

REPORT OF THE NUCLEAR REGULATION COMMITTEE

This report summarizes regulatory developments, court decisions and legislative actions that have occurred in the area of nuclear energy regulation from June 1, 2008 to May 31, 2009.*

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I. REGULATORY DEVELOPMENTS

A. *Proposed Revisions to NRC Waste Confidence Decision*

The Nuclear Regulatory Commission (NRC) sought comment on proposed revisions to its Waste Confidence Decision on October 8, 2008.¹ The Waste Confidence Decision consists of five generic findings pertinent to environmental analyses for new reactor licensing.² The findings were first issued in 1984, revised in 1990, and reaffirmed in 1999. Findings 1, 3, and 5, which the NRC

* The Nuclear Regulation Committee gratefully acknowledges the contribution to this report by Daniel F. Stenger, Erin L. Alexander, Eric R. Pogue, Gerald Garfield, Lynn M. Fountain, and Leor Schwartz.

1. 73 Fed. Reg. 59,551 (Oct. 9, 2008).

2. 10 C.F.R. § 51.23(a) (2007).

proposes to reaffirm, state in essence that safe disposal of high-level radioactive waste and spent nuclear fuel is technically feasible, that the high-level waste and spent nuclear fuel can be managed safely until a permanent repository is available.

The NRC intends to amend findings 2 and 4. Finding 2 currently states the NRC's confidence that a geologic repository will be available in the first quarter of the twenty-first century. The proposed rule would revise the finding to state that the NRC predicts that a repository will be available within fifty-sixty years beyond the licensed operation of all reactors. Finding 4 provides an assurance that spent nuclear fuel can be stored safely at reactor sites without significant environmental impact for at least thirty years beyond the licensed operation of the reactor, including the period of license renewal. The proposed rule would extend this time period to sixty years beyond the licensed operation of the reactor.

The NRC also sought comment on whether a time frame for the availability of a repository should be included in the Waste Confidence Decision at all. The NRC has stated in this regard that elimination of the existing 2025 timeframe would not be intended to signal a lack of confidence that a repository will be available. The proposed findings are intended to support the NRC's reviews of new plant license applications by resolving issues of spent fuel disposal generically. The comment period expired on February 6, 2009. Commission action on the draft final rule may be deferred to incorporate additional information on the direction of the federal high level waste disposal program, including changes proposed by the Obama Administration.

B. Final Rule on New Reactor Aircraft Impact Assessments

On February 17, 2009, the NRC approved a final rule that requires nuclear power reactor designers to assess the ability of a reactor's design to avoid or mitigate the effects of a large, commercial aircraft impact. The rule treats commercial aircraft impacts as beyond design-basis events. In other words, the reactor design is not expected to meet the same requirements for performance following an aircraft impact as it must following design-basis events such as large fires, earthquakes, hurricanes, and improbable equipment malfunctions.

The new rule requires designers to evaluate the effects of an impact on core cooling capability, containment integrity, spent fuel cooling capability, and spent fuel pool integrity. If core cooling and spent fuel cooling capability can be maintained following an impact, then no changes are necessary. If that capability cannot be maintained after an impact, then the designer must consider other options. Any design features adopted solely to comply with the rule must meet high quality standards but need not meet design-basis regulations such as redundancy. In the Safety Analysis Report, the designers must include a description of the reactor's design features and cooling capabilities and demonstrate how the design features would mitigate or avoid the effects of an aircraft impact.

C. Final Rule Expanding Security Requirements for Nuclear Power Plants

On December 17, 2008, the NRC approved a rule to expand security requirements for new and existing nuclear power plants.³ Some of the requirements are similar to those already imposed by orders issued shortly after the events of September 11, 2001. Other requirements are new and resulted from experience in implementing previous security orders and evaluation of force-on-force exercises.

This final security requirements rule also resolves issues raised in three petitions for rulemaking.⁴ One petition, submitted by the Union of Concerned Scientists and the San Luis Obispo Mothers for Peace, requested the NRC to require licensees to evaluate whether proposed changes, tests, or experiments decrease protection against radiological sabotage and, if so, to make changes or conduct tests or experiments only with NRC approval. A second petition, submitted by Three Mile Island Alert, asked the NRC to require armed guards at entrances to all “owner controlled areas.” The NRC declined to require licensees to post armed guards, instead giving licensees flexibility to determine whether the guards are necessary. A third petition, also submitted by the Union of Concerned Scientists, asked the NRC for additional site access authorization requirements. That proposal was considered but not adopted.

