UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

CHAIRMAN

April 30, 2008

The Honorable Thomas R. Carper
Chairman, Subcommittee on Clean Air
and Nuclear Safety
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

The Fiscal Year (FY) 2008 Energy and Water Development Appropriations Act 110-185, directed the U.S. Nuclear Regulatory Commission (NRC) to provide a semiannual report on the status of its licensing and other regulatory activities. On behalf of the Commission, I am submitting this report, which covers the first half of FY 2008. I am also providing in this cover letter additional information in order to keep you fully and currently informed of NRC's regulatory activities.

On November 14, 2007, the NRC amended its employee protection regulations to clarify the Commission's authority to impose a civil penalty upon a non-licensee contractor or subcontractor of a Commission licensee, or applicant for a Commission license who violates the NRC's regulations by discriminating against employees for engaging in protected activity (72 FR 219). The NRC also amended its employee protection regulations related to the operation of Gaseous Diffusion Plants to conform with the NRC's other employee protection regulations and to allow the NRC to impose a civil penalty on the United States Enrichment Corporation (USEC), as well as a contractor or subcontractor of USEC. The rule went into effect on December 14, 2007.

On November 26, 2007, the NRC approved Connecticut Yankee Atomic Power Company's request to release a majority of the Haddam Neck nuclear power plant site near Meriden, Connecticut, for unrestricted public use. Residual contamination on the land (approximately 210 acres) is below NRC regulatory requirements that allow a maximum radiation dose of 25 millirem per year. (The average person in the United States receives about 300 millirem from background radiation each year.) Connecticut Yankee's license will still apply to the site's dry cask storage facility, where the spent nuclear fuel from the plant's 28 years of operation is stored, plus a parcel of land surrounding this facility. The total land remaining under the license is approximately 5 acres. Connecticut Yankee remains responsible for the security and protection of this land and the dry cask storage facility, and is required to maintain $100 million in nuclear liability insurance coverage for the facility until the waste has been removed.

On January 24, 2008, the NRC issued a Notice of Violation and proposed civil penalty of $650,000 to Entergy for its continuing failure to comply with NRC Orders to fully implement a new emergency notification system with back-up power for the Indian Point nuclear power plant. Normally, a base civil penalty in the amount of $65,000 would be considered for this violation, considered a Severity Level III violation. However, as noted in the letter to Entergy, the NRC wants to emphasize the importance of prompt compliance with NRC Orders, and exercised discretion to increase the base civil penalty because of the continuing failure to meet the implementation date, which was due to circumstances reasonably within Entergy's control. While Entergy continues to work toward putting the new system into operation, the plant's existing siren system remains operable to alert the public in the event of a radiological emergency at Indian Point.

On March 11, 2008, the NRC announced that it will establish the Edward McGaffigan, Jr. Public Service Award in memory of the agency's longest-serving Commissioner, who died last year after a long battle with cancer. The award will be a career tribute given to an NRC employee or recent retiree who demonstrates an extraordinary commitment to public service and exemplifies the integrity, professional dedication, and moral character that Commissioner McGaffigan exhibited in his decades of public service. The award will be considered annually but granted only when a nominee meets all the specifications and requirements for the award.

The NRC has completed an Agreement with the Commonwealth of Pennsylvania to assume part of the agency's regulatory authority over certain radioactive materials in the state. Pennsylvania becomes the 35th state to sign such an agreement with the NRC. The agreement became effective March 31, 2008. Under the agreement, the NRC transferred to Pennsylvania the responsibility for licensing, rulemaking, inspection and enforcement activities for: (1) radioactive materials produced as a result of processes related to the production or utilization of special nuclear material (SNM); (2) uranium and thorium source materials; (3) SNM in quantities not sufficient to form a critical mass; and (4) accelerator-produced or other radioactive materials under NRC jurisdiction provided by the Energy Policy Act of 2005. The NRC transferred approximately 650 licenses, most for medical and industrial uses of radioactive material, to Pennsylvania's jurisdiction. The NRC will retain jurisdiction over regulation of commercial nuclear power plants and other facilities, and Federal agencies using certain nuclear material in the state. In addition, NRC will retain authority for the review, evaluation and approval of sealed sources and devices containing certain nuclear materials manufactured in Pennsylvania and distributed throughout the country.

On December 5, 2007, NRC issued Orders to an additional class of licensees authorized to possess risk-significant radioactive materials, requiring fingerprinting of individuals who require unescorted access to the radioactive materials. Agreement States are in the process of issuing similar requirements for licensees in their States. The Orders were issued in accordance with Section 652 of the Energy Policy Act of 2005, which amended Section 149 of the Atomic Energy Act of 1954, as amended, to require fingerprinting and a Federal Bureau of Investigation identification and criminal history records check for, among other licensees, those designated by the Commission as warranting fingerprinting.

The NRC will continue to conduct additional inspections at the Indian Point nuclear power plant throughout 2008 to ensure issues associated with on-site groundwater contamination and the facility's new siren system are being properly addressed. Entergy Nuclear operates Indian Point, which is located in Buchanan (Westchester County), New York. Overall, the NRC considers Entergy's operation of Indian Point to be acceptable, with both operating units currently in the category of oversight that would typically result in a baseline, or routine, level of inspections.

Please contact me for any additional information you may need.

Sincerely,

Dale E. Klein

Enclosure:
Semiannual Status Report on the Licensing
Activities and Regulatory Duties of the
U.S. NRC, October 2007 - March 2008

cc: Senator George V. Voinovich

Identical letter sent to:

The Honorable Thomas R. Carper
Chairman, Subcommittee on Clean Air
and Nuclear Safety
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510
cc: Senator George V. Voinovich

The Honorable Barbara Boxer
Chairman, Committee on Environment
and Public Works
United States Senate
Washington, D.C. 20510
cc: Senator James M. Inhofe

The Honorable Rick Boucher
Chairman, Subcommittee on Energy
and Air Quality
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515
cc: Representative Fred Upton

The Honorable John D. Dingell
Chairman, Committee on Energy
and Commerce
United States House of Representatives
Washington, D.C. 20515
cc: Representative Joe Barton

The Honorable Peter J. Visclosky
Chairman, Subcommittee on Energy
and Water Development
Committee on Appropriations
United States House of Representatives
Washington, D.C. 20515
cc: Representative David L. Hobson

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

Protecting People and the Environment

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

October 2007 - March 2008

Note: The period of performance covered by this report includes activities occurring between the first day of October 2007 and last day of March 2008. 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.

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I Implementing Risk-Informed Regulations

The U.S. Nuclear Regulatory Commission (NRC) continues to make progress toward risk-informing its regulations for nuclear power reactors. Since 2004, the NRC staff has published a final rule to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50.69, "Risk-Informed Categorization and Treatment of Structures, Systems, and Components for Nuclear Power Reactors," and a final voluntary rule adding a new 10 CFR 50.48(c) that endorsed the National Fire Protection Association (NFPA) performance-based, risk-informed fire protection consensus standard, NFPA-805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants."

In addition, the NRC staff worked with the Nuclear Energy Institute (NEI) to develop industry implementing guidance NEI 04-02, "Guidance for Implementing a Risk-Informed, Performance-Based Fire Protection Program Under 10 CFR 50.48(c)," which the NRC endorsed in Regulatory Guide (RG) -1.205, "Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants." Currently, NRC licensees for 44 operating nuclear power units have submitted letters of intent to adopt NFPA-805 as their licensing basis.

The NRC staff is also making progress to resolve open issues related to the development of the final rule, 10 CFR 50.46a, to establish risk-informed requirements for emergency core cooling systems. The NRC initially published the proposed rule for risk-informing these requirements on November 7, 2005.

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). The comment period on the ANPR closed December 29, 2006. The staff completed a preliminary review of the stakeholder's comments and determined that, while stakeholder's views are generally favorable toward risk-informing reactor requirements for advanced reactors, there is a general desire that a set of draft requirements be developed and applied to a non-light water reactor as a pilot test. Stakeholders also expressed concern that the effort to risk-inform the requirements should not adversely impact the licensing of new reactors in the near term. As a result of comments received on the ANPR, the Commission approved the NRC staff's recommendation to defer the rulemaking until after the development of the licensing strategy for the Next Generation Nuclear Plant (NGNP) or receipt of an application for design certification or a license for the Pebble Bed Modular Reactor (PBMR).

