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Section of Public Utility, Communications,
and Transportation Law

Report of

NUCLEAR ENERGY COMMITTEE

2008 Fall Council Meeting

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EXECUTIVE SUMMARY¹

On the legislative front, several bills were introduced in both the House and the Senate that aim to increase our nation's production of domestic energy resources. These bills supported the advancement of the Nuclear Power 2010 program, offered tax incentives for investments in nuclear power facilities, and encouraged the implementation of workforce training within the industry. Three separate bills in the House authorized the Secretary of Energy to use the Nuclear Waste Fund to enter into contracts with private sector entities for the recycling of spent nuclear fuel ("SNF"). In addition, Senator Lamar Alexander introduced a bill that would prohibit the importation of low-level radioactive waste into the United States, and Senator Hillary Clinton introduced a bill that aimed to upgrade the security at civilian nuclear facilities. An appropriations bill for energy and water resources allocated a total of \$1 billion to the Department of Energy ("DOE") and the Nuclear Regulatory Commission ("NRC") to assist in the development of nuclear energy production.

On the judicial front, the Court of Federal Claims awarded over \$82 million in damages to Carolina Power & Light Company for claims against the Government for damages resulting from the DOE's failure to meet its statutory and contractual obligations to collect SNF. In addition, the Court of Federal Claims granted the Government's motion to join the claims of Consolidated Edison Company of New York and Entergy Nuclear Indian Point 2 against the Government for failure to dispose of its SNF. The U.S. Court of Appeals for the Federal Circuit remanded several trial court decisions for their failure to use the Standard Contract acceptance rate in the calculation of damages awarded for the Government's breach of the Standard Contract. The Federal Circuit also upheld the Government's authority to waive the prohibition in the Anti-Assignment Act against the assignment of a claim against the Government, and thereby accept the assignment of a takings claim related its breach of the Standard Contract. The U.S. Court of Appeals for the Second Circuit affirmed the NRC's decision to deny petitioners' request that the NRC amend its regulations to require that an applicant seeking a renewal of a nuclear power plant license be held to the same standards required of an applicant seeking an initial license. The U.S. Court of Appeals for the Ninth Circuit rejected the state of Washington's appeal of the trial court's holding that the Cleanup Priority Act, a Washington statute, is invalid in its entirety because it is preempted by the Atomic Energy Act, a federal law.

Recent developments at the NRC include new reactor activities, license renewals and design certifications. The NRC has docketed four applications for new nuclear units and is now conducting its technical reviews for those units. Three additional applications are currently undergoing acceptance review. The NRC is currently reviewing fifteen license renewal applications, and has received numerous letters of intent to apply for license renewal. The NRC is also undertaking several security initiatives, including initiating rulemaking on aircraft impacts, unauthorized introduction of weapons, and emergency preparedness, among other things. Elsewhere at the NRC there are several ongoing proceedings involving license renewal

¹ Chad A. Pilcher and David L. McPhail, associates at Balch & Bingham LLP, contributed to the Legislative and Judicial sections, and Tyson R. Smith, Emily J. Duncan and Rachel Miras-Wilson, associates at Winston & Strawn LLP, contributed to the Administrative section of this report.

and uranium recovery facilities. In the enforcement arena, the NRC has approved a case-by-case extension of the enforcement discretion period.

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I. LEGISLATIVE ACTIVITY

A. Energy Independence

Several bills addressing the current energy situation facing the United States have been introduced during the second session of the 110th Congress. Many of these promote the use of nuclear power. On May 22, 2008, Representative Mike Rogers (R-MI) introduced the “American Energy Independence Act” (H.R. 6161), which aims to achieve energy independence in the United States by July 4, 2015. The bill was referred to the House Committee on Energy and Commerce. It was also referred to five other committees for consideration of specific issues falling under their jurisdiction.

H.R. 6161 seeks to provide standby support for certain nuclear plant delays, encourages the Secretary of Energy (“Secretary”) to carry out the Nuclear Power 2010 program, and appropriates hundreds of millions of dollars over a five year period towards this goal. The bill would amend the Internal Revenue Code to establish a nuclear power manufacturing credit equal to twenty percent of a qualified investment during a taxable year, as well as a nuclear power facility construction credit equal to ten percent of qualified power facility expenditures. H.R. 6161 would require the Secretary to establish a National Nuclear Energy Council to serve in an advisory role on matters concerning nuclear energy. With regard to the storage of nuclear fuel, this bill would authorize the Secretary to initiate and implement temporary nuclear fuel storage agreements with communities interested in hosting storage facilities, subject to Congressional review.

On June 26, 2008, Representative Bill Shuster (R-PA) introduced the “Energy Independence Act” (H.R. 6421). The bill was referred to the House Committee on Natural Resources and five other committees. H.R. 6421 addresses many options for sustained energy production in the United States and seeks to eliminate certain impediments to the development of nuclear energy sources. This bill contains many provisions that are similar to H.R. 6161 and would amend terms and conditions of the Energy Policy Act of 2005 that govern federal authority to enter into contracts with sponsors of certain advanced nuclear facilities and the Nuclear Power 2010 Program. Other amendments to the Energy Policy Act would direct the Secretary of Labor to promulgate regulations for a workforce training program for workers skilled in the nuclear utility and nuclear energy sectors. The bill would amend the Nuclear Waste Policy Act of 1982 (“NWPA”) to revise contracting procedures for certain civilian nuclear power reactors.

On August 1, 2008, Representative Jim Matheson (D-UT) introduced the “Fulfilling U.S. Energy Leadership Act of 2008” (H.R. 6817). The bill was referred to the House Committee on Ways and Means and several other committees. H.R. 6817 is designed to increase domestic energy production and diversify the United States’ energy portfolio. One method of achieving these goals is by investing in nuclear energy. The bill would order a study and report to discuss the effect that expanding nuclear energy production would have on reducing greenhouse gases and reducing the cost of electricity. In addition, the bill would encourage implementation of the Nuclear Power 2010 program, establish an Interagency Working Group to facilitate the

development of the nuclear industry in the United States, and encourage workforce training throughout the nuclear industry.

On September 18, 2008, Senator Michael Enzi (R-WY) introduced the “Eight Steps to Energy Sufficiency Act of 2008” (S. 3523). The bill was referred to the Senate Committee on Finance. S. 3523 offers a comprehensive plan for tackling America’s energy issues and advocates for further development of nuclear power. The bill would amend the NWPA to require that, in conjunction with an application for the construction of a storage facility, the Secretary must apply to the NRC for a license to construct and operate facilities to receive and store nuclear waste at Yucca Mountain. The United States Nuclear Regulatory Commission (“NRC” or “Commission”) would then be required to make an application within eighteen months. S. 3523 would also provide tax credits for investments in nuclear power facilities and amend the Internal Revenue Code to include a five-year accelerated depreciation for new nuclear power facilities.

B. Nuclear Waste

On May 22, 2008, Representative Joe Barton (R-TX) introduced H.R. 6132, a bill designed to authorize the use of funds in the Nuclear Waste Fund to promote the recycling of spent nuclear fuel (“SNF”). The bill was referred to the House Committee on Energy and Commerce and the Committee on the Budget. H.R. 6132 would amend the NWPA to authorize the Secretary to use Nuclear Waste Funds to make competitive grants to enter into long-term contracts with private sector entities for the recycling of SNF. The bill would direct the NRC to complete a rulemaking to establish a process for the licensing of facilities for the recycling of SNF. The bill would also provide that the receipt and disbursement of Nuclear Waste Funds shall not be counted for federal budgetary purposes.

On June 26, 2008, Representative Rob Bishop (R-UT) introduced H.R. 6384, the “Americans for American Energy Act of 2008,” and on July 22, 2008, Representative John Boehner introduced H.R. 6566, the “American Energy Act.” Both of these bills were referred to the House Committee on Natural Resources, in addition to several other committees. The nuclear power provisions of these comprehensive bills echo those proposed in H.R. 6132. The bills would amend the NWPA to allow the Secretary to use nuclear waste funds to enter into contracts for the recycling of nuclear fuel. The bills would also require the NRC to complete a rulemaking within two years of the passage of this bill to establish a process for the licensing of facilities for the recycling of SNF. In addition, each bill would prohibit the NRC from denying an application for a license, permit, or other authorization under the Atomic Energy Act of 1954 on the grounds that sufficient capacity for the disposal of SNF or high-level radioactive waste does not exist or will not become available in a timely manner.

