total	102 <sup>3</sup>	58	120	127	407	
	FY 05 Total	239	197	300	282	1018	
	FY 04 Total	271	175	290	301	1037	

\* Numbers of violations are based on enforcement action tracking system data that may be subject to minor changes following verification. The numbers shown as Severity Level I, II, III or IV refer to the number of Severity Level I, II, III, and IV violations or problems. The monthly totals generally lag by 30 days due to inspection report and enforcement development.

Escalated Reactor Enforcement Actions Associated with the Reactor Oversight Process								
Region I Region II Region III Region IV TO								
Notices of	Quarter 2 FY 06 RED	0	0	0	0	0		
Violation Related to RED,	Quarter 2 FY 06 YELLOW	0	0	0	0	0		
YELLOW, or WHITE	Quarter 2 FY 06 WHITE	1	0	0	1 <sup>4</sup>	2		
Finalings	FY 06 YTD Total	1	0	2	1	4		

<sup>&</sup>lt;sup>3</sup>The FY 06 YTD Total for Region I and the overall FY 06 YTD Total were increased by two to reflect a correction in the December 2005 non-cited violation data.

<sup>&</sup>lt;sup>4</sup>The violation and its associated finding will not be described because the issue is security related.

Escalated Reactor Enforcement Actions Associated with the Reactor Oversight Process							
	Region I Region II Region III Region IV TOTAL						
	FY 05 Total	5	5⁵	8 <sup>6</sup>	2 <sup>7</sup>	20	
FY 04 Total 3 4 7 6 20							

#### Description of Significant Actions Taken During the Second Quarter of FY 06

<u>AmerGen Energy Company, LLC (Oyster Creek Generating Station) EA-05-199</u> – On January 9, 2006, a Notice of Violation was issued for a violation of 10 CFR 50.54(q), 10 CFR 50.47(b)(4), and the Oyster Creek Generating Station Emergency Plan. This violation was associated with a WHITE significance determination process (SDP) finding involving the licensee's failure to utilize properly the Emergency Plan emergency action level (EAL) matrix during an actual event. Specifically, operators did not recognize that plant parameters met the EAL thresholds for declaring an Unusual Event and a subsequent Alert. Since an Alert was not declared, licensee personnel did not activate their emergency response organization to assist operators in mitigating the event. Additionally, State and local agencies, which rely on information provided by the facility licensee, might not have been able to take initial response measures in as timely a manner had the event degraded further.

#### Entergy Nuclear Operations, Inc. (Indian Point Units 2 and 3) EA-05-190 - On

January 31, 2006, an immediately effective Confirmatory Order Modifying License was issued to Entergy Nuclear Operations, Inc., Indian Point Units 2 and 3. The licensee consented to modifying its operating licenses for Indian Point Units 2 and 3 to meet the criteria in Section 651(b) of the Energy Policy Act of 2005 that directs the Commission to require that backup power is to be available for the emergency notification system of a power plant, including the emergency siren warning system, if the alternating current within the 10-mile emergency planning zone of the power plant is lost.

Exelon Generation Company, LLC (LaSalle County Station) EA-06-022 – On March 31, 2006, a Notice of Violation was issued to Exelon for a willful Severity Level III violation involving three

<sup>&</sup>lt;sup>5</sup>The FY 05 Total for Region II and the overall FY 05 Total were both increased by one to reflect a correction for a violation associated with a WHITE SDP finding issued during December 2004. The violation and its associated finding will not be described because the issue is security related. This error was identified during an internal audit.

<sup>&</sup>lt;sup>6</sup>The FY 05 Total for Region III and the overall FY 05 Total were both increased by three to reflect a correction for three violations associated with a previously issued RED SDP finding. A description of the violations was included the April 2005 Congressional Report, but the April 2005 totals were not updated. This error was identified during an internal audit.

<sup>&</sup>lt;sup>7</sup>The FY 05 Total for Region IV and the overall FY 05 Total were both increased by one to reflect a correction for a violation associated with a WHITE finding issued on April 15, 2005. A description of this event is also included the <u>Addition to Description of Significant Actions Taken During April 2005</u> section. This error was identified during an internal audit.

contract employees who violated radiation protection procedures associated with entry into high radiation areas.