On March 22, 2007, the staff issued Regulatory Issue Summary (RIS) 2007-06, "RG 1.200 Implementation," to inform licensees of how the NRC will implement its technical adequacy review of plant-specific probabilistic risk assessments (PRA) used to support risk-informed licensing actions after the issuance of national consensus PRA standards and the issuance of RG 1.200, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities." Revision 2 to RG 1.200 is scheduled to be issued in December 2008. This revision will endorse the American Society of Mechanical Engineers/American Nuclear Society combined PRA standard, which includes requirements for fire PRA models.

Beginning April 26, 2007, the Risk-Informed Regulatory Improvement Program is now referred to as the Risk-Informed and Performance-Based Plan (RPP). Under this plan, the staff has committed to complete development of the RPP database, inform the Commission in periodic reports of any potential issues associated with achieving a risk-informed and performance-based regulatory structure, and develop final objectives for each regulatory arena.

II Reactor Oversight Process

The NRC continues to implement the Reactor Oversight Process (ROP) at all nuclear power plants. The NRC staff 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 NRC staff hosted ROP Working Group public meetings on October 18 and December 5, 2007; and January 16, February 20, and March 19, 2008. The ROP Working Group is made up of representatives from industry, NEI, and NRC staff, who meet with the goal of continuously improving the ROP and reactor safety. The meetings are open to the public and provide a forum for external feedback on staff initiatives. During the meetings, attendees discussed mitigating systems performance index (MSPI) implementation including MSPI implementation for Browns Ferry, Unit 1, safety culture integration into the ROP, performance indicator issues including potential changes to NEI 99-02, "Regulatory Assessment Performance Indicator Guidance," and open and new frequently asked questions (FAQs).

- On October 4, 2007, the NRC published a survey in the *Federal Register* and on the NRC website to seek external stakeholder input regarding the implementation of the ROP. The NRC staff have conducted these surveys every year since the ROP was first implemented in 2000. The NRC received seven survey responses similar in nature to those received in previous surveys. The NRC considered this feedback when evaluating its annual self-assessment of the ROP for calendar year (CY) 2007 as documented in SECY-08-0046, dated April 2, 2008.

- On October 18, 2007, the NRC staff participated in a public meeting with NEI representatives and public interest groups on the Public Radiation Safety Cornerstone to discuss proposed changes to the Significance Determination Process. The changes were subsequently approved and issued in early 2008.

- On October 30, 2007, the NRC staff completed an effectiveness review, known as ROP realignment, for all baseline inspection procedures in the ROP cornerstone areas of Initiating Events, Mitigating Systems, Barrier Integrity, Occupational Radiation Safety, and Public Radiation Safety. The review considered inspection results over a 3-year period (CY 2004 through CY 2006). The purpose of this review is to ensure the most effective overall application of inspection resources within the ROP. The staff made changes affecting inspection scope and frequency to 12 baseline inspection procedures and implemented the revised baseline inspection program beginning in CY 2008.

- On December 5, 2007, the NRC conducted a public meeting with NEI representatives to discuss the consistency of health physics inspection findings in the Occupational and Public Radiation Safety Cornerstones.

- On January 10, 2008, the Risk Assessment of Operational Event (RASP) Handbook Volume 1, "Internal Events Revision 1.01," was made public availability in the NRC's Agencywide Documents and Management System (ADAMS). The RASP Handbook contains best practices used within the industry for assessing risk and is used as a reference in the Significance Determination Process.

- On February 5, 2008, the NRC staff conducted a public meeting with NEI and Electric Power Research Institute (EPRI) representatives to discuss the new EPRI Ground Water Protection Guidelines. These new guidelines complement the EPRI Ground Water Monitoring Guidelines issued in 2005.

- On March 5, 2008, the NRC staff posted the ROP end-of-cycle plant assessment results for CY 2007 on the NRC website. The results indicate that, overall, the plants continue to operate safely. While the results indicate an increase in the number of plants receiving higher level of NRC attention (i.e., Columns 3 and 4), the NRC staff has not concluded that the results are an indication of a substantive negative trend.

III Status of Issues in the Reactor Generic Issues Program

Generic Issues (GI) Closed During First and Second Quarter FY 2008:

- GI-156.6.1, "Pipe Break Effects on Systems and Components Inside Containment"

  The NRC has closed out GI-156.6.1. This GI considered whether a set of older plants, which were licensed before modern regulations were put in place, adequately addressed certain dynamic effects of pipe breaks inside containment. The staff performed a series of calculations which resolved the issue for approximately one half of the older plants, and then individually reviewed the containment designs and layouts for each of the remaining plants. Based on the calculations and reviews, the staff concluded that no significant safety problem exists and the generic issue was resolved.

GIs with Significant Schedule Adjustments During First and Second Quarter FY 2008:

- GI-191, "Assessment of Debris Accumulation on Pressurized Water Reactor (PWR) Sump Performance"

  Planned strainer modifications are complete at essentially all PWRs. These modifications typically increased strainer size by one to two orders of magnitude. The NRC believes these modifications have improved strainer performance. Head loss testing accounting for chemical effects is ongoing but expected to generally be complete in late 2008. Licensees have submitted supplemental responses to Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation during Design Basis Accidents at Pressurized-Water Reactors," and completion of staff's review

of the responses is expected to be complete by the end of 2008. The staff is also verifying through inspections that licensees have accomplished the activities they committed too related to GL 2004-02. These inspections will be completed during summer 2008. Extensions have been granted for some licensees to complete certain hardware modifications as late as spring 2009.

- GI-199, "Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States on Existing Plants"

  The staff completed the screening analysis and determined that GI-199 meets the criteria to begin the Safety / Risk Assessment Stage of the Generic Issue Process. On February 6, 2008, the staff met with stakeholders in a public meeting to discuss the results of the Screening Stage of GI-199. This meeting was held to ensure that EPRI and other stakeholders are given the opportunity to participate in the Safety / Risk Assessment Stage for GI-199. The staff is currently collecting and analyzing seismic hazard information from available sources, and seismic risk information from Individual Plant Examination of External Events (IPEEE) analyses. EPRI has committed to provide up-to-date information on seismic source characterization and attenuation models in May 2008. The staff plans to review this information and use this information in the Safety / Risk Assessment Stage as appropriate.

The remaining open GIs are on track to complete according to (or close to) schedules previously submitted.

IV Licensing Actions and Other Licensing Tasks

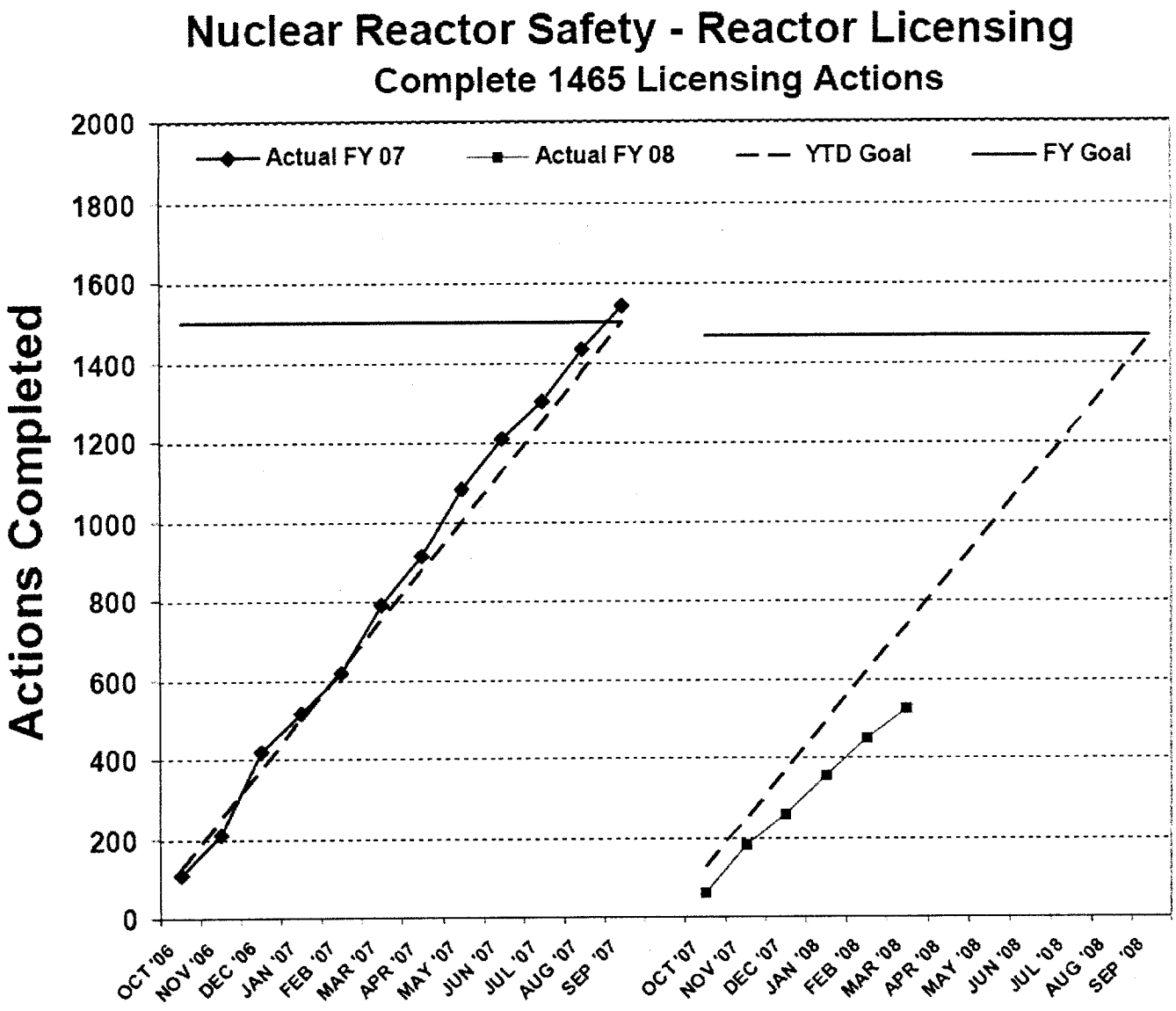
Operating power reactor licensing actions are defined as orders, license amendments, exemptions from regulations, relief from inspection or surveillance requirements, topical reports submitted on a plant-specific basis, notices of enforcement discretion, or other actions requiring NRC review and approval before they can be implemented by licensees. The fiscal year (FY) 2008 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 GLs or Bulletins, NRC responses to 10 CFR 2.206 petitions, NRC review of generic topical reports, responses by 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 (FSAR) updates, or other licensee requests not requiring NRC review and approval before they can be implemented by licensees. The FY 2008 NRC Performance Plan incorporates one output measure related to the number of other licensing tasks completed.