On June 26, 2008, Senator Pete Domenici introduced the “SMART Act of 2008” (S. 3215), and the bill was referred to the Committee on Energy and Natural Resources. S. 3215 would require the Secretary to enter into cooperative agreements with private entities to share the cost of obtaining construction and operating licenses for certain types of recycling facilities. The bill promotes the establishment of privately owned and operated storage and recycling facilities for used nuclear fuel. S. 3215 would allow the Secretary to enter into long-term contracts with

private entities to recycle and store commercial used nuclear fuel. The bill would also offer incentives for communities to serve as temporary storage sites for nuclear waste.

On July 7, 2008, Senator Lamar Alexander (R-TN) introduced S. 3225, a bill designed to prohibit importation of certain low-level radioactive waste. A similar bill (H.R. 5632), introduced in the House of Representatives by Representative Bart Gordon (D-TN) on March 13, 2008. S. 3225, would amend the Atomic Energy Act to prohibit the NRC from issuing a license authorizing the importation of low-level radioactive or specific radioactive waste streams that are exempt from regulation under the Low-Level Radioactive Waste Policy Act. The bill would exempt radioactive waste that is being returned to the U.S. government or to a military facility that is authorized to possess it. It would also exempt waste that resulted from the use of nuclear material in a foreign country, where that material was obtained from an entity in the United States and is being returned for management and disposal. This bill specifically aims to prevent the NRC from allowing Energy Solutions to import up to 20,000 tons of low-level radioactive waste from Italy. S. 3225 would authorize the President of the United States to waive the prohibition and permit the granting of a specific license, if there is a finding that such importation would meet an important national or international policy goal.

C. Safety and Security

Senator Hillary Clinton (D-NY) introduced the “Nuclear Facility and Material Security Act of 2008” (S. 3444) on August 1, 2008. The bill was referred to the Senate Committee on Environment and Public Works. The House version of this legislation (H.R. 6816) was introduced on the same day by Representative Edward Markey (D-MA), and that bill was referred to the House Committee on Energy and Commerce. S. 3444 and H.R. 6816 are designed to minimize the risks involved if a terrorist attack was attempted at a nuclear power plant.

The bill would require the NRC to issue a final rule requiring all new commercial nuclear power reactors approved for construction to be designed to withstand the impact of a large commercial aircraft. The bill also mandates that the configuration of spent fuel stored in spent fuel pools be arranged to minimize the risk of fire. It would require SNF to be transferred into dry cask storage as soon as safely possible, and mitigation features to be installed at nuclear facilities to help to cool stored spent fuel in the event of a terrorist attack. The bill would require the NRC Office of the Inspector General to establish a unit to audit the Commission’s regulatory oversight activities related to safety and security of civilian nuclear facilities.

D. Appropriations

On July 14, 2008, Senator Byron Dorgan (D-ND) introduced the “Energy and Water Development and Related Agencies Appropriations Act, 2009” (S. 3258). S. 3258 makes appropriations for energy and water development for the fiscal year ending September 30, 2009.

S. 3258 would appropriate \$803 million to the Department of Energy (“DOE”) for the purchase, construction, and acquisition of plant and capital equipment and other expenses necessary for nuclear energy activities. Three million must be used for projects specified under

the heading “Congressionally Directed Nuclear Energy Projects” in the report of the Committee on Appropriations.

S. 3258 would allocate \$195 million to nuclear waste disposal activities and to effectuate the NWPA. Of this amount, \$5 million goes to Nevada for expenditures to conduct scientific oversight responsibilities and participate in licensing activities. Nye County, Nevada would receive \$1 million for on-site oversight activities, and \$9 million would go to affected units of local government.

S. 3258 states that commitments to guarantee loans under the Energy Policy Act shall not exceed a total principal amount of \$18.5 billion for eligible nuclear power facilities. The bill appropriated \$193 million to carry out defense nuclear waste disposal activities, including the acquisition of real property or facility construction or expansion. The DOE, the NRC, and the National Nuclear Security Administration were allocated \$15 million each for the establishment of an Integrated University Program to support university research and development in areas relevant to their respective missions.

The NRC would be allocated \$1.02 billion to cover necessary salaries and expenses for fiscal year 2009. Of this amount, \$861 million is to be derived from revenues from licensing fees, inspection services and other collections, and \$162 million appropriated from the federal government.

II. JUDICIAL ACTIVITY

A. Spent Nuclear Fuel

Beginning in 1998, nuclear utilities began filing suits against DOE for its failure to remove SNF from reactor sites pursuant to the terms of the Standard Contract and the NWPA. The following discussion summarizes the aspects of each SNF decision that are unique to that decision.

1. *Carolina Power & Light Co. v. United States*

On May 19, 2008, the U.S. Court of Federal Claims awarded over \$82 million in damages to Carolina Power & Light Company and Florida Power Corporation (collectively “Progress Energy”) for costs incurred in the storage of SNF at four nuclear power plants in North Carolina, South Carolina, and Florida.² The court concluded that as a result of DOE’s breach of the Standard Contract, Progress Energy spent large sums of money to activate storage pools, develop dry storage facilities for SNF, and to ship SNF between its plants. The court disallowed Progress Energy’s claims for designing, constructing, and replacing spent fuel racks and for upgrading a water system because Progress Energy would have incurred these expenses absent the Government’s breach.

² *Carolina Power & Light Co. v. United States*, 82 Fed. Cl. 23 (2008).

On June 19, 2008, the court granted in part and denied in part the Government's motion for reconsideration of the \$82 million damages award.³ In its motion, the Government asserted that the damages should be reduced by \$316,434. The court rejected the Government's request for a reduction of \$260,037 in railroad track maintenance costs. However, the court agreed to reduce the damages by \$42,295 and \$14,342, for overhead costs and AFUDC charges, respectively.

2. *Dairyland Power Coop. v. United States*

On July 2, 2008, the U.S. Court of Federal Claims rejected the Government's motion for summary judgment regarding the portion of Dairyland Power Cooperative's ("Dairyland") claimed damages for costs incurred in developing private off-site alternatives for storage of SNF as a result of the Government's breach of the Standard Contract.⁴ In an attempt to develop private fuel storage ("PFS"), Dairyland created Genoa Fuel Tech, Inc. ("GFT"), a separate legal entity created solely to invest in PFS. The Government contended in its motion for summary judgment that the investment in PFS made by GFT could not be an element of Dairyland's damages as a matter of law, because GFT was not in privity of contract with the Government. The court held that GFT's lack of privity of contract with the Government did not preclude Dairyland from arguing that GFT's investment in PFS is recoverable as part of Dairyland's damages.

3. *Sacramento Mun. Util. Dist. v. United States*

On August 7, 2008, the U.S. Court of Appeals for the Federal Circuit instructed the trial court upon remand to use the Standard Contract acceptance rate to calculate the damages owed to Sacramento Municipal Utility District ("SMUD") by the Government for its failure to dispose of SMUD's SNF.⁵ The court reversed the trial court's holding that SMUD's decision to use dual-purpose storage canisters for its SNF was not foreseeable and was unreasonable at the time of contract formation. In addition, the court reversed the trial court's grant of an offset to the Government for SMUD's internal labor expenses. The court reasoned that, upon showing evidence that the labor expenses were caused by the Government's breach, SMUD would be entitled to recover the costs arising from the time its employees spent on mitigation efforts.

4. *Pacific Gas and Elec. Co. v. United States*

On August 7, 2008, the U.S. Court of Appeals for the Federal Circuit held that the trial court erred in its determination of the acceptance rate used to calculate damages owed to Pacific Gas & Electric Company ("PG&E") by the Government for its failure to dispose of PG&E's

³ *Carolina Power & Light Co. v. United States*, 82 Fed. Cl. 317 (2008).

⁴ *Dairyland Power Coop. v. United States*, 82 Fed. Cl. 379 (2008).

⁵ *Sacramento Mun. Util. Dist. v. United States*, Nos. 2007-5052, 2007-5097, 2008 U.S. App. LEXIS (Fed. Cir. August 7, 2008).

SNF.⁶ The court held that in setting the rate at which the DOE was obligated to begin accepting SNF from PG&E, the Court of Federal Claims improperly relied on a DOE estimate made after contract formation. The court held that the acceptance rate used by the trial court was improperly based on an express mechanism set forth in the Standard Contract for determining the acceptance rate beginning in 1991, which would have rendered timely performance impossible. The court directed the trial court on remand to recalculate the damages based upon a 1987 acceptance rate.