## Addition to Description of Significant Actions Taken During April 2005<sup>8</sup>

<u>Omaha Public Power District (Fort Calhoun Station) EA-05-038</u> – On April 15, 2005, a Notice of Violation was issued for a violation associated with a WHITE SDP finding involving the licensee's failure to identify and correct a failed fuse during emergency diesel (EDG) generator surveillance testing, which resulted in the EDG being inoperable for 29 days. The associated violation was cited against 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," because the licensee failed to identify and correct the issue associated with the failed fuse, which resulted in the EDG being inoperable for a period of time longer than allowed by the plant's technical specifications.

# 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 NRC is codifying through rulemaking the actions taken to enhance security of NRC power reactor licensees. The public comment period for a proposed rule on fitness-for-duty (10 CFR Part 26), including both drug/alcohol testing and fatigue-related provisions, ended on December 27, 2005. This rulemaking will update the drug and alcohol testing provisions and establish enforceable requirements of the management of worker fatigue. The public comment period for a proposed rule on the Design Basis Threat (DBT) (10 CFR 73.1) ended on January 23, 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. Also currently under development is a comprehensive proposed rule on Requirements for Physical Protection (10 CFR 73.55) incorporating safety/security interface requirements that will 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. The NRC retains responsibility for establishing exercise scenarios, oversight of the mock adversary force, and evaluation of licensee performance. Measures have been established to minimize any possibility of a conflict of interest between the mock adversary force and the licensees'

<sup>&</sup>lt;sup>8</sup>This event description was added in order to reflect a correction in the April 2005 data. The FY 05 Total for Region IV and the overall FY 05 Total were also increased by one in order to reflect the same correction. This error was identified during an internal audit.

responsibilities for physical protection. To date, mock adversary force personnel have performed adequately in the force-on-force exercises in which they have participated.

In February 2006, NRC staff participated in an industry-sponsored workshop on force-on-force security that provided opportunities for members of industry and government to discuss force-on-force exercise processes and other security initiatives affecting licensees. The NRC staff also made a presentation on the Joint Conflict and Tactical Simulation (JCATS) system, including a simulation exercise, and requested voluntary participants for future JCATS activities.

NRC has established a review team to evaluate the Remotely Operated Weapons System (ROWS) deployed at one power reactor site. This is the first application of ROWS technology at a power reactor. The licensee has submitted a revised security plan that incorporates the ROWS, which offers a response capability at reduced cost, into the site protective strategy. This is a first-of-a-kind effort, and the NRC review team is developing a standard review plan to be used to evaluate the licensee's submittal and any similar future requests.

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 (FBI), and others to develop plans to address recommended actions. Working closely with licensees and DHS, the staff also developed Emergency Action Levels 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. In February 2006, 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.

In December 2005, the NRC designated Regional Federal Security Coordinators (primary and alternate) in each of the NRC Regional Offices. Their responsibilities are delineated in Section 651 of the Energy Policy Act of 2005. NRC staff will assess effectiveness after one year.

On January 24, 2006, the NRC conducted a successful tabletop exercise at DHS headquarters with representatives from DHS, the Department of Defense, and the FBI. The tabletop focused on the interrelationships between NRC and DHS, consistent with the National Response Plan and annexes, in responding to incidents at nuclear power plants. The interactive discussion among participants resulted in reconfirmation of the respective responsibilities of the NRC and DHS for nuclear plant incidents. A follow-on, NRC-sponsored, interagency tabletop exercise, focused on a terrorist aircraft attack on a nuclear power plant, was conducted at NRC headquarters on March 16, 2006.

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. The NRC staff is evaluating safety benefit of the proposed

strategies. In addition, the NRC has completed structural analysis of one spent fuel pool and is continuing with the structural analysis of an additional pool to provide further insight into spent fuel pool structural safety margin. The remaining analysis will be completed in May 2006.

# IX 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. 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 NRC staff has been conducting power uprate reviews since then and has completed 108 such reviews to date. Approximately 13,797 megawatts-thermal (MWt) or 4,599 megawatts-electric (MWe) to the Nation's electric generating capacity or an equivalent of about 4.6 nuclear power plant units has been gained through implementation of power uprates at existing plants. The NRC staff currently has 10 plant-specific power uprate applications under review. The ten applications under review are for four MUR power uprates and six EPUs.