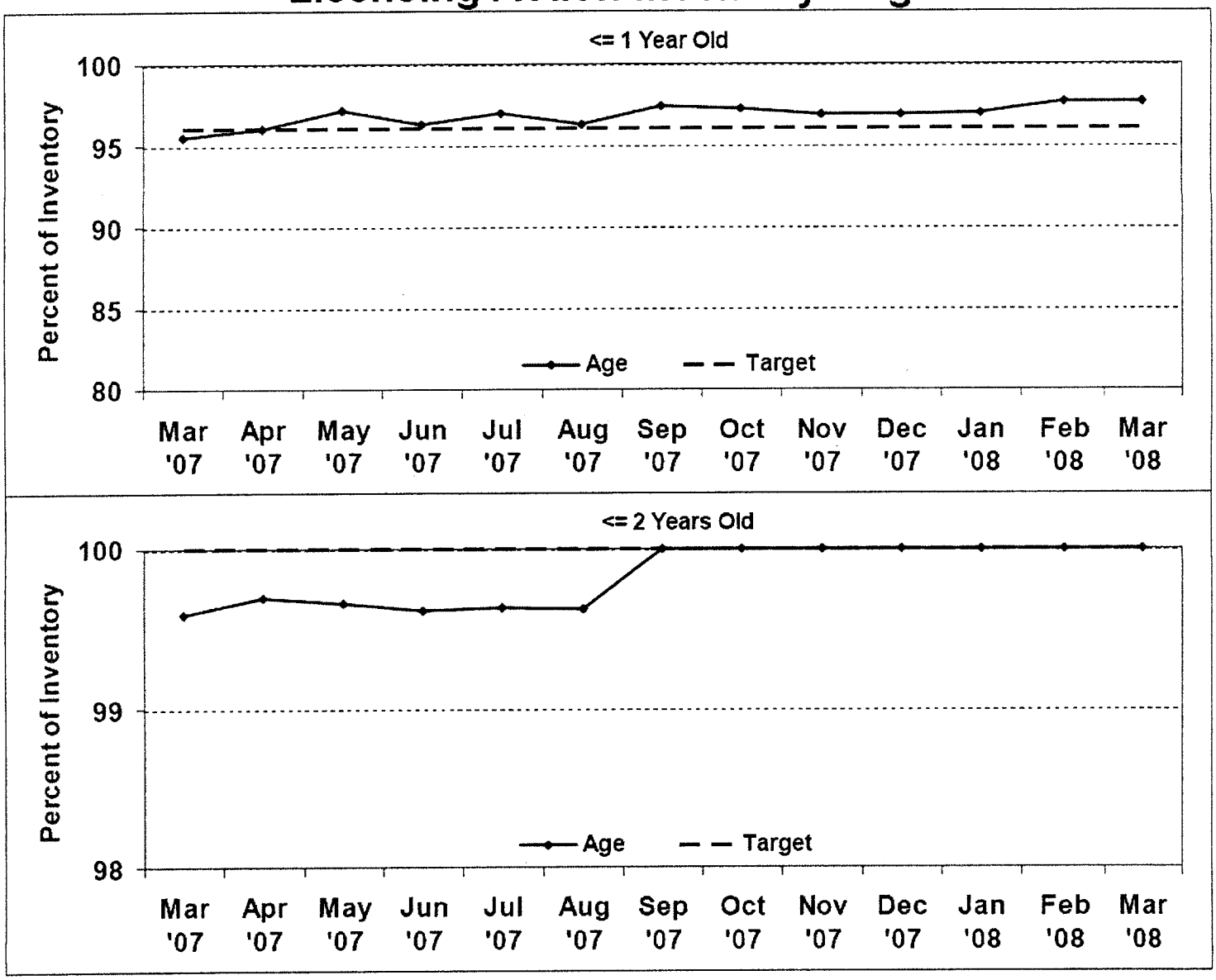
The actual FY 2006 and FY 2007 results, the FY 2008 goals, and the actual to-date FY 2008 results for the three NRC Performance Plan output measures for operating power reactor licensing actions and other licensing tasks are shown in the following table.