5. *Yankee Atomic Elec. Co. v. United States*

On August 7, 2008, the U.S. Court of Appeals for the Federal Circuit reversed and remanded the trial court's assessment of damages owed to Yankee Atomic Electric Company, Maine Yankee Atomic Power Company, and Connecticut Yankee Atomic Power Company (collectively the "Yankees") for the Government's failure to dispose of the Yankees' SNF.⁷ The court held that the trial court failed to set forth a clear acceptance rate to calculate the damages owed to the Yankees, relied on an acceptance rate based on assumption and approximation. Furthermore, the acceptance rate used by the trial court was not based upon an evaluation of whether the Yankees would have pursued dual-purpose dry storage even if the Government had timely performed. Accordingly, the court ordered the trial court to determine the SNF acceptance rate under the Standard Contract and apply that rate in determining the substantial cause of the Yankee's costs.

6. *Consolidated Edison Co. of N.Y. v. United States*

On September 3, 2008, the U.S. Court of Federal Claims granted the Government's motion to join the claims of Consolidated Edison Company of New York, Inc. ("ConEd") and Entergy Nuclear Indian Point 2, LLC ("Entergy").⁸ Both ConEd and Entergy filed claims against the Government for DOE's failure to dispose of SNF at the Indian Point 2 Nuclear Power Station, which ConEd sold to Entergy in 2001. The court held that because both ConEd and Entergy were seeking damages for the same costs at Indian Point 2, the failure to join the claims would expose the Government to a substantial risk of incurring payment of duplicative damages.

7. *Delmarva Power & Light Co. v. United States*

On September 18, 2008, the U.S. Court of Appeals for the Federal Circuit upheld the Government's authority to waive the prohibition in the Anti-Assignment Act against the assignment of claims against the Government, and thereby validate an assignment that the Act otherwise would prohibit.⁹ Delmarva Power & Light Company ("Delmarva") and Atlantic City

⁶ *Pacific Gas & Elec. Co. v. United States*, 536 F.3d 1282 (Fed. Cir. 2008).

⁷ *Yankee Atomic Elec. Co. v. United States*, 536 F.3d 1268 (Fed. Cir. 2008).

⁸ *Consolidated Edison Co. of N.Y. v. United States*, Nos. 03-2622C, 04-33C, 2008 U.S. Claims LEXIS 251 (Fed. Cl. September 3, 2008).

⁹ *Delmarva Power & Light Co. v. United States*, No. 2008-5010, 2008 U.S. App. LEXIS 19773 (Fed. Cir. September 18, 2008).

Electric Company (“Atlantic City”) entered into written contracts with Public Service Electric and Gas Company (“PSEG”) agreeing to transfer to PSEG their interests in certain nuclear plants, which included all claims of Delmarva and Atlantic City relating to DOE’s breach failure to dispose of SNF. Subsequently, Delmarva and Atlantic City filed a takings claim against the Government for damages resulting from the DOE’s breach of the Standard Contract. The court held that the claims assigned to PSEG by Delmarva and Atlantic City included the takings claim and that the Government had the authority to accept the assignment by waiving the Anti-Assignment Act’s prohibition.

B. NRC Licensing

1. *Massachusetts v. United States*

On April 8, 2008, the U.S. Court of Appeals for the First Circuit denied Massachusetts’ claim that the NRC committed statutory violations when it dismissed Massachusetts from a license renewal proceeding for two nuclear power plants owned by Entergy which were located within ten miles of the Massachusetts border.¹⁰ Massachusetts attempted to gain “party” status in the license renewal proceeding to ensure that the NRC would address Massachusetts’ safety concerns regarding the disposition of SNF. The NRC claimed that Massachusetts was required to forego its attempt to gain “party” status in the proceeding and instead seek to participate in the proceeding as an “interested governmental entity” in order to petition the agency to delay the issuance of the renewal licenses. The court agreed with the NRC and denied Massachusetts’ petition because it failed to first exhaust its administrative remedies before seeking a resolution from the court.

2. *Spano v. NRC*

On September 19, 2008, the U.S. Court of Appeals for the Second Circuit affirmed the NRC’s decision to deny petitioners’ request that the NRC amend its regulations to require that an applicant seeking a renewal of a nuclear power plant license be held to the same standards required of an applicant seeking an initial license.¹¹ The petitioners challenged the NRC’s decision on the grounds that: (1) the NRC violated its own regulations by not allowing petitioners to supplement their petitions; (2) the NRC failed to hold a hearing on the application; (3) the NRC improperly relied on the presence of other administrative remedies; and (4) the NRC failed to consider new information raised by petitioners. The Second Circuit upheld the NRC’s decision to deny the petitioners’ request because it could not conclude that the NRC’s decision was arbitrary and capricious.

3. *New Jersey v. NRC*

On May 21, 2008, the U.S. Court of Appeals for the Third Circuit dismissed for lack of jurisdiction New Jersey’s petition for review of the NRC’s denial of its request for a hearing.

¹⁰ *Massachusetts v. United States*, 522 F.3d 115 (1st Cir. 2008).

¹¹ *Spano v. NRC*, Nos. 06-5140, 07-1559, 07-1756, 2008 U.S. App. LEXIS 20017 (2nd Cir. May 21, 2008).

New Jersey requested a hearing to seek rescission of portions of an NRC guidance document, NUREG-1757, which addresses how licensees can satisfy certain decommissioning requirements.¹² New Jersey's petition for review of NUREG-1757 was directly related to the State's challenge of two decommissioning plans filed by Shieldalloy Metallurgical Corporation ("Shieldalloy"). In addition to challenging the NRC's technical analyses of Shieldalloy's decommissioning plans, New Jersey also challenged the legality of the NRC's decommissioning regulations, including certain portions of NUREG-1757. The court concluded that it lacked jurisdiction over these claims because NUREG-1757 is not a final order of the NRC and does not determine any rights or obligations of any party. The court also concluded that it had no jurisdiction to address New Jersey's assertion that the NRC was required to issue an Environmental Impact Statement in conjunction with its issuance of NUREG-1757.

C. Radioactive Waste Disposal

1. *United States v. Manning*

On May 21, 2008, the U.S. Court of Appeals for the Ninth Circuit rejected the state of Washington's appeal of the trial court's holding that the Cleanup Priority Act ("CPA"), a Washington statute, is invalid in its entirety because it is preempted by the Atomic Energy Act ("AEA"), a federal law.¹³ The CPA was enacted to prevent the addition of new radioactive and hazardous waste to the Hanford Nuclear Reservation in Washington until the cleanup of existing contamination had been completed. The court held that the CPA was preempted because it regulated within the same field occupied by the AEA. Specifically, the court reasoned that both the CPA and the AEA were enacted to regulate against radiation hazards and that both directly affected decisions concerning radiological safety.

III. ADMINISTRATIVE ACTIVITY

A. Nuclear Regulatory Commission Policy, Practices, and Procedures

1. Status of Reappointments

President Bush nominated Kristine Svinicki, a Senate staffer, to take Commissioner Merrifield's seat in July 2007. Svinicki's nomination had been tied to the reappointment of NRC Commissioner Gregory Jaczko, whose term was to expire in June 2008. Both appointments had been delayed for some time. In March 2008, Svinicki was confirmed to be a Commissioner through June 2012 and Commissioner Jaczko was confirmed to another term for five years starting on July 1, 2008. This brings the total number of Commissioners to four. The fifth seat for the Commission, which expires in June 2010, must be filled by a Democratic or independent candidate because there can be no more than three members of the same political affiliation serving on the Commission.

¹² *New Jersey v. NRC*, 526 F.3d 98 (3rd Cir. 2008).

¹³ *United States v. Manning*, 527 F.3d 828 (9th Cir. 2008).

2. New Plant Developments

(a) South Texas COLA

On September 24, 2007, the South Texas Project Nuclear Operating Co. (“STPNOC”) filed a combined license application (“COLA”) for two Advanced Boiling Water Reactors (“ABWRs”) at the site of the existing South Texas units. The NRC accepted the application for docketing on December 5, 2007. On January 30, 2008 and February 13, 2008, respectively, NRC Staff suspended its safety review and withdrew the opportunity to request a hearing pending STPNOC’s decision on vendor support. STPNOC’s original primary contractor was GE Hitachi, but in early 2008 STPNOC chose Toshiba to construct the two new ABWRs. NRC Staff has continued to review the environmental portion of the application.

(b) Applications for New Nuclear Units

The NRC has received several additional applications for new nuclear units, including Grand Gulf Unit 3 in Mississippi, Virgil C. Summer Units 2 and 3 in South Carolina, Victoria County Station Units 1 and 2 in Texas, Shearon Harris Units 2 and 3 in North Carolina, Vogtle Units 3 and 4 in Georgia, Levy County Units 1 and 2 in Florida, Callaway Plant Unit 2 in Missouri, Fermi Unit 2 in Michigan, Comanche Peak Units 3 and 4 in Texas, and River Bend Unit 2 in Louisiana. The Grand Gulf, Victoria County Station, and River Bend Station applications are for new economic simplified boiling water reactors (“ESBWR”), the Harris, Vogtle, Summer and Levy County applications are for AP1000s, and the Callaway application is for a U.S. EPR.