On March 2, 2006, the NRC staff completed its review of the Vermont Yankee (VY) EPU application and approved the 20 percent power uprate. Regarding litigation issues, the Atomic Safety and Licensing Board is expected to establish the final hearing schedule in the near future. Regarding the power ascension of VY to the new EPU power level, VY suspended the power ascension process after the first 5 percent increase in power on March 5, 2006, when certain plant data reached an administrative limit specified in the VY steam dryer monitoring plan. VY remained at the 105 percent power level until March 31, 2006, when the NRC headquarters staff completed its review of the licensee's engineering evaluation, which justified further power ascension. As documented in the NRC staff's Safety Evaluation for the EPU, the licensee has formally committed not to increase power above the applicable hold point if any safety concerns are identified during the NRC staff review of the power ascension data. The power level of VY as of April 3, 2006, is 110 percent of the previous licensed thermal power.

On February 10, 2006, the Hope Creek licensee withdrew its EPU application. The NRC allowed the licensee to withdraw the application because it was incomplete.

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, which 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.

In March 2006, the NRC staff surveyed licensees to obtain information on whether they plan to submit power uprate applications over the next 5 years. Based on this 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.

# X 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). 10 CFR Part 52 governs the issuance of standard design certifications, early site permits (ESPs), and combined licenses (COLs) for nuclear power plants.

## **Design Certifications and Pre-Application Meetings**

On December 30, 2005, the Commission approved the final design certification rule for the Westinghouse AP1000 standard plant design. On January 27, 2006, the AP1000 final design certification rule was issued in the *Federal Register* (71 FR 4464). This final rule amends 10 CFR Part 52 to certify the AP1000 standard plant design. 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 certification was the fourth issued under Part 52 and is valid for 15 years.

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 accepted formally as a docketed application for design certification. The NRC staff also informed GE that a schedule had 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. Based on experience with previous design certifications, a 15 month period is assumed for closure of the open items and issuance of the final design approval, and a 12 month period is assumed for the design certification rulemaking. In a letter to GE dated January 5, 2006, the staff emphasized the importance of the Request For Additional Information process and the need to provide timely responses to ensure that schedules would not be adversely impacted.

On March 23, 2006, the staff briefed Senate Energy and Natural Resource Committee staff members on the ESBWR design certification review project. This briefing also covered infrastructure development efforts, including the COL Application Regulatory Guide development, the Standard Review Plan update, and the Part 52 rulemaking.

On January 10, 2006, the NRC staff met with representatives of Framatome ANP (FANP) to discuss the pre-application review for the Evolutionary Power Reactor (EPR). FANP plans to submit three topical reports over the next several months and also discussed a proposal for early submittal of information during the pre-application review period to facilitate early review, resolution of issues, and NRC approval. FANP also described topics that it believes would benefit from the application of the Multinational Design Approval Program. On February 23, 2006, the staff met with FANP regarding possible design acceptance criteria (DAC) for the EPR design. FANP stated that its goal is to set a high threshold for use of DAC for the EPR design certification and proposes to submit design process descriptions for piping, instrumentation and controls, and human factors in the third quarter of this calendar year. NRC review of these submittals would yield a defined level of design completion and detail required to close out design issues during the design certification review, with the intent of minimizing or eliminating

DAC in the final design control document to be cited in the certification. Framatome plans to provide a letter to NRC describing its proposal.

Pebble-Bed Modular Reactor (PBMR) (Pty) Ltd. continues to engage the NRC staff in planning discussions to prepare for the pre-application review of the PBMR design. PBMR (Pty) Ltd. intends to pursue a design certification under 10 CFR Part 52. The company has also stated that it intends eventually to seek deployment of the PBMR in the U.S. PBMR (Pty) Ltd. expects to submit detailed white papers on a number of technical topics and support the submittals with educational sessions and topical workshops for the NRC staff. PBMR (Pty) Ltd.'s most recent schedule projections show the pre-application phase to extend to the end of 2007 or early 2008, followed by submission of a design certification application in 2008. On February 28 - March 2 and March 15 -16, 2006, PBMR (Pty) Ltd. representatives met with the NRC staff for familiarization sessions on plant layout and systems, safety design and analysis, and plant operations and events for the PBMR reactor.