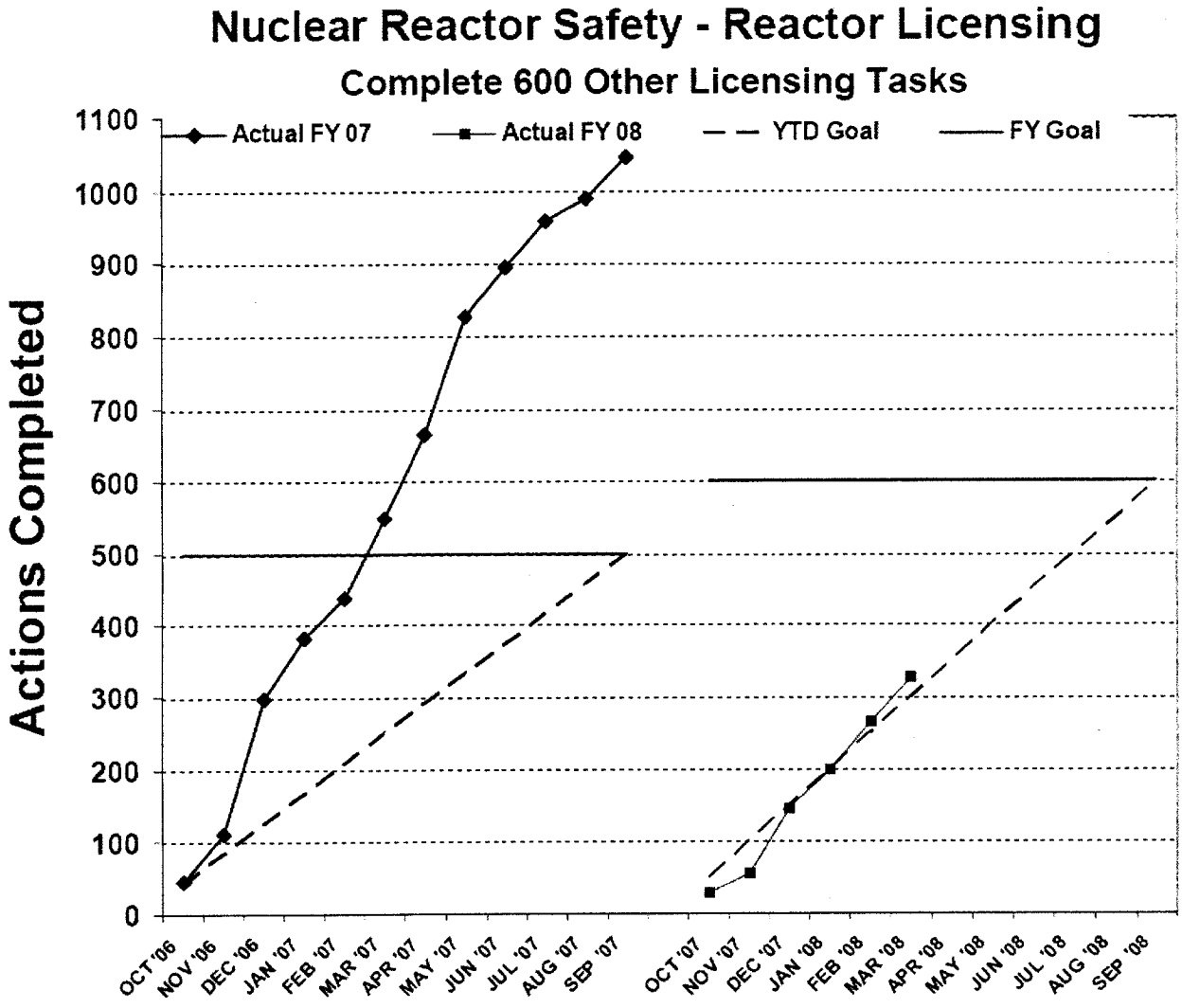
PERFORMANCE PLAN				
Output Measure	**FY 2006 Actual**	**FY 2007 Actual**	**FY 2008 Goals**	**FY 2008 Actual (thru 3/31/08)**
Licensing actions completed/year	1659	1542	≥ 1465	524
Age of licensing action inventory	97.8% ≤ 1 year and 99.9% ≤ 2 years	97.4%≤ 1 year and 100% ≤ 2 years	96% ≤ 1 year and 100% ≤ 2 years	97.7% ≤ 1 year and 100% ≤ 2 years
Other licensing tasks completed/year	676	1045	≥ 600	326
Age of other licensing tasks inventory	Not measured	Not measured	90% ≤ 1 year and 100% ≤ 2 years	93.4% ≤ 1 year and 100% ≤ 2 years

The charts on the following pages show NRC's FY 2008 trends for the three operating power reactor licensing action and other licensing task output measure goals:


Nuclear Reactor Safety - Reactor Licensing
Complete 1465 Licensing Actions
Actions Completed
Actual FY 07
Actual FY 08
YTD Goal
FY Goal
2000
1800
1600
1400
1200
1000
800
600
400
200
0
OCT '06
NOV '06
DEC '06
JAN '07
FEB '07
MAR '07
APR '07
MAY '07
JUN '07
JUL '07
AUG '07
SEP '07
OCT '07
NOV '07
DEC '07
JAN '08
FEB '08
MAR '08
APR '08
MAY '08
JUN '08
JUL '08
AUG '08
SEP '08

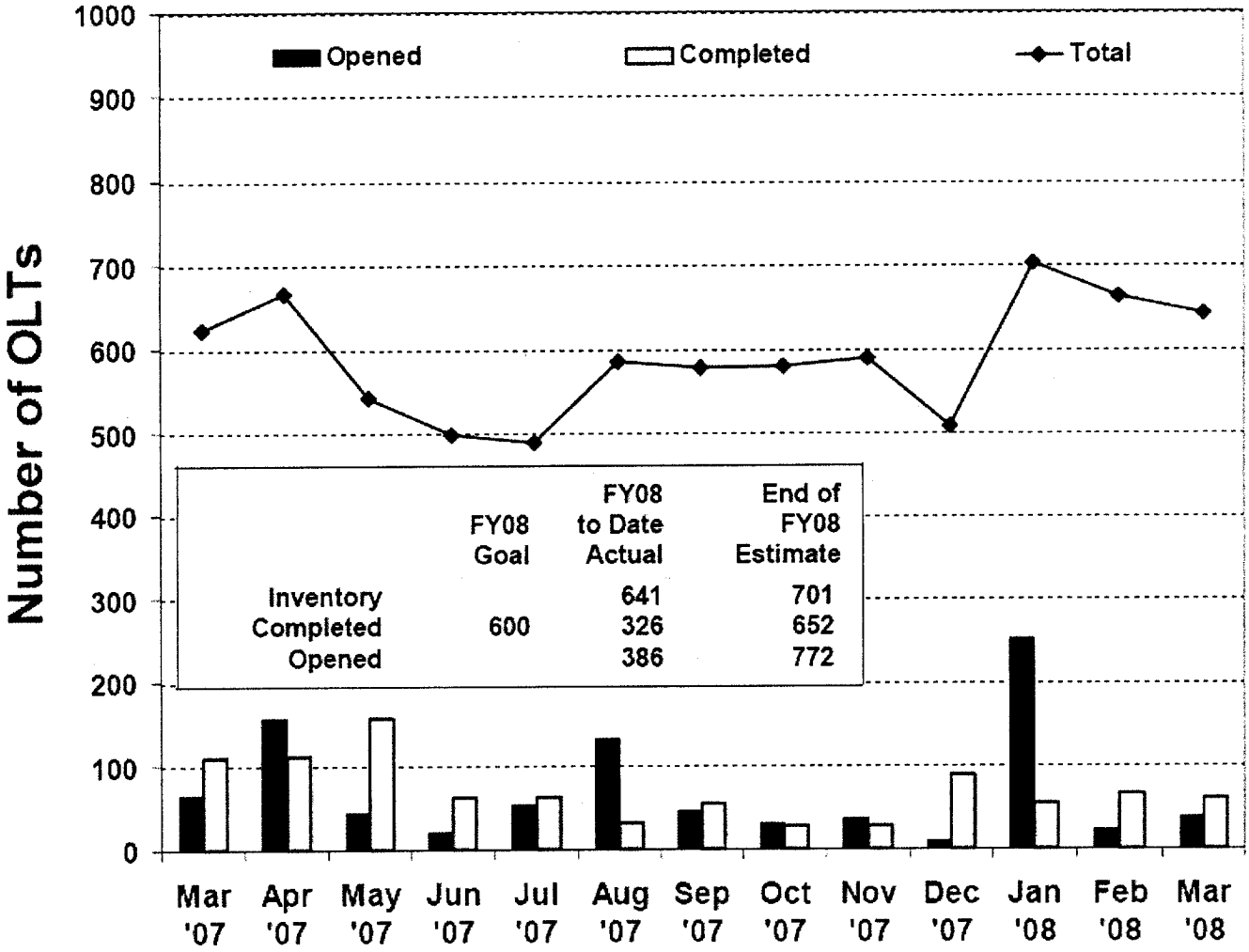
Licensing Action Inventory - Age Goals




Nuclear Reactor Safety - Reactor Licensing
Complete 600 Other Licensing Tasks
Actions Completed
Actual FY 07
Actual FY 08
YTD Goal
FY Goal
1100
1000
900
800
700
600
500
400
300
200
100
0
OCT '06
NOV '06
DEC '06
JAN '07
FEB '07
MAR '07
APR '07
MAY '07
JUN '07
JUL '07
AUG '07
SEP '07
OCT '07
NOV '07
DEC '07
JAN '08
FEB '08
MAR '08
APR '08
MAY '08
JUN '08
JUL '08
AUG '08
SEP '08

Nuclear Reactor Safety - Reactor Licensing

Other Licensing Task Inventory



	FY08 Goal	FY08 to Date Actual	End of FY08 Estimate
Inventory		641	701
Completed	600	326	652
Opened		386	772

V Status of License Renewal Activities

The NRC has completed the review of license renewal applications for 48 of the 104 nuclear power units licensed to operate.

A petition for suspension of the license renewal application review for Oyster Creek, Vermont Yankee, Pilgrim and Indian Point, was filed with the Commission related to the September 6, 2007, Office of Inspector General (OIG) Audit Report, OIG-07-A-15, "Audit of NRC's License Renewal Program." The report acknowledges existence of a comprehensive renewal program, but recommends process improvements largely related with documentation of the staff's review.

The following is the status of applications currently under review.