Among the significant new requirements in the final rule are the following:

- (1) Safety/security Interface: Licensees are now required to manage and assess the potential conflicts between security activities and other plant activities such that those activities do not compromise plant security or safety;
- (2) Cyber Security: All new and existing plants are now required to have a cyber security plan. The new requirements are designed to provide high assurance that digital and computer systems are protected in the case of a design basis threat;
- (3) Strategies and Response Procedures for Aircraft Attacks: Licensees must develop guidance and mitigation strategies to address the loss of large areas of the plant due to fire or explosion following an aircraft attack; and
- (4) Training and Qualification: New requirements include additional physical requirements for unarmed security personnel and enhanced qualification and training for these personnel.

The new rule also includes more rigorous access authorization requirements and physical security requirements, including measures that protect mixed-oxide (MOX) fuel from theft or diversion. The final rule became effective on May 26, 2009. Licensees must be in compliance by March 31, 2010.⁵

3. 74 Fed. Reg. 13,929 (March 27, 2009).

4. *Id.*

5. *Id.*

D. Final EPA Rule on Public Health and Environmental Radiation Protection Standards for Yucca Mountain

On September 30, 2008, EPA finalized the public health and safety standard for the proposed geologic repository at Yucca Mountain, Nevada.⁶ The Energy Policy Act of 1992 required that EPA promulgate radiation protection standards for Yucca Mountain and that the standards be based upon and consistent with recommendations made by the National Academy of Sciences (NAS). EPA first issued radiation protection standards to limit the dose received by the public from Yucca Mountain in 2001. The 2001 standards included a dose limit of fifteen millirem per year (150 microsieverts per year) for the first 10,000 years after disposal. The standards did not establish a particular dose limit beyond the first 10,000 years but did require that dose projections be performed.⁷

In 2004, the U.S. Court of Appeals for the District of Columbia Circuit held that the 2001 EPA rule was inconsistent with the recommendations made by the NAS.⁸ Specifically, NAS recommended a dose limit be established to limit exposure to individuals at the time of peak risk. The court remanded the rule to EPA for revision to the extent the rule did not cover the time of peak risk. In choosing a peak dose standard for the time period after 10,000 years, EPA took particular note of NAS's discussion of the 100 millirem threshold and the international radiation protection community's endorsement of that particular number as protective of public health. The final standard retains the dose limit of fifteen millirem per year for the first 10,000 years after disposal and establishes a dose limit of 100 millirem per year (one millisievert per year) between 10,000 years and one million years after disposal. In March 2009, the NRC published a final rule implementing EPA's radiation protection standard for Yucca Mountain.

E. Submittal of Yucca Mountain License Application

The Department of Energy (DOE) submitted its license application to construct and operate a geologic repository at Yucca Mountain to the NRC on June 3, 2008. After determining that the application was sufficiently complete to begin a thorough technical review, the NRC formally docketed the application on September 8, 2008. The NRC also adopted DOE's Environmental Impact Statement, subject to supplementation on groundwater analyses. The Nuclear Waste Policy Act of 1982 requires that the NRC complete its review within three years of docketing the application. The Act also permits the NRC to request an additional year if needed. At the conclusion of the technical review, the NRC staff will publish a Safety Evaluation Report containing its findings on the repository design and a determination of whether the design meets NRC regulations.

The NRC published a notice of opportunity to request a hearing on October 22, 2008. Twelve groups, filing a total of 318 contentions, petitioned to become parties to the hearing. The Atomic Safety and Licensing Board admitted eight parties and a total of 299 contentions. The parties admitted include the states of

6. 73 Fed. Reg. 61,265 (Oct. 15, 2008).

7. *Id.*

8. *Nuclear Energy Inst. v. EPA*, 373 F.3d 1251 (D.C. Cir. 2004).

Nevada and California, several counties within those states, and the Nuclear Energy Institute. Other petitioners were eliminated due to lack of standing or lack of demonstrated compliance with the NRC's Licensing Support Network. The 299 contentions concern safety and environmental issues. Two Nevada contentions challenging DOE's institutional integrity and managerial competency were rejected. The Commission upheld this decision.

F. DOE Loan Guarantee Program

Title XVII of the Energy Policy Act of 2005 (EPAAct 2005) authorized the Department of Energy's (DOE) establishment of the loan guarantee program for certain defined "eligible" projects – including renewable energy systems and advanced nuclear energy facilities. DOE issued proposed rules in May 2007 and issued its final rule implementing the loan guarantee program on October 23, 2007 (Final Rule).

Beginning in 2006, prior to the implementation of the Final Rule, DOE began offering opportunities for eligible projects to apply for loan guarantees under EPAAct 2005 through a series of solicitations. On June 30, 2008, DOE issued two solicitations pertaining to advanced nuclear energy facilities: (i) a nuclear power solicitation, under which DOE made available up to \$18.5 billion in loan guarantees for advanced nuclear power projects (Nuclear Power Solicitation); and (ii) a front-end nuclear power solicitation, under