The NRC has docketed Grand Gulf, Harris, Summer, and Vogtle, and is conducting its technical reviews. For Grand Gulf, the opportunity to request a hearing has expired, and no individual or party filed a petition to intervene. The NRC plans to issue the Final Environmental Impact Statement (“FEIS”) in May 2010 and the Final Safety Evaluation Report (“FSER”) in March 2011. For Shearon Harris Units 2 & 3, the opportunity to request a hearing has expired. The NRC is expected to issue Harris’s FSER and FEIS in April 2011 and May 2010, respectively. For Vogtle Units 3 and 4, the opportunity to request a hearing expires on November 16, 2008. The Commission has target dates of December and January 2010 to release the FSER and the FEIS. The NRC docketed Summer Units 2 and 3 in August 2008. The applicant has said it anticipates NRC’s review of the application to take at least three years, with a decision in 2011.

Victoria County Station, Levy County, and Callaway are currently undergoing acceptance review. The applicant hopes to have Unit 2 online in 2016 and Unit 3 in 2019. The NRC was expected to begin acceptance review for Victoria County Station Units 1 and 2 on September 3, 2008 and plans to complete the review on October 31, 2008. Levy County submitted its application on July 30, 2008, and NRC Staff began its acceptance review on August 8, 2008. The decision has not yet been docketed. Callaway Plant’s July 28, 2008 COLA was the first application for a new reactor in the Midwest. The applicant hopes the NRC will issue a license for the new unit in October 2010 and expects to start plant construction in June 2013 and finish in June 2017. Its goal is to begin commercial operation in December 2017.

On September 26, 2008, the NRC published in the Federal Register its 60-day notice of opportunity to for the public participate in the hearing on the COLA for the proposed new reactor at the Calvert Cliffs site in Maryland (73 Fed. Reg. 55,876).

(c) Limited Work Authorizations and Related Issues

On October 9, 2007, the NRC issued a final rule (72 Fed. Reg. 57416) amending regulations applicable to limited work authorizations (“LWAs”). The rule, among other things, modifies the scope of activities that are considered “construction” and expedites the LWA process in 10 C.F.R. § 50.10(e) by allowing combined license (“COL”) applicants and early site permit (“ESP”) holders to conduct certain pre-construction activities prior to obtaining NRC approval. These activities include site clearing, transmission line routing, and road building. Additionally, construction of certain systems, structures, and components (“SSC”) that are not essential to public health and safety or common defense and security may proceed without NRC review or approval.

On April 2, 2008, the NRC Staff issued “Interim Staff Guidance on Limited Work Authorizations,” ISG COL/ESP–ISG–004 (“ISG”). In the ISG, the NRC Staff stated that, under the revised rule, the impacts of construction activities need to be addressed because they are the activities being authorized. The NRC also concluded that the impacts of pre-construction and construction activities need to be separated so the impacts of the construction activities can be appropriately addressed. In addition, the NRC Staff indicated that the impacts of the pre-construction activities need to be described so they can be evaluated as part of the cumulative impacts of the project. This would apply regardless of whether the applicant is requesting an LWA.

Due to several questions raised by the industry related to the scope of SSCs under the revised definition of “construction,” NRC Staff held public meetings, and, on August 19, 2008, issued a supplement to ISG. The supplement provides a definition of the types of activities that qualify as construction, clarifies distinctions between temporary and permanent features, and also discusses further examples of construction activities. These examples included circulating water systems, turbine building structures and foundations, and crane foundations and support pads. On September 5, 2008, the supplement was transmitted to the Advisory Committee on Reactor Safeguards and the Committee to Review Generic Requirements for review and consideration.

(d) DOE Loan Guarantees

The Energy Policy Act of 2005 authorizes the Secretary to make loan guarantees for advanced nuclear energy projects for up to 80 percent of the project cost of the facility. The loan guarantees are available for up to 100 percent of the loan amount, so long as all guarantees for a project do not exceed 80 percent of project costs. DOE will issue 100 percent loan guarantees only if the loan is issued and funded by the Treasury Department’s Federal Financing Bank. DOE also will issue loan guarantees for loans from private lenders. If DOE guarantees 90 percent or less, the eligible lenders and other holders will not be prohibited from separating the guaranteed portion from the non-guaranteed portion of the debt instrument (*i.e.*, stripping). On June 30, 2008, DOE’s loan guarantee program published two solicitations relevant to nuclear

power: nuclear power projects and projects involving the front end of the fuel cycle. For nuclear power projects, DOE will make no more than \$18.5 billion available in loan guarantee authority. For the front end of the fuel cycle, the amount available is \$2 billion.

(e) Smaller Nuclear Units - Toshiba 4S and NuScale

Although more attention has been focused on the larger reactor designs, two companies are actively exploring licensing of smaller nuclear units (<100 MW): Toshiba for its 4S reactor and NuScale for its Multi-Application Small Light-Water Reactor. Toshiba has been in pre-application discussions with the NRC regarding its “nuclear battery” for several years and currently expects to submit an application for a design approval in 2009 and a combined license application referencing the design in 2012. NuScale plans to submit a design certification application for its modular reactor in 2010.

(f) Draft Policy Statement Regulation of Advanced Reactors

On May 9, 2008, the NRC published a draft policy statement on the regulation of advanced reactors (73 Fed. Reg. 26349). The updated policy aims to improve the licensing environment for advanced nuclear power reactors to minimize complexity and uncertainty in the regulatory process. In particular, the purpose of this revision is to update the Commission’s policy statement on advanced reactors to integrate the Commission’s expectations for security and preparedness, which have evolved significantly in the past several years, with the current expectations for safety. The draft policy statement identifies several “attributes” that the Commission believes should be considered in designing advanced reactors, including the use of use of inherent or passive safety systems and incorporating design features to mitigate potential terrorist attacks.

(g) Design Certifications

AREVA submitted an application for standard design certification for the U.S. EPR on December 11, 2007. The U.S. EPR is an evolutionary pressurized water reactor with a rated thermal output of 4,500 MWt. The U.S. EPR design features four redundant trains of emergency cooling equipment, and a containment and shield building for added protection. The NRC Staff performed an acceptance review of the application for completeness and technical sufficiency and docketed the application in March 2008. The NRC Staff’s review is ongoing.

The US-APWR is a 4451 MWt pressurized water reactor designed by Mitsubishi Heavy Industries, Ltd. The evolutionary design with active safety features is based on established APWR technology. Mitsubishi submitted an application for standard design certification on December 31, 2007. The NRC Staff performed an acceptance review of the application for completeness and technical sufficiency and docketed the application in March 2008. The NRC Staff’s review is ongoing.

In addition to those designs, the NRC Staff continues to review Revision 16 to Westinghouse’s AP1000 Design Control Document (“DCD”) and Revision of GE-Hitachi’s ESBWR DCD.

(h) Tennessee Valley Authority- Bellefonte

The Tennessee Valley Authority (“TVA”) is applying for a license to operate two new units on its existing Bellefonte nuclear facility site. On September 12, 2008, the Licensing Board ruled in LBP-08-16 that the Southern Alliance for Clean Energy (“SACE”) and the Blue Ridge Environmental Defense League (“BREDL”) had standing to intervene. The Licensing Board admitted four of the Petitioner’s contentions asserting that: 1) TVA’s environmental report does not adequately address the adverse impacts on fishery and aquatic resources; 2) TVA fails to offer a plan for low-level radioactive waste disposal; 3) TVA fails to address the environmental impact of storing low-level radioactive waste on site; and 4) TVA’s cost comparison fails to provide reasonably current and up-to-date information regarding estimated electrical generation costs. The Licensing Board denied the admission of a contention positing the need for an environmental impact analysis of the “carbon footprint” associated with the proposed expansion of Bellefonte. The Licensing Board referred this denial, and its admission of contentions 2 and 3, to the Commission for review..