Oyster Creek License Renewal Application

The final supplemental environmental impact statement (SEIS) was issued in January 2007 and the final safety evaluation report (SER) was issued in March 2007. A request for hearing was received in response to the NRC's notice of opportunity for hearing, an Atomic Safety and Licensing Board (ASLB) was established, and the hearing is proceeding. An evidentiary hearing was held on September 24-25, 2007. The ASLB issued an initial decision rejecting the contention on December 18, 2007. The intervener is currently appealing the decision. In addition, the State of New Jersey filed an appeal with the U.S. Court of Appeals regarding the Commission's denial of their request to intervene as a party.

Pilgrim License Renewal Application

The final SEIS was issued in July 2007, and the final SER was issued in June 2007. A request for hearing was received in response to the NRC's notice of opportunity for hearing, an ASLB was established, and the hearing is proceeding.

On September 26, 2007, the Advisory Committee on Reactor Safeguards (ACRS) issued its letter to the Commission recommending approval of the application.

Vermont Yankee License Renewal Application

The draft SEIS was issued in December 2006, and the SER, identifying remaining confirmatory items, was issued in March 2007. A request for hearing was received in response to the NRC's notice of opportunity for hearing, an ASLB was established, and the hearing is proceeding. The final SEIS was issued in August 2007 and the final SER was issued in February 2008.

James A. FitzPatrick License Renewal Application

The FitzPatrick license renewal application is currently under review. The final SEIS and the final SER were issued in January 2008. The ACRS Full Committee has reviewed the SER and the NRC staff is awaiting the ACRS recommendation letter to the Commission.

Susquehanna License Renewal Application

On September 13, 2006, the NRC received an application for renewal of the operating licenses for Susquehanna Units 1 and 2. The NRC completed its acceptance review and found the application acceptable for docketing and review. A request for hearing was submitted in response to the notice of an opportunity to request a hearing, and an ASLB was established. ASLB subsequently determined that the petitioner's contentions were not admissible and terminated the proceeding.

The licensee submitted the license renewal application concurrent with a request for extended power uprate (EPU), which will require the licensee to supplement the renewal application in the future. Because of the potential impact of the EPU supplement on the license renewal review, the licensee agreed that the license renewal schedule will be established after approval of the EPU and submittal of the supplement to the renewal application.

Wolf Creek License Renewal Application

The Wolf Creek license renewal application is currently under review. The draft SEIS was issued in September 2007 and the SER with open items was issued in February 2008. The final SER is scheduled to be issued in May 2008.

Shearon Harris License Renewal Application

The Shearon Harris license renewal application is currently under review. The draft SEIS was issued in December 2007 and the SER with open items was issued in March 2008.

Indian Point License Renewal Application

On April 30, 2007, the NRC received an application for renewal of the operating licenses for Indian Point Units 2 and 3. The staff conducted an environmental scoping meeting in September 2007. In response to requests from members of Congress and the State of New York, the Commission, in its discretion, extended the time for filing petitions to intervene in the license renewal proceeding for Indian Point Nuclear Generating Units 2 and 3 from October 1, 2007, to November 30, 2007. A request for hearing was received in response to the NRC's notice of opportunity for hearing, an ASLB was established, and the hearing is proceeding.

Vogtle License Renewal Application

On June 29, 2007, the NRC received an application for renewal of the operating licenses for Vogtle Units 1 and 2. The NRC conducted its acceptance review and found the application acceptable for docketing and review. The staff conducted an environmental scoping meeting in September 2007. The draft SEIS is scheduled to be issued in April 2008.

Three Mile Island Nuclear Station, Unit 1

On January 8, 2008, the staff received an application from AmerGen requesting the renewal of the operating license for the Three Mile Island Nuclear Station, Unit 1. The NRC staff conducted its acceptance review and found the application acceptable for docketing and review. The application is currently under review. An environmental scoping meeting is scheduled for April 2008.

VI Summary of Reactor Enforcement Actions

Reactor Enforcement by Region

The reactor enforcement statistics below are arranged by Region, most recent half year, and FY 2008 to date. The FY 2007 and FY 2006 statistics are provided comparison purposes. The statistics are also depicted in separate tables for the non-escalated and escalated reactor enforcement data, as well as separate tables for the escalated enforcement data associated with traditional enforcement and the ROP. These tables are followed by brief descriptions of the escalated reactor enforcement actions associated with both traditional enforcement and the reactor oversight process (as well as any other significant actions) taken during the applicable calendar half year.

NON-ESCALATED REACTOR ENFORCEMENT ACTIONS						
		Region I	Region II	Region III	Region IV	TOTAL
Cited Severity Level IV or GREEN	First Half FY 08	0	0	1	1	2
	FY 08 YTD Total	0	0	1	1	2
	FY 07 Total	3	0	0	5	8
	FY 06 Total	10	0	1	3	14
Non-Cited Severity Level IV or GREEN	First Half FY 08	59	129	143	144	475
	FY 08 YTD Total	59	129	143	144	475
	FY 07 Total	181	147	302	302	932
	FY 06 Total	224	154	256	259	893
TOTAL Cited and Non-Cited Severity Level IV or GREEN	First Half FY 08	59	129	144	145	477
	FY 08 YTD Total	59	129	144	145	477
	FY 07 Total	184	147	302	307	940
	FY 06 Total	234	154	257	262	907

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.

Some of FY 07 total numbers have been revised from the third quarter FY 07 report, which were incorrectly tallied due to table conversion problems from changing word processing applications.

ESCALATED REACTOR ENFORCEMENT ACTIONS ASSOCIATED WITH TRADITIONAL ENFORCEMENT						
		Region I	Region II	Region III	Region IV	TOTAL
Severity Level I	First Half FY 08	0	0	0	0	0
	FY 08 YTD Total	0	0	0	0	0
	FY 07 Total	0	0	0	0	0
	FY 06 Total	0	0	0	0	0
Severity Level II	First Half FY 08	0	1	0	0	1
	FY 08 YTD Total	0	1	0	0	1
	FY 07 Total	0	1	0	0	1
	FY 06 Total	0	0	0	0	0
Severity Level III	First Half FY 08	1	1	1	0	3
	FY 08 YTD Total	1	1	1	0	3
	FY 07 Total	2	2	2	0	6
	FY 06 Total	2	1	7	1	11
TOTAL Violations Cited at Severity Level I, II, or III	First Half FY 08	1	2	1	0	4
	FY 08 YTD Total	1	2	1	0	4
	FY 07 Total	2	3	2	0	7
	FY 06 Total	2	1	7	1	11

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

Some of FY 07 total numbers have been revised from the third quarter FY 07 report, which were incorrectly tallied due to table conversion problems from changing word processing applications.

ESCALATED REACTOR ENFORCEMENT ACTIONS ASSOCIATED WITH THE REACTOR OVERSIGHT PROCESS						
		Region I	Region II	Region III	Region IV	TOTAL
Violations Related to RED Findings	First Half FY 08	0	0	0	0	0
	FY 08 YTD Total	0	0	0	0	0
	FY 07 Total	0	0	0	0	0
	FY 06 Total	0	0	0	0	0
Violations Related to YELLOW Findings	First Half FY 08	0	1	0	0	1
	FY 08 YTD Total	0	1	0	0	1
	FY 07 Total	0	0	1	0	1
	FY 06 Total	0	0	1	0	1
Violations Related to WHITE Findings	First Half FY 08	0	0	0	2	2
	FY 08 YTD Total	0	0	0	2	2
	FY 07 Total	4	5	2	4	15
	FY 06 Total	3	6	3	2	14
TOTAL Related to RED, YELLOW, or WHITE Findings	First Half FY 08	0	1	0	2	3
	FY 08 YTD Total	0	1	0	2	3
	FY 07 Total	4	5	3	4	16
	FY 06 Total	3	6	4	2	15

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.

Some of FY 07 total numbers have been revised from the third quarter FY 07 report, which were incorrectly tallied due to table conversion problems from changing word processing applications.

Reactor Escalated Enforcement Actions (EA) as Well as Any Other Significant Actions Taken

South Carolina Electric and Gas Company (V.C. Summer Nuclear Plant) EA-07-079 - On October 12, 2007, a Notice of Violation and Exercise of Enforcement Discretion was issued to South Carolina Electric and Gas Company for a Severity Level III violation involving changes made by V.C. Summer to its Emergency Plan. Specifically, between October 1980 and July 28, 2006, the licensee made changes, without Commission approval, to the NRC approved revision of their Emergency Action Levels (EAL) that: 1) decreased the effectiveness of the plan; and, 2) resulted in a non-standard (hybrid) EAL scheme. In consideration of the guidance under Enforcement Guidance Memorandum (EGM) 07-003, "Disposition of Violations of 10 CFR 50.47(B)(4) for Failure to Maintain a Standard Emergency Action Level Scheme," partial discretion was determined to be warranted in this case because of actions undertaken to restore compliance to the most recently approved Emergency Plan, and because in most scenarios involving a Site Area Emergency and General Emergency, the significance of the unapproved changes would not have a deleterious effect upon implementation of the Emergency Plan. Therefore, a civil penalty was not assessed in this case.