#### Early Site Permits

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 January 13, 2006, Dominion Nuclear North Anna LLC submitted a stand-alone supplement to the North Anna ESP application to address the safety and the environmental changes in the application resulting from a modified approach to the proposed Unit 3 cooling. On February 10, 2006, the staff issued a letter to Dominion identifying key areas in which the supplement is deficient and requested the applicant to provide a complete and comprehensive revised ESP application adequately addressing the deficiencies. Also, in the letter, the staff provided an updated schedule for the supplemental final SER and EIS to be issued. On February 22, 2006, the NRC staff briefed the Senate Committee on Energy and Natural Resources staff regarding the North Anna ESP application review. The NRC staff discussed the status of its review of the recent design change initiated by Dominion and the key areas in which additional information is needed. The NRC staff held a public meeting with Dominion on March 10, 2006, to discuss the North Anna ESP supplemental submittal.

In September 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.

System Energy Resources Inc. (SERI) 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 December 23, 2005, the ACRS issued its final letter on the Grand Gulf ESP final SER, and on February 7, 2006, the staff sent a letter to SERI requesting that the applicant provide a supplement to the application further

addressing potential hazards along the Mississippi River. On March 1, 2006, the staff received SERI's supplemental information. The staff is reviewing this information and will revise the SER as necessary.

All three 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 is scheduled to issue the final EIS in for the Grand Gulf site in April 2006 and for the Clinton site in July 2006.

#### Combined License

On August 17, 2005, Southern Nuclear Operating Company 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. Southern is scheduled to submit an ESP application in August 2006 and a COL application in March 2008. On January 27, 2006, Southern announced that it will pursue the Westinghouse AP1000 as the reactor technology for potential new nuclear units at the Vogtle site. On March 20 - 22, 2006, the staff toured Southern's Vogtle and Hatch sites in support of the Vogtle ESP application.

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 design. AREVA and Constellation each own half of Unistar. 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 the EPR design following about 6 months later. An additional COL application is planned about a year later. On January 25, 2006, the NRC staff met with representatives of UniStar/Constellation to discuss pre-application activities for a potential COL application. UniStar/Constellation discussed potential schedules for early submittals of information necessary to obtain approval from the NRC for limited work authorizations. UniStar/Constellation also stated that it is scheduling to begin site characterization activities at Calvert Cliffs, which is one of several potential UniStar sites.

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. On February 21, 2006, the NRC staff met with Progress Energy to discuss their preparations for submitting a COL application. 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 November 15, 2005, the NRC staff met with Entergy Nuclear to discuss planning related to COL applications for its Grand Gulf and River Bend sites. The Grand Gulf application is scheduled to be submitted in either the 4th quarter of 2007 or the 1st quarter of 2008, and the River Bend application is scheduled for approximately 6 weeks after the Grand Gulf submittal. The Grand Gulf application will be a joint venture with NuStart and will reference the ESP, and both submittals 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, Entergy Nuclear submitted a letter to the NRC staff to initiate pre-application activities.

On September 22, 2005, NuStart Energy announced that it had selected Grand Gulf and Bellefonte as the two sites it will use for its applications for COLs for new nuclear plants. The Grand Gulf site was designated for the GE ESBWR design and the Bellefonte site 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, which is scheduled to be submitted during the fourth quarter 2007, and a single unit COL application for Grand Gulf site, which is scheduled for fourth quarter 2007 or first quarter 2008. On February 7, 2006, the NRC staff held a public meeting with NuStart to discuss the Bellefonte COL pre-application activities. NuStart stated that it is planning on using some of the existing structures at the Bellefonte site, such as the cooling towers, intake structure, switchyard, and tower. During the meeting, the NRC staff and NuStart discussed the concept of the design-centered approach and standardization of COL applications among other applicants referencing the AP1000 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 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.

#### Regulatory Infrastructure

On November 3, 2005, the Executive Director for Operations issued SECY-05-0203 requested 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 (SECY-05-0203, "Revised Proposed Rule to Update 10 CFR Part 52, Licenses, Certifications, and Approvals for Nuclear Power Plants"). This rulemaking to enhance 10 CFR Part 52 is based on lessons learned during 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 approved 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 March 14, the NRC staff held a public meeting with stakeholders to discuss the proposed 10 CFR Part 52 changes and rulemaking.