3. License Renewal

(a) Status of License Renewal Applications

To date, the NRC has issued operating license renewals for 48 nuclear units. Currently, applications for 15 units are under review, including Oyster Creek (received July 22, 2005); Pilgrim 1 (received January 27, 2006); Vermont Yankee (received January 27, 2006); James A. Fitzpatrick (received August 1, 2006); Susquehanna (received September 15, 2006); Wolf Creek (received October 4, 2006); Harris (received November 16, 2006); Indian Point Units 2 and 3 (received April 30, 2007); Vogtle (received June 29, 2007); and Beaver Valley (received August 28, 2007), Three Mile Island (received January 8, 2008), Prairie Island, Units 1 and 2 (received April 15, 2008), and Kewaunee Power Station (received August 14, 2008). The NRC has also received numerous letters of intent to apply for license renewal (at 23 sites). In accordance with 10 C.F.R. § 2.109, a renewal application must be submitted at least five years before the expiration of the license in order to ensure that the plant can operate uninterrupted during the renewal process.

(b) Extension of Indian Point Review Schedule

On January 24, 2008, the NRC issued a revised schedule of review for the license renewal application of Entergy’s Indian Point Nuclear Generating Unit Nos. 2 and 3. The schedule was revised to reflect the changed date for the issuance of Requests for Additional Information (“RAIs.”) The schedule was revised a second time, on April 23, 2008, to allow NRC Staff time to review Entergy’s responses to the Staff’s RAIs.

On September 2, 2008, NRC Staff revised the schedule a third time. This most recent schedule updated the dates for the issuance of the safety evaluation report (“SER”) and the draft Supplemental Environmental Impact Statement (“SEIS”). The issuance date for the SER was extended approximately four months to January 5, 2009 because of the review of RAIs, the large number of contentions, and changes to the SER that incorporate the Staff’s corrective actions stemming from the recent Office of the Inspector General report. The issuance date of the draft

SEIS has been delayed approximately three months, and it is now scheduled to be issued on December 12, 2008. The draft SEIS has been delayed due to the large number of public comments on the scope of NRC Staff's environmental review. The newly revised schedule also estimates that the final SEIS would be issued on February 12, 2010.

(c) Petitions to Intervene - Prairie Island Indian Community

On April 15, 2008, Prairie Island Nuclear Generating Plant filed its application for license renewals for Units 1 and 2. Subsequently, the NRC and Prairie Island Indian Community ("the Community") entered into a Memorandum of Understanding establishing a cooperating agency relationship with the NRC. The relationship was established to aid in the preparation of the SEIS, which will be issued in connection with the Prairie Island license renewal.

On June 17, 2008, NRC Staff published a notice of hearing and opportunity to intervene. The Community submitted the sole petition to intervene on August 18, 2008. The Community is located approximately 600 yards north of the reactor site, and owns and operates the Treasure Island Resort and Casino. In its petition, the Community contended that a renewal of the Prairie Island license could negatively affect the health and safety of community residents, put visitors at risk and damage the surrounding environment.

NRC Staff and the applicant filed an answer to the Community's petition on September 12, 2008. NRC Staff did not contest the Community's standing to intervene, but argued that the Community's petition should be denied for failure to put forth any admissible contentions. The applicant opposed the Community's petition to intervene because none of the Community's contentions were supported by expert opinions. The applicant also noted that the Community submitted many of the same contentions in the Indian Point license renewal case. As a result, the applicant argued that the Community had failed to demonstrate how these identical contentions were relevant to Prairie Island.

4. Security Initiatives

(a) Proposed Rule: Power Reactor Security Requirements - Aircraft Impacts

On July 9, 2008, the Commission issued a Final Rule Package for SECY-08-0099, "Power Reactor Security Requirements." As aircraft threats may be significant, rapidly evolving events and because licensees may only receive threat notifications a short time before potential onsite impacts, the NRC Staff has determined it imprudent for licensees to attempt to identify and accomplish *ad hoc* mitigative actions in the midst of such circumstances. The proposed rule requires licensees to develop specific procedures that describe the pre-identified actions they intend to take when they are provided with pre-event notification. It requires licensees to develop, implement, and maintain procedures for 1) verifying the authenticity of aircraft threat notifications to avoid taking actions in response to hoaxes that may have adverse impacts, and 2) contacting all onsite personnel and appropriate offsite response organizations in a timely manner following threat notifications. It would also require licensees to develop guidance and mitigation strategies for potential large fires and explosions including those caused by the impacts of large commercial aircraft.

(b) Proposed Rule: Criminal Penalties; Unauthorized Introduction of Weapons

The NRC is considering a new rule which would establish criminal penalties for the unauthorized introduction of weapons into certain types of nuclear facilities. In SECY 08-0083, dated June 17, 2008, NRC Staff proposed implementation of Section 654 of the Energy Policy Act of 2005 (119 Stat. 812), “Unauthorized Introduction of Dangerous Weapons,” which authorizes the NRC to issue regulations that make it a federal crime to bring, without authorization, weapons or explosives into licensed facilities. This rule would require certain signage warning individuals of criminal penalties associated with carrying, transporting or otherwise introducing any dangerous weapon, explosive or other dangerous instrument material into designated facilities.

On August 12, 2008 the Commission approved publication of the proposed rule, subject to conditions. Notably, the rule should seek comment: 1) as to where the terms “dangerous weapon,” “dangerous instrument or material,” and “explosive” should be defined, and what definitions would be appropriate; and 2) on performance-based signage regarding signs being “easily readable” at night. In addition, the Commission directed NRC Staff to 1) consider addressing the details of implementation to provide maximum flexibility to licensees; and 2) review the criminal penalties associated with the authorizing legislation and the Atomic Energy Act, and consult with the Department of Justice in order to recommend whether legislation should be sought to increase the penalties. The proposed rule was published in the *Federal Register* on September 3, 2008 (73 Fed. Reg. 51378).

(c) SECY-08-0059 Rulemaking Plan: Part 74 – MC&A of SNM

On April 25, 2008, the NRC issued a rulemaking plan for SECY-08-0059, “Part 74: Material Control and Accounting (“MC&A”) of Special Nuclear Material (“SNM”).” NRC Staff is seeking Commission approval to engage in a rulemaking to provide a more risk-informed MC&A regulatory framework. Staff believes that the post-9/11 threat environment requires updated safeguard programs to better ensure protection against the diversion or theft of material that could subsequently be used to create an improvised nuclear device (“IND”). MC&A requirements for SNM would still be based on material quantity and form, but the new rulemaking plan would also take into account the relative attractiveness of different materials in fabricating INDS. Therefore the staff wishes to 1) revise SNM categorization values, and summarize SNM values in a new categorization table that defines threshold quantities and material forms requiring varying levels of protection; 2) create a new diversion path analysis for fuel fabrication facilities possessing a Category 1 quantity of SNM and enrichment facilities as part of a detection and response program; and 3) revise and consolidate in Part 74 all SNM MC&A requirements. The DOE completed similar revisions to its own SNM categorization table in 2007.

5. Enhancement to Emergency Preparedness – Draft Rule Language

On January 8, 2008, the Commission accepted NRC Staff’s proposal to develop a rulemaking plan and change the current Emergency Preparedness (“EP”) guidance. On March 12, 2008, the NRC published a notice in the *Federal Register* making the preliminary draft rule

language available to stakeholders (73 Fed. Reg. 13157). The purpose of the proposal is to enhance EP regulations based on past operating experience and within the context of the post-September 11, 2001 world.

NRC Staff's draft of the rule focuses improving four EP areas – public safety, emergency response, off-site coordination, and staff protection. First, to ensure public safety, the amendments would require the licensee to identify backup alert and notification systems and periodically review and update evacuation time estimates to incorporate recent population fluctuations or changes in the emergency planning zone infrastructure. Second, to improve emergency response, the amendments would limit collateral responsibilities of on-shift emergency response organization members; clarify the meaning of “maintain in effect” to ensure emergency plans are maintained and properly evaluated before being altered; add a criterion for the timely completion of emergency classifications; require the identification of alternative facilities to direct the emergency response if the Technical and Operational Support Centers are unavailable; and take security-based event declarations into account when creating their emergency action level schemes. Third, to improve offsite response to emergencies, the proposed amendments would no longer require that emergency operations facilities be located near a plant, but instead would stipulate that these facilities meet certain functional requirements. The amendments would also require better licensee coordination with offsite response organizations to ensure the organizations and licensees can collectively implement the emergency plans. Fourth, for the safety of plant employees, the amendments would require licensees to implement various protective actions for onsite personnel; and schedule and provide criteria for the hostile action events preparedness drills and exercises. Finally, the proposed amendments to the rule would remove shift staffing and augmentation requirements, incorporating them into guidance materials.

The NRC accepted comments until July 1, 2008, and intends to publish a proposed rulemaking in the *Federal Register* in February 2009.