Arizona Public Service Company (Palo Verde Nuclear Generating Station) EA-07-162 - On October 19, 2007, a Confirmatory Order (Effective Immediately) was issued to Arizona Public Service Company (APS) to formalize commitments made as a result of a successful alternative dispute resolution (ADR) mediation session. The commitments were made by APS as part of a settlement agreement between APS and the NRC concerning the falsification, by a qualified senior reactor operator, at the Palo Verde Nuclear Generating Station (PVNGS), of a record related to a steam generator blowdown. As part of the settlement agreement, APS agreed to take a number of actions. In recognition of these actions, and those corrective actions already completed by APS, the NRC is satisfied that its concerns will be addressed.

Southern Nuclear Operating Company (Joseph M. Farley Nuclear Plant, Unit 2) EA-07-173 - On October 31, 2007, a Notice of Violation associated with a Yellow Significance Determination Process Finding was issued to the Southern Nuclear Operating Company as a result of inspections at the Joseph M. Farley Nuclear Plant, Unit 2. This Yellow finding involved the failure of a Train A Residual Heat Removal containment sump recirculation isolation motor operated valve in Unit 2 to fully open during quarterly surveillance tests on April 29, 2006, and January 5, 2007. The Notice of Violation was based on violation against 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for failing to promptly identify and correct a significant condition adverse to quality which resulted in the valve stroke failures. Specifically, the licensee did not assure that the causes of the condition, including rust/corrosion accumulation on valve components in the valve encapsulation dating back to 2001, was determined and corrective action taken to preclude repetition.

Exelon Generation Company, LLC (Dresden Nuclear Power Station) EA-07-200 – On November 27, 2007, a Notice of Violation and Exercise of Discretion for Proposed Imposition of Civil Penalty in the amount of $65,000 was issued for a Severity Level III issue consisting of four violations involving the licensee's failure to comply with 10 CFR 74.19 between 1959 and 2007. In summary, the licensee failed to (a) keep complete records showing the inventory (including location and unique identify), transfer, and disposal of all special nuclear material (SNM) in its possession; (b) establish, maintain, and follow written material control and accountability procedures that were sufficient to enable the licensee to account for SNM in its possession; and

(c) conduct a physical inventory of all SNM in its possession at intervals not to exceed 12 months. This resulted in the failure to account for two fuel pellets and a number of incore detectors containing SNM.

Omaha Public Power District (Fort Calhoun Station) EA-07-194 - On December 7, 2007, a Notice of Violation was issued for violations associated with a White Significance Determination Finding involving a violation of 10 CFR 50, Appendix B, Criterion XVI, and a violation of the Fort Calhoun Technical Specifications. Specifically, the licensee failed to promptly identify and correct a significant condition adverse to quality involving high resistance across the field flash contacts of a relay in the Train A emergency diesel generator (EDG) voltage regulator circuit and failed to provide a written procedure for maintenance that could affect the performance of safety-related EDG voltage regulator relay auxiliary contacts.

Southern California Edison Company (San Onofre Nuclear Generating Station (SONGS)) EA-07-232 - On January 11, 2008, a Confirmatory Order (Effective Immediately) was issued to Southern California Edison Company (SCE) to formalize commitments made as a result of a successful ADR mediation session. The commitments were made by SCE as part of a settlement agreement between SCE and the NRC concerning the falsification, by a contract fire protection specialist at SONGS, of firewatch certification sheets on numerous occasions from April 2001 to December 2006. As part of the settlement agreement, SCE agreed to, in general terms, perform a common cause evaluation of known recent events, conduct a safety culture assessment, conduct training and communications, and develop or enhance various programs in areas such as ethics, disciplinary process, contract programs, and oversight. In recognition of these actions, and corrective actions already completed, NRC will refrain from further enforcement action related to this particular case, and may exercise enforcement discretion for the next six months on willful cases that meet the conditions of Section VII.B.4 of the Enforcement Policy, "Violations Identified Due to Previous Enforcement Action." NRC will evaluate the implementation of SCE's commitments during future inspections.

Entergy Nuclear Operations (Palisades Nuclear Plant) EA-07-255* – On January 14, 2008, a Notice of Violation was issued for a violation associated with a Greater Than Green Significance Determination Finding. The details of the violation contain safeguards information.

Florida Power and Light Company (Turkey Point Nuclear Plant, Units 3 & 4) EA-07-110, EA-07-113, EA-07-116, EA-07-119 - On January 22, 2008, a Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $208,000 was issued for a Severity Level II issue consisting of (1) the licensees failure to ensure, on or about April of 2004, that each of its armed responders was equipped with a contingency weapon in accordance with an NRC Order issued on February 25, 2002, Section B.4(f); (2) the licensees failure to ensure, on or about August 2005, that each of its armed responders was equipped with a contingency weapon in accordance with the licensee Physical Security Plan; (3) a violation of 10 CFR 50.9, incomplete and inaccurate information; and (4) the failure of the licensee to make a one hour report to the NRC as required in 10 CFR 73, Appendix G, Paragraph 1.I(a)(3).

* Actions are security-related. Details of the violation are not publically available. Therefore, these metrics are not included in the tables of Part VIII, "Enforcement Process and Summary of Reactors Enforcement by Region" section.

Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Station) EA-08-006 - On January 24, 2008, a Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $650,000 was issued to Entergy Nuclear Operations, Inc. This action was based on a continuing Severity Level III violation of the NRC's January 31, 2006, Confirmatory Order to implement Section 651(b) of the Energy Policy Act (Act) of 2005. The Order required Entergy to install backup power for the Indian Point Alert and Notification System (ANS) by January 31, 2007. The NRC subsequently extended, at the licensee's request, the implementation date to April 15, 2007. On April 23, 2007, the staff issued a Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $130,000 when Entergy failed to meet the April 15, 2007, implementation date. On July 30, 2007, the NRC issued an Order to supplement the requirements of the January 31, 2006, Confirmatory Order, based on Entergy's proposed corrective actions for noncompliance with the Confirmatory Order. On August 30, 2007, the staff issued a subsequent Notice of Violation for Entergy's failure to place the new ANS in service by August 24, 2007, as required by the July 30, 2007, Order. As of April 16, 2007, the licensee remains in violation of the Orders.

Luminant Generation Company, LLC (Comanche Peak Steam Electric Station) EA-08-028 - On February 29, 2008, a Notice of Violation was issued for a violation associated with a White Significance Determination Finding involving a violation of the Unit 1 Technical Specification (TS) 3.8.1, "AC Sources - Operating," which requires that while the plant is in Modes 1, 2, 3, or 4, two diesel generators (DGs) capable of supplying the onsite Class 1E power distribution subsystem(s) shall be operable. From November 1, 2007, through November 21, 2007, while the plant was in Mode 1, one of the two DGs capable of supplying the onsite Class 1E power distribution subsystem(s) was inoperable, and action was not taken to either restore the DG to an operable status within 72 hours or be in Mode 3 within 6 hours and Mode 5 within 36 hours. Specifically, Emergency Diesel Generator (EDG) 1-02 was made inoperable as a result of painting activities due to paint having been deposited and remaining on at least one fuel rack in a location that prevented motion required to support the operation of the EDG. This condition caused EDG 1-02 to fail to start during a surveillance test on November 21, 2007.

Ameren UE Corporation (Callaway Nuclear Power Plant) EA-07-280* - On March 20, 2008, a Notice of Violation was issued for a violation associated with an Office of Investigations finding. The details of the violation contain safeguards information.

* Actions are security-related. Details of the violation are not publically available. Therefore, these metrics are not included in the tables of Part VIII, "Enforcement Process and Summary of Reactors Enforcement by Region" section.

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 security at nuclear power plants. A series of Advisories, Orders, and RISs have been issued and, as needed, will continue to be issued to strengthen further the security of NRC-licensed facilities and control of nuclear materials.