On December 1 and 2, 2005, the NRC staff participated in a public meeting with the NEI Combined License Task Force. During the meeting, the NRC staff stated that it is developing a COL application regulatory guide based on Regulatory Guide 1.70, "Standard Form and Content of Safety Analysis Reports for Nuclear Power Plants." A draft of the regulatory guide is scheduled to be issued in June 2006 and the final in early 2007. Work-in-progress versions of each chapter of the regulatory guide are being placed on the NRC website between February and June 2006. The NEI Combined License Task Force has requested periodic meetings to discuss draft chapters after they are placed on the NRC website. On March 15, 2006, the NRC staff held a public workshop with stakeholders to discuss the draft Regulatory Guide (DG-1145) and its contents. There are three additional public meetings scheduled prior to DG-1145's scheduled issuance in June 2006.

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

On January 12 and March 8, 2006, the NRC staff met with representatives from the Department of Energy (DOE) to discuss the use of a Laboratory Consortium to support new reactor licensing. The DOE Laboratory Consortium consists of the major DOE Office of Science Laboratories (Argonne National Laboratory, Brookhaven National Laboratory, Oak Ridge National Laboratory and Pacific Northwest National Laboratory). The NRC staff and National Labs are working to establish a collaborative approach with regard to leveraging multiple laboratories' resources to assist the staff in future new reactor licensing application reviews.

In February 2006, the NRC staff traveled to Finland and France to meet with regulatory counterparts regarding the Multinational Design Approval Program. Discussions were focused on possible cooperation in review of the EPR reactor design. Counterpart nations expressed interest in information exchange and cooperation, indicating topics other than the EPR review where NRC may be able to provide assistance.

On February 21, 2006, the NRC staff met with the Nuclear Energy Institute (NEI) to discuss the design-centered approach and standardization of a combined license application (COLA). The staff and industry representatives discussed various aspects of a reference COLA, including when one would be identified and submitted, and what portions of a reference COLA would be considered standard.

On March 6, 2006, NRC staff hosted a public meeting with NEI on the proposed rulemaking for security design expectations for new reactors. Industry representatives indicated their intentions to develop several documents that may help with the development of staff's guidance documents in support of the rule. Staff and industry agreed to continue to interact throughout the rulemaking process.

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 Commission directed the staff to complete the ANPR stage by December 2006 and to provide a recommendation by May 2007 on whether and, if so, how to proceed with rulemaking.

# New Reactor Licensing Activities As of March 31, 2006

Organization	Designs endorsed or under consideration	Sites under Consideration	Planned Applications	Date	Basis
General Electric	ESBWR	N/A	Design Certification	8/24/2005	8/24/05 Application Submitted
Framatome ANP	EPR	N/A	Design Certification	12/2007	Letter 11/4/05
Southern Nuclear Operating Company	AP1000	Vogtle	ESP and COL	8/2006: ESP 3/2008: COL	Letters 7/26 and 8/17/05 Mtg Summary (ML052710018)
Constellation	EPR	Nine Mile Point Calvert Cliffs, plus 2	COL	6/2008 and 6/2009	Press Release 11/2/05 Mtg Letter 11/4/05
Dominion	ESBWR	North Anna	COL	9/2007	DOE solicitation award and press release Letter 11/22/05
Duke	AP1000	Cherokee (2)	COL	Late 2007 or Early 2008	Letters 3/4/05, 10/25/05 and 3/16/06
Progress Energy	AP1000	Harris (2)	COL	Sept or Oct 2007	Letters 8/24/05 and 2/1/06 11/1/05 Mtg
		Florida (2)	COL	Late 2007 or 1 <sup>st</sup> Qtr 2008	Press Release
NuStart Energy	AP1000	Bellefonte (2)	COL	4 <sup>th</sup> Qtr 2007	Letters 12/7/2004 and
	ESBWR	Grand Gulf	COL	4 <sup>th</sup> Qtr 2007 or 1 <sup>st</sup> Qtr 2008	press release
Entergy	ESBWR	River Bend	COL	Early 2008	Press Release 11/15/05 Mtg Letter 12/5/05
South Carolina Electric and Gas	AP1000	Summer (2)	COL	3 <sup>rd</sup> Qtr 2007	Letters 12/5/05 and 2/10/06
Unannounced ABWR Applicant	ABWR	TBD (2)	ESP and COL	3 <sup>rd</sup> Qtr 2007:ESP (COL: soon after)	Letter 3/13/06