6. Criminal Prosecution – Davis-Besse

Andrew Siemaszko, a former engineer at the Davis-Besse nuclear plant, was convicted on three criminal counts in federal court on August 26, 2008. The convictions stemmed from Siemaszko's involvement in inaccurate reporting to the NRC regarding the plant's condition. Sentencing for Siemaszko has not yet been scheduled and his attorney has indicated that he may appeal. The Siemaszko conviction follows that of David Geisen, former engineer at Davis-Besse, who was convicted in October 2007 on similar charges. Geisen was sentenced to four months of home confinement with electronic monitoring, three years of probation, 200 hours of community service, and a \$7,500 fine. He is appealing his sentence. Rodney Cook, another co-defendant and former plant contractor was acquitted.

7. Independent Spent Fuel Storage Installation Licenses and Certificate of Compliance Terms - Draft Rule Language

The NRC has drafted rule language to amend current regulations regarding the licensing requirements for Independent Spent Fuel Storage Installation (“ISFSI”). The proposed language would clarify the license term limits for dry storage cask Certificates of Compliance (“CoCs”)

and ISFSI licenses; eliminate inconsistencies between general license requirements and site-specific ISFSI license requirements; and allow Part 72 general licensees to apply changes authorized by an amended CoC to a cask loaded under the initial CoC or an earlier amended CoC. The amendments would extend the initial and renewal terms for part 72 CoCs and licenses, clarify the general license storage term and allow a licensee to apply CoC amendment changes to a previously loaded cask without express NRC approval (provided the cask conforms to the terms, conditions, and specifications of the amended CoC). The deadline for comments was August 31, 2008.

8. Denial of Petition for Rulemaking on Spent Fuel Pools

On August 8, 2008, the Commission denied two petitions for rulemaking, one filed by the Attorney General of the Commonwealth of Massachusetts and one by the Attorney General for the State of California (73 Fed. Reg. 46204). Both petitions asserted “new and significant information” showed that spent fuel stored in high-density spent fuel pools is more vulnerable to zirconium fires than the NRC had previously concluded. The petitioners argued that an accident or terrorist attack could result in drainage of cooling water, which in turn would cause stored spent fuel assemblies to ignite, with the resulting fire releasing a substantial amount of radioactive material into the environment. The NRC analysis was based on studies demonstrating that the probability of an accident being caused by a zirconium fire in a spent fuel pool is very low and well within the Commission’s safety goals. Furthermore, the NRC does not believe that NEPA requires it to consider the environmental consequences of a hypothetical attack. However, the NRC stated that even if it was required to do so, the NRC’s decision would remain unchanged, because a successful terrorist attack is not “reasonably foreseeable.” The NRC therefore found that the environmental impacts of renewing a plant license, in regard to a terrorist attack on spent fuel pools, are insignificant. Commissioner Jaczko voted to partially grant the petitions because information in support of the petitions will be considered during a future rulemaking.

9. Denial of Petition for Rulemaking on Security Plan Exercises

On September 23, 2008, the NRC published its notice denying a petition for rulemaking (PRM-50-83) submitted by Mr. David Lochbaum ("Petitioner") on behalf of the Project on Government Oversight and the Union of Concerned Scientists. *See* 73 Fed. Reg. 54,744. The Petitioner requested that the NRC amend its regulations to require periodic demonstrations by applicable local, state, and federal entities, showing that nuclear power plants can be adequately protected against radiological sabotage by adversaries with capabilities that exceed those posed by the design basis threat. The petition was denied, in large part, because oversight and coordination of local, state, and federal entities are under the purview of the Department of Homeland Security.

10. Entergy Creation of Holding Company - Enexus Energy Corporation

The NRC approved the indirect transfer of operating licenses for the FitzPatrick, Indian Point Units 2 and 3, Palisades, Pilgrim and Vermont Yankee nuclear power plants from owner Entergy Corporation (“Entergy”) to new owner Enexus Energy Corporation (“Enexus”) on July 28, 2008. The transfer also covers the licenses for the permanently shut down Indian Point Unit

1 and the independent spent fuel storage installation at Big Rock Point. Enexus is the nation's "first stand-alone, publicly traded nuclear-energy generating and marketing company." Under terms set forth in the July 30, 2007 application submitted by Entergy Nuclear Operations, Enexus will own the individual licenses via holding companies. Enexus' 50/50 joint venture with Entergy Corporation will be called EquaGen LLC (now operating as Entergy Nuclear, Inc.). EquaGen will operate the six operating nuclear power facilities. On June 12, 2008, the Federal Energy Regulatory Commission issued an Order approving the transaction. However, Entergy still needs approval from state regulators in Vermont and New York.

11. Security Guard Inattentiveness - Response to Security Concerns at Peach Bottom

In September 2007, after video recordings of inattentive security officers in a "ready room" at the Peach Bottom plant came to light, the NRC launched a range of inspections and investigations. Subsequently, an Augmented Inspection Team confirmed there had been several occasions in which security officers were inattentive and that the licensed operator, Exelon, and Wackenhut, which was then the plant's contract security provider, missed opportunities to identify such behavior via the behavioral observation program. On December 12, 2007, the NRC issued Bulletin 2007-01, "Security Officer Inattentiveness," to evaluate the extent to which licensees have the appropriate administrative and management controls "to deter and address inattentiveness and complicity among licensee security personnel including contractors and subcontractors."

Separately, the NRC initiated a lessons-learned assessment to identify potential improvements to the NRC's allegation referral and follow-up processes. The review team developed recommendations for improvements to allegation procedures, practices and policies, and to the inspection program aimed specifically at enhancing the NRC's ability to identify conditions of inattentiveness. A Senior Executive Review Panel ("SERP") was established in February 2008 to evaluate the recommendations of the Peach Bottom Lessons Learned Review Team. These recommendations, which were endorsed by the SERP and the Commission included enhancing NRC processes for forwarding allegations to a licensee, evaluating licensee responses and documenting NRC evaluation of the licensee's response.

The Office of the Inspector General ("OIG") also issued OIG-07-65, "NRC's Response to Security-Related Concerns at Peach Bottom" on August 22, 2008. OIG reported that there were inconsistencies in the NRC's assessment of the safety significance of two allegations, made within six months of each other each concerning inattentive security officers at Peach Bottom.

12. Enforcement

On January 24, 2008, Entergy Nuclear Operations, Inc. ("ENO") was fined the sixth highest civil penalty yet issued, \$650,000, for its failure to meet the requirements of Confirmatory Orders ("Orders") that set deadlines for establishing backup power for the Emergency Notification System ("ENS") at Indian Point. This was the third enforcement action levied against ENO for its failure to comply with Section 651(b) of the Energy Policy Act of 2005 ("EPAAct"). The EPAAct required installation of back-up power for the ENS by January 2005, for those facilities within a 50-mile radius of a permanent population in excess of

15,000,000. NRC Order EA-07-189 required that Federal Emergency Management Agency approval be obtained prior to declaring the new system operable. The requisite approval was received by ENO on August 22, 2008. In response, the NRC issued Confirmatory Action Letter 1-08-005 requiring ENO to implement a tone alert radio (“TAR”) Control Program and distribute TARs to required locations in the 0-5 mile region in the Emergency Planning Zone prior to placing the new system in service. The new ENS system was placed into service on August 27, 2008.

Effective September 10, 2008, the Commission approved an extension of the enforcement discretion period (on a case-by case basis) for licensees transitioning to the risk-informed National Fire Protection Association Standard (“NFPA”) 805. *See* 73 Fed. Reg. 52,705. The enforcement discretion period was initially extended from two to three years on April 18, 2006. The Commission extended the enforcement discretion period in recognition of the fact that licensees need additional time to: (1) procure additional resources; and (2) develop fire probabilistic risk assessments.

The enforcement trends for *Traditional* (*i.e.*, those involving Severity Levels and possibly civil penalties) and ROP-related escalated enforcement actions through September 29, 2008, are summarized below in the following data tables:

Figure 1 -- Traditional Historical Enforcement Summary

	Number of Escalated Enforcement Actions	Number of Escalated Enforcement Actions w/CP	Number of Escalated Violations	Proposed Civil Penalty (CP) Amount	Average CP per Escalated Enforcement Action
2000	10	2	12	\$198,000	\$99,000
2001	6	3	6	\$198,000	\$66,000
2002	3	2	4	\$348,000	\$174,000
2003	6	2	6	\$120,000	\$60,000
2004	8	4	8	\$208,000	\$52,500
2005	12	8	17	\$5,886,000	\$735,750
2006	10	3	10	\$229,000	\$76,333
2007	6	3	6	\$260,000	\$52,000
2008	3	2	3	\$930,000	\$465,000

Figure 2 -- Historical SDP Enforcement Summary

	Number of Escalated Enforcement Actions 1/	Number of Escalated Findings 2/	White Findings	Yellow Findings	Red Findings
2000	9	11	10	0	1
2001	18	20	18	2	0
2002	24	26	24	0	1
2003	13	16	11	2	2
2004	15	16	15	0	0
2005	17	17	14	2	1
2006	16	17	14	0	0
2007	11	11	9	2	0
2008	5	5	5	0	0

- 1 Under the revised Enforcement Policy, the SDP is used to evaluate most inspection findings to determine the safety significance. For those actions issued under this approach, escalated actions are categorized as: (1) either low to moderate risk significance (“**White**”); (2) moderate to substantial risk significance (“**Yellow**”); or (3) great risk significance with a significant reduction in safety (“**Red**”). Very low risk significance findings (“**Green**”) are not included.
- 2 Often escalated actions involve multiple findings. As a result, the number of escalated findings tends to exceed the total number of escalated actions issued in a given year.
- 3 Data presented from 2008 is current through September 29, 2008.