In March 2008, the 10 CFR Part 26 rule to amend existing requirements for security force personnel at reactor facilities was published in the *Federal Register*, (FRN Vol. 73, No. 62 16966 – 17235 [E8-4998]). NRC staff is actively involved with the public and the industry through public meetings to develop RGs and industry guidance for the rule requirements. The fifth public meeting since August 2007 was held on March 25, 2008.

The NRC continues to work on the proposed rule, "Power Reactor Security Requirements" and resolve public comments, draft final rule language, and publish draft regulatory guidance in a concurrent process. In the first and second quarter of FY 2008, all regulatory guides that support rulemaking, with the exception of cyber security, have been published and distributed to appropriate stakeholders. The staff is currently preparing the *Federal Register* Notice and SECY paper for Commission approval.

The Commission directed the staff to establish personnel access authorization and physical security requirements for nuclear power plant construction. In the near term, the staff will continue interacting with the industry to resolve open items on NEI 03-12, Appendix F, "Security During Plant Construction" and will begin rulemaking activities to codify the requirements.

The NRC is conducting full force-on-force exercises at each site on a normal, 3-year cycle using the expanded adversary characteristics that were developed as a result of the post-9/11 threat environment. The purpose of the force-on-force exercises is to assess and improve, as necessary, performance of defensive strategies at licensed facilities. During the first and second quarters of FY 2008, the NRC completed force-on-force exercises at ten sites. The current force-on-force cycle ends in December 2010. The NRC remains committed to working with the industry to improve realism and effectiveness of the force-on-force exercise program and continues to pursue methods to improve simulations

The NRC and the Department of Homeland Security (DHS) continue to meet on a monthly basis to implement the provisions of the Energy Policy Act of 2005 for the consultation of proposed new reactor locations. The Department of Homeland Security has outlined a process to collect and evaluate information that will enable it to identify potential vulnerabilities of a proposed new reactor facility location to a terrorist attack. To date, DHS has visited two proposed new reactor facility locations associated with combined license applications that have been accepted for review by the NRC.

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 (SPU) 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 (EPU) are power uprates beyond the design capacity of the plant and, thus, require major plant modification.

Licensees have applied for and implemented power uprates since the 1970s as a way to increase the power output of their plants. The NRC staff has conducted power uprate reviews since then and has completed 118 such reviews to date. Approximately 15,788 megawatts-thermal (MWt) or 5,263 megawatts-electric (MWe) in electric generating capacity (an equivalent of about 5.3 nuclear power plant units) has been gained through implementation of power uprates at existing plants. The NRC currently has nine plant-specific power uprate applications under review. The nine applications include two MUR power uprates, three SPUs, and four EPUs.

In March 2008, the NRC staff conducted a survey of all nuclear power plant licensees to obtain information on whether they planned to submit power uprate applications over the next 5 years. Based on this survey, licensees plan to request power uprates for 27 nuclear power plants over the next 5 years. If approved, these power uprates will result in an increase of about 5,878 MWt or approximately 1,959 MWe in generating capacity.

On March 28, 2008, the NRC Office of the Inspector General (IG) released a report on its Audit of NRC's Power Uprate Program, OIG-08-A-09. The staff is currently reviewing the report recommendations and will develop an action plan in response to the recommendations.

IX New Reactor Licensing

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

The staff is engaged in numerous ongoing interactions with vendors and utilities regarding prospective new reactor applications and licensing activities. Based on these interactions, the staff expects to receive a significant number of new reactor COL applications over the next several years and has developed the infrastructure necessary to support the application reviews. As of April 2008, the staff is preparing to receive up to 22 COL applications for a total of 33 new nuclear units over the next few years.

Early Site Permit Reviews

To date, the NRC has issued three ESPs: System Energy Resources, Inc., for the Grand Gulf site in Mississippi; Exelon Generation Company, LLC, for the Clinton site in Illinois; and Dominion Nuclear North Anna, LLC, for the North Anna site in Virginia.

The NRC is currently reviewing an application submitted by the Southern Nuclear Operating Company (SNC) for the Vogtle site in Georgia. The staff received the Vogtle ESP application in August 2006 and completed its acceptance review in September 2006. The staff issued its SER with open items for the Vogtle ESP application on August 30, 2007. The staff issued its draft Environmental Impact Statement (EIS) for the Vogtle ESP on September 14, 2007. Based on

recent information that SNC provided, the staff now plans to issue its final EIS in August 2008. The staff will publish the safety review schedule once SNC submits its data regarding geology, seismology, and geo-technical engineering.

Design Certifications

The staff has issued DCs for four reactor designs that can be referenced in an application for a nuclear power plant: General Electric (GE) Nuclear Energy's Advanced Boiling Water Reactor (ABWR) design, Westinghouse's System 80+ design, Westinghouse's AP600 design, and Westinghouse's AP1000 design.

The staff is currently performing reviews of the following DCs: GE Hitachi Nuclear Energy's (GEH) Economic Simplified Boiling Water Reactor (ESBWR), Westinghouse's AP1000 Design Certification Amendment, AREVA's Evolutionary Power Reactor (EPR), and Mitsubishi's (MHI) US-Advanced Pressurized Water Reactor (APWR) designs.

The ESBWR DC application was submitted on August 24, 2005. On June 1, 2007, subsequently updated on October 31, 2007, GEH submitted its schedule for submitting major deliverables to support the ESBWR DC. The staff provided its review schedule for the ESBWR DC to GEH on November 27, 2007. GEH informed the staff on February 20, 2008 of a two-month delay in the submittal of ESBWR Design Control Document (DCD) Revision 5, from March 31, 2008 to May 31, 2008. The staff is currently evaluating schedule impacts resulting from this delay and the scheduling of several topical reports submitted for review since the June 1, 2007 letter. In addition, the staff is aware of additional design changes under consideration by GEH which will need to be evaluated for schedule impacts when they are submitted for staff review.

By letter dated May 26, 2007, Westinghouse submitted an application to amend the AP1000 Design Certification Rule and also submitted Revision 16 to the AP1000 DCD. The staff published its review schedule for the AP1000 Amended DC on February 15, 2008. The final SER is scheduled for completion in March 2010. As of April 10, 2007, Westinghouse has submitted 123 technical reports for staff review. Although submitted as part of the Bellefonte COL pre-application phase, these technical reports apply generically to the remaining COL applications that intend to reference the AP1000 design through Revision 16 to the AP1000 DCD. The staff is evaluating the schedule for its review of the amendment to the AP1000 Design Certification in light of recent technical issues identified in the technical reports.

The US-EPR DC was submitted on December 11, 2007. The staff completed its acceptance review of AREVA's EPR DC on February 25, 2008, and is currently conducting its safety review of the US-EPR DC application.

The US-APWR DC was submitted on December 31, 2007. The staff completed its acceptance review of MHI's US-APWR DC on February 29, 2008, and plans to publish its review schedule for the DC application in May 2008.

Combined License Application Activities

As of March 31, 2008, the staff has received nine COL applications for review. These applications are listed below with a brief status of the staff's review activities.

- Calvert Cliffs partial COL application submitted for an EPR on July 13, 2007.
  - The NRC completed its acceptance review of the partial COL application.
  - The second and final part of the COL application was submitted on March 17, 2008.

- South Texas Project (STP) COL application submitted for two ABWRs on September 20, 2007.
  - The NRC issued a letter to STP discussing the NRC's acceptance of the application for review; and noted that a schedule would not be provided until additional information was submitted.
  - STP requested that the NRC stop review of certain sections of the COL application until vendor support necessary to continue developing the referenced design was obtained.
  - The NRC informed STP that the review of a majority of the COL application for STP Units 3 and 4 were going to be suspended and that a review of a limited number of selected sections would continue.

- Bellefonte COL application submitted for two AP1000 advanced passive pressurized water reactors on October 30, 2007.
  - The NRC completed its acceptance review, published its review schedule and is currently conducting the safety review.

- North Anna COL application submitted for an ESBWR on November 27, 2007.
  - The NRC completed its acceptance review, published its review schedule and is currently conducting the safety review.

- Lee COL application submitted for two reactors at the Lee site on December 13, 2007.
  - The NRC completed its acceptance review, published its review schedule and is currently conducting the safety review.

- Shearon Harris COL application submitted for two AP1000 reactors on February 19, 2008.
  - The NRC expects to complete its acceptance review by April 21, 2008.

- Grand Gulf COL application submitted for an ESBWR on February 27, 2008.
  - The NRC expects to complete its acceptance review by April 30, 2008.

- Vogtle COL application submitted for two AP1000 reactors on March 31, 2008.
  - The NRC is currently conducting its acceptance review.