B. Important NRC Adjudication Developments

1. North Anna COLA (LBP-08-15)

The NRC issued an early site permit (“ESP”) to Dominion Virginia Power’s North Anna Power Station on November 20, 2007. Six days later, Dominion Virginia Power filed a COLA for an ESBWR to be located at North Anna. On March 10, 2008, NRC Staff issued a notice of hearing and opportunity to intervene. BREDL and its Virginia-based chapter, People’s Alliance for Clean Energy (“PACE”), petitioned for intervention and requested a hearing. Both the Applicant and NRC Staff opposed the petition.

The Atomic Safety and Licensing Board (“Licensing Board” or “Board”), in LBP-08-15, found that BREDL, but not PACE, established standing to intervene, and that one of the group’s contentions was admissible in part. BREDL contended that North Anna’s COLA failed to address the fact that no facility in the U.S. is currently licensed or able to accept radioactive waste from the existing and proposed North Anna nuclear power reactors. BREDL argued that the COLA should have included a plan to manage the low-level radioactive waste (“LLRW”) generated by the new reactor given that the Barnwell facility in South Carolina no longer accepts North Anna’s LLRW. BREDL also argued that the COLA should have examined the environmental consequences of storing LLRW at the North Anna site. The Board admitted the safety contention, but did not admit the environmental contention because it believed the latter was resolved in North Anna’s ESP proceeding. The Board also noted that the safety contention raised a generic issue applicable to many COL applicants. The Board also granted the North Carolina Utilities Commission’s request to participate as a non-party interested state.

2. Pa’ina (CLI-08-16)

On August 13, 2008, the Commission reversed the Licensing Board’s admission of Concerned Citizens of Honolulu’s (“Concerned Citizens”) contention that a NEPA analysis was necessary to assess the potential health impacts of food irradiated in the facility. The contention stems from Pa’ina Hawaii LLC’s material license application for an underwater irradiator to be located in Honolulu, Hawaii. The NRC generally does not perform an environmental analysis of irradiator facilities because it has implemented a categorical exclusion for irradiators. Here, however, NRC Staff agreed to prepare an Environmental Assessment (“EA”) of the Pa’ina irradiator as part of a settlement agreement with Concerned Citizens. Upon issuance of the EA, Concerned Citizens filed a contention claiming that the EA had failed to analyze the health effects of consuming irradiated foods. The Board admitted the contention.

The Commission concluded that the contention was inadmissible. The Commission found that the Food and Drug Administration (“FDA”) has statutory authority to analyze the safety of food irradiation, and the NRC has no authority to revoke or revise FDA regulations, or to prohibit the use of machine sources of radiation to irradiate food. The Commission stated further that food irradiation does not relate to the environmental effects of the issue of irradiator licensing, and therefore is not governed by NEPA.

3. Crow Butte (North Trend/Renewal)

Crow Butte Resources, Inc. (“Crow Butte”) has two ongoing licensing proceedings. First, in the North Trend Expansion proceeding, Crow Butte is seeking to amend its source materials license to develop additional uranium in-situ recovery mining resources near Crow Butte’s present uranium in-situ mining site in Crawford, Nebraska. On April 29, 2008, the Licensing Board assigned to the proceeding admitted petitioners Owe Aku/Bring Back the Way, Debra White Plume, and the Western Nebraska Resources Council (“WNRC”) as intervening parties.

The Board also admitted three joint contentions: that Crow Butte’s application does not accurately describe the expanded mine’s effects on the environment or the potential for water contamination; that Crow Butte’s mining will contaminate local water resources; and that Crow Butte has not consulted Oglala Sioux Tribe leaders about the prehistoric Indian camp located in the area of the prospective mine expansion as required under NEPA and the National Historic Preservation Act. The Board denied the petitions for hearing of Slim Buttes Agricultural Development Corporation and Thomas Kanatakeniate Cook. The Oglala Sioux Tribe will be allowed to participate in the proceeding as an interested government entity. The Board held additional oral argument on July 23, 2008 to discuss a proposed contention regarding the foreign ownership of Crow Butte and the petitioners’ request for a hearing under Subpart G of 10 C.F.R. Part 2.

The second proceeding relates to license renewal. In response to a May 27, 2008 notice of opportunity for hearing, 13 petitioners timely filed requests for hearing and petitions to intervene. Petitioners’ contentions are similar, and in some cases identical, to the contentions presented in the Crow Butte North Trend Expansion proceeding. Oral argument on standing and the admissibility of contentions are being heard on September 30, 2008.

4. Indian Point License Renewal (LBP-08-13 and Board Order Striking WestCAN’s Request for Hearing Due to Lack of Candor)

The NRC received the license renewal application for Indian Point Units 2 and 3 on April 30, 2007. The license renewal proceeding received considerable intervenor attention throughout 2007. On July 31, 2008, in LBP-08-13, the Board ruled on seven of the petitions to intervene. The Board granted the petitions to intervene of the State of New York (“NYS”), Riverkeeper, Inc., and Hudson River Sloop Clearwater because each entity established standing and provided at least one admissible contention. The Board denied the petitions of Connecticut Residents Opposed to Relicensing Indian Point (“CRORIP”); the Town of Cortlandt, New York (“Cortlandt”); the State of Connecticut (“Connecticut”); and Westchester County, New York (“Westchester”) because these groups failed to proffer an admissible contention. The Board, however, allowed Cortlandt, Connecticut, and Westchester to participate as interested governmental entities.

The Board admitted fifteen contentions, including failures to address the effects of aging due to metal fatigue on key reactor components; new information regarding the environmental effects of radionuclide leaks from spent fuel storage; and the impact of the units on minority, low-income and disabled individuals in the community.

The Board dismissed the Village of Buchanan and the City of New York from the proceeding because these governments did not submit admissible contentions. The Board allowed both entities to petition to participate as interested government parties within 30 days after any contention was admitted.

Westchester Citizen's Awareness Network ("WestCAN") was an intervener not included in the LBP-08-13 order. On December 10, 2007, WestCAN filed a petition to intervene in the proceeding. WestCAN's certificate of service was inaccurate and it filed multiple, non-identical copies of pleadings throughout the proceeding. In response, the Board issued several orders reminding WestCAN and other interveners what was expected and required for acceptable pleadings. WestCAN subsequently submitted three materially false certificates of service for the same reply brief. WestCAN also ignored three Board orders requesting further information about the inaccurate certificates of service. When WestCAN finally responded to the Board's requests for information, it provided a false account of why the certificates of service were misleading. Due to WestCAN's lack of candor and integrity, the Board struck WestCAN's Request for Hearing on July 31, 2008. WestCAN appealed the order on August 8, 2008. The Board issued its denial of a request for reconsideration on September 23, 2008. The Board also dismissed Friends United for Sustainable Energy because of an inaccurate certificate of service.

5. Millstone Uprate Amendment (LBP-08-09)

Dominion Nuclear Connecticut, Inc. is seeking to amend its operating license to increase Millstone Power Station Unit 3's authorized core power level from 3411 to 3650 megawatts thermal and make changes to technical specifications to support operation at the increased power level. On June 6, 2008, the Licensing Board ruled on a joint petition to intervene and request for hearing filed by the Connecticut Coalition Against Millstone ("CCAM") and Nancy Burton. Neither the NRC nor Dominion challenged CCAM's standing; however Dominion challenged Burton's individual standing. The Board granted Burton standing. Although she had only seasonal residency, the Board determined the fact that she had spent time at a cottage ten miles from the Millstone facility on a regular basis since 1970 was enough to establish a bond between her and the facility's vicinity and the likelihood of an ongoing and continuing connection and presence. Nevertheless, the Board denied Petitioners' request for an evidentiary hearing because they failed to proffer an admissible contention.

6. MOX Services (LBP-08-11)

Shaw AREVA MOX Services ("MOX Services") is applying for a license to operate the Mixed Oxide Fuel Fabrication Facility ("MOX facility") at the Savannah River Site in South Carolina. On October 31, 2007, the Licensing Board ruled in LBP-07-14 that three organizational Petitioners had standing in the safety issues phase of the proceeding. The Board also made a tentative ruling that two of the Petitioners' five original contentions appeared admissible; however since construction of the MOX facility is not scheduled to be complete until 2014, the Board recognized that any safety contentions about construction outcomes would necessarily include speculation. Thus the Board invited reconsideration of its ruling and requested comment on proposed procedural approaches. In response, the parties filed a variety of pleadings, and the Board held two more oral arguments in January and April of 2008.

On June 27, 2008 the Board ruled on Petitioners' contentions and all other pending matters. It dismissed Petitioners' environmental contentions, one of which had initially been admitted, because on reconsideration the Board determined the contentions were outside the scope of the safety issues phase of the proceeding. The Board admitted a contention it had recast to better fit into the safety issues phase and granted the heading request accordingly. Finally, given the complexity of the proceeding, the Board determined that any new or amended contentions will be deemed timely if filed within sixty (as opposed to thirty) days of the Petitioners learning, or being in the position to learn, of the availability of information that triggers the filing of such a contention.

7. Oyster Creek License Renewal (LBP 07-17, CLI-08-10, August 21, 2008 Order)

This proceeding concerns an application by AmerGen Energy Company, LLC ("AmerGen") to renew its operating license for the Oyster Creek Nuclear Generating Station and a single contention addressing AmerGen's aging management program for measuring corrosion in the sand bed region of the of the drywall liner. On June 6, 2006, the Licensing Board concluded that the admitted contention was a contention of omission that had been cured. On October 10, 2006, the Board admitted one of the newly proffered contentions alleging that the monitoring frequency in the sand bed region of the drywall shell during the renewal period was insufficient to maintain adequate protection. On March 30, 2007, AmerGen submitted a motion for summary disposition, arguing that there is no genuine issue of material fact that calls into question whether AmerGen's scheduled monitoring frequency for the sand bed region of the drywell is sufficient to maintain an adequate safety margin. In a June 19, 2007 decision, the Licensing Board denied AmerGen's motion. An evidentiary hearing on the application was held in September 2007.

On December 18, 2007, the Licensing Board issued an initial decision rejecting the challenge to Oyster Creek's renewal application. Specifically, the Board for AmerGen demonstrated that the frequency of its planned UT measurements, in combination with the other elements of its aging management program, provides reasonable assurance that the sand bed region of the drywall shell will maintain the necessary safety margin during the period of extended operation. The initial decision included an "Additional Statement" expressing a desire for a "conservative best estimate analysis of the actual drywall shell," which AmerGen agreed to conduct. On May 28, 2008 the Commission asked the parties to file additional briefs explaining whether the structural analysis that AmerGen has committed to perform matches or bounds the sensitivity analyses that the Additional Statement would impose, and whether additional analysis is necessary. On August 21, 2008, the parties' filings addressing this limited issue were referred to the Licensing Board for resolution.

8. Pacific Gas & Electric Co. (CLI-08-01)

The Commission continues to adjudicate a long-running matter involving PG&E's independent spent fuel storage installation at Diablo Canyon. Following a remand from the Ninth Circuit Court of Appeals, the Commission ordered the NRC Staff to prepare a Supplemental Environmental Assessment addressing the likelihood of a terrorist attack at the Diablo Canyon

ISFSI site and the potential consequences of such an attack. According to the EA Supplement, a terrorist attack would not result in a significant release of radiation to the public, even under the most severe plausible threat scenarios. San Luis Obispo Mothers for Peace filed a request for a hearing based on that supplement. In CLI-08-01, the Commission granted the hearing request, in part, with respect to the environmental consequences of a terrorist attack. On July 1, 2008, the NRC held oral argument on the adequacy of the NRC Staff's Supplement EA. In an unusual move (first time in 19 years), oral argument was conducted before the four Commissioners. A decision is expected in the near future.

9. Duke Energy Carolinas, LLC (LBP-08-17)

Duke Energy Carolinas, LLP has submitted an application for a combined license to construct and operate two reactors at William States Lee III Nuclear Station site in Cherokee County, South Carolina. On September 22, 2008, the Licensing Board issued LBP-08-17, denying BREDL's petition for intervention. Although the Board determined BREDL had standing to intervene, it found BREDL failed to submit an admissible contention.

C. High Level Waste Storage and Developments

1. License Application Submitted and Docketed with EIS Determination

On June 3, 2008, the DOE submitted a license application to the NRC seeking authorization to construct a high level waste repository ("HLW") at Yucca Mountain, Nevada. As required by the NWPA, the license application was accompanied by a Final Environmental Impact Statement (EIS). On September 8, 2008, after conducting an initial examination of the application, NRC Staff determined that it was acceptable for docketing. There will be a hearing prior to an issuance of construction authorization, notice of which will be published in the *Federal Register* at a later date

NRC Staff also reviewed the DOE EIS and found that it practicable to adopt the EIS, with further supplement. NRC Staff concluded that supplementation is necessary to adequately address all the impacts on groundwater or from surface discharges on groundwater. The NRC requested that DOE provide a plan for supplementation within 30 days of the application's docket date.

2. Case Management Order for Petitions, Contentions, Responses (LBP-08-10)

In December 2007, the Commission authorized an Advisory Pre-License Application Presiding Officer Board to obtain the views of potential parties and recommend case management requirements for any adjudication regarding DOE's application for authorization to construct a HLW repository at Yucca Mountain, Nevada. This Board was established on February 13, 2008. On June 17, 2008, the Commission gave the Board the authority to issue binding case management orders for specific procedural aspects of any HLW proceeding that may be initiated. Because of the large number of contentions the Board expects to be filed, the Board has established a uniform format for contention submission, a uniform protocol for demonstrating compliance with the criteria for admissibility, and a uniform system for referencing or attaching supporting material. These requirements are outlined in the Board's

June 20, 2008 Memorandum and Order, “Case Management Order Concerning Petitions to Intervene, Contentions, Responses and Replies, Standing Arguments, and Referencing or Attaching Supporting Materials.”

3. Modification of Schedule to File Petitions (CLI-08-18)

In CLI-08-18, dated August 8, 2008, the Commission addressed Nevada’s request to modify the filing schedule for petitions to intervene in proceedings on DOE’s application for authorization to construct a geologic repository at Yucca Mountain. Although the Commission declined to adopt Nevada’s proposed modifications, it did agree to modify the schedule. The Commission noted that a proceeding initiated on a DOE application of this kind “has the potential to be one of the most extensive and complex adjudicatory proceedings in history.” Additionally, the existing 30-day limit on intervention petitions for high level waste repository construction periods is half the time accorded in nearly all other NRC adjudicatory proceedings. Therefore the Commission granted Nevada and any other petitioning party an additional 30-days to file a petition. To keep the timetable equitable, the Commission further proposed to 1) double the existing time permitted to file answers and replies to fifty and fourteen days, respectively; 2) extend the period for the First Prehearing Conference from eight to sixteen days after the deadline for filing replies; and 3) extend the period for issuance of a First Prehearing Conference Order from thirty to sixty days after the First Prehearing Conference.

4. DOE Issues Total System Performance Assessment Report Update

DOE is required by regulation to evaluate the safety of the entire Yucca Mountain Repository. DOE’s Office of Civilian Waste Management fulfills this responsibility via a computer model, Total System Performance Assessment. On August 5, 2008, DOE released a revised estimate of the total system life cycle cost of \$96.2 billion 2007 dollars, which includes the cost to research, construct, and operate the repository for 150 years- from the program’s inception in 1983 through decommissioning in 2133. This is a thirty-eight percent increase from the 2001 estimate, reflecting inflation, a substantial increase in the amount of waste to be shipped and stored at the repository, increases in raw material costs, and refinement of the repository design.

The total cost of building and operating the repository is divided among utility ratepayers and taxpayers, with ratepayers estimated to pay a little more than 80 percent, or \$77.3 billion. DOE determined that the fee of one tenth of one cent for each kilowatt-hour paid by commercial nuclear utilities to the Nuclear Waste Fund remains adequate to cover the nuclear utility customers’ portion of the total costs. DOE also noted that its assessment cannot be maintained unless there is sufficient annual funding for the project and stated its commitment to working with Congress to secure consistent funding.