- V.C. Summer COL application submitted for two AP1000 reactors on March 31, 2008.
  - Start of NRC's formal acceptance review will begin no later than June 2, 2008. Delayed start stems from uncertainties in the applicant's plans and schedule for COL submittal.

Regulatory Infrastructure

The staff continues to perform activities to enhance the efficiency and effectiveness of the review processes for new reactor applications. These activities include updating key guidance documents for NRC activities and application preparation, developing strategies and work products for optimizing the review of applications received, developing a construction inspection program for new construction activities, and continuing activities in the pre-application and DC review processes. The staff has successfully implemented processes and performed acceptance reviews on DC and COL applications and established schedules for the review of the applications.

A few examples of recent infrastructure activities include:

- Staff issuance of NRO-REG-100, Draft Revision 1, "Acceptance Review Process for a Combined License or Design Certification," for use and comment;
- Development of safety evaluation templates for ABWR and AP1000 COL applications;
- Implementation of SharePoint as the virtual desktop for access to all pertinent project information, procedural guidance, and review tools;
- Implementation of ADAMS Explorer on SharePoint, which is a web-based version of Agency-wide Documents Access and Management System which allows for hyperlinks between files;
- Implementation of Enterprise Project Management (EPM) 2007 for use in managing licensing projects;
- Implemented schedules in EPM for four DCs, three Reference-COLs, and several Subsequent-COLs; and
- Created a Contract Master Plan for the Office.

In addition to making major revisions to its regulations to enhance the licensing processes for new reactors, including Limited Work Authorizations (LWAs), the NRC has issued a proposed rule that would require assessments of the possible impacts of a large commercial airliner on new reactor designs and the implementation of practical design features to mitigate the effects of such impacts. The staff is currently evaluating public comments on the proposed rule and is also working with industry experts to develop guidance for the assessments. Another rulemaking is underway to codify additional security requirements that were imposed by orders on the operating nuclear power plants. The revised regulations will be applied to all new reactors.

Construction Inspection Program Developments

The staff continues to make significant progress in the development of programs and procedures to support construction inspection. Several milestones were achieved regarding the development of the construction inspection program, which include:

- Inspection Manual Chapters and related Inspection Procedures to support inspections for construction activities under LWAs were completed. The staff is progressing on the remaining Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) procedures and is on track to complete the reviews and updates well in advance of the anticipated need.

- Stakeholder interactions, including public meetings to develop implementation guidance and outreach meetings in the vicinity of potential new reactor sites, are continuing. The staff has conducted 5 public meetings in the Washington, D.C. area to work through the implementation details associated with ITAAC closure, licensee assessment, enforcement, and the implementation of the U.S. Department of Energy standby support rule.

- Staff piloted a new inspection procedure, the objective of which is to verify, by direct observation, the effectiveness of the independent oversight activities performed by third-party organizations of NRC quality assurance requirements.

- Five additional inspections under the enhanced vendor inspection program were completed.

- Efforts to collect and share construction related operational experience are progressing. In the international arena, bilateral cooperation activities included an inspector completing a two month assignment in Finland to share construction experience with Finnish regulators. Other bilateral activities include briefings and participation in vendor inspections with foreign regulators. Domestic activities include the revision of a Memorandum of Understanding with the Institute of Nuclear Powers Operations to facilitate the exchange of construction information.

Advanced Reactors

In the area of advanced reactors, the staff completed a draft of the licensing strategy basis document for Next Generation Nuclear Plant project, which is due to Congress in August 2008. The staff also submitted a paper to the Commission on advanced reactors (SECY-2008-0019), to provide the Commission with information regarding the staff's current licensing, technical review, and regulatory research activities associated with advanced reactors; an update on industry projections as to when advanced reactor designs will be submitted to the NRC for licensing reviews; and the staff's plans to develop programmatic and organizational strategies that will position the NRC to effectively and efficiently support the licensing and technical reviews that are anticipated for advanced reactor designs.

Organization/Design*	Sites under Consideration **	Planned Applications	Date	Basis
AP1000 (52-006) Certified Design (AP1000 Design Certification Amendment Submitted 5/26/2007)				
Duke (52-018/019)	William S. Lee III Nuclear Station (2) (Cherokee)	COL	Submitted 12/13/2007	Letters 3/4/05, 10/25/05, 3/16/06 7/17/06 (RIS), 5/31/07 (RIS), and 9/5/2007
NuStart Energy (TVA) (52-014/015)	Bellefonte (2)	R-COL	Submitted 10/30/2007	Letters 12/7/2004, 11/17/2005, 7/17/06 (RIS), and 5/31/07 (RIS)
Progress Energy (52-022/023)	Harris (2)	COL	Submitted 2/19/2008	Letters 8/24/05 and 2/1/06; 11/1/05 Mtg Letter 7/12/06 (RIS), 5/31/07 (RIS)
Progress Energy (756)	Levy County, Fla (2)	COL	7/2008	Letters 8/24/05 and 2/1/06; 11/1/05 Mtg Letter 7/12/06 (RIS), 5/31/07 (RIS)
South Carolina Electric and Gas (743)	Summer (2)	COL	Submitted 3/31/2008	Letters 12/5/05, 2/10/06, 7/13/06 (RIS), and 5/30/07 (RIS)
Southern Nuclear Operating Co. (755)	Vogtle (2)	COL	Submitted 3/31/2008	Letters 7/26/05, 8/17/05, 7/17/06 (RIS), and 5/30/07 (RIS); Mtg Summary (ML052710018)
Florida Power and Light	Turkey Point (2)	COL	2009	Letters 4/3/06, 7/2/07 (RIS), and 10/26/07 (RIS)
ESBWR (52-010) Design Certification Application Submitted 8/24/05				
Dominion (52-017)	North Anna	R-COL	Submitted 11/27/2007	Letter 11/22/05, 7/17/06 (RIS), 5/31/07 (RIS), 08/09/07
Entergy (745)	River Bend	COL	5/2008	Letter 12/5/05, 7/17/06 (RIS), and 5/31/07 (RIS)
NuStart Energy (Entergy) (52-024)	Grand Gulf	COL	Submitted 02/27/2008	Letters 12/7/2004, 11/17/2005, 7/17/06 (RIS), 5/31/07 (RIS), 08/09/07
Exelon	Victoria Cty, Texas (2)	COL	11/2008	Letter 9/29/06 and 5/31/07 (RIS)
EPR (52-020) Design Certification Application Submitted 12/11/2007				
Alternate Energy Holdings	Bruneau, Idaho	COL	4th Qtr 2008	Letters 12/14/06, 5/14/07 (RIS), and 7/23/07
Amarillo Power (752)	TBD (2)	COL	4th Qtr 2008	Letter 3/13/06, 7/27/06, 3/15/07, and 5/31/07 (RIS)
AmerenUE (750)	Callaway	COL	3rd Qtr 2008	Letter 7/12/06, 12/15/06, 4/5/07, 6/1/07, and 5/31/07 (RIS)
PPL Generation	Berwick	COL	3rd Qtr 2008	Letters 5/24/07, 6/13/07, and 9/4/2007
Unistar Nuclear (52-016)	Calvert Cliffs	R-COL	Submitted 1/13/2007 and 3/17/2008	Press Release; 11/2/05 Mtg; Letters 11/4/05, 6/8/06, 6/21/06, 7/13/06 (RIS), and 5/31/07 (RIS)
(759)	Nine Mile Point	COL	3rd Qtr 2008	
ABWR (52-001) Certified Design				
NRG Energy (52-012/013)	South Texas Project (2)	R-COL	Submitted 9/20/07	Letters 6/19/06 and 5/29/07 (RIS)

New Reactor Licensing Activities - Letters of Intent Received
As of March 31, 2008

US APWR (52-021) Design Certification Application Submitted 12/31/2007				
Luminant Power (754)	Comanche Peak (2)	R-COL	7/2008	Letter 6/27/06, 9/7/06, 1/18/07, 3/9/07, 4/9/07, and 5/30/07 (RIS)
Unannounced Technology				
Detroit Edison	Fermi	COL	10/2008	Letters 2/15/07 and 5/31/07 (RIS)
Duke	Davie County, NC Oconee County, SC	ESP ESP	TBD TBD	Letter 3/16/06
Unannounced Applicant	TBD	ESP	6/2010 - 6/2012	Letter 4/5/07
Unannounced Applicant	TBD	COL	3/2010	Letter 1/31/08
Transition Power	Utah	ESP/COL	4/2010	Letter 1/30/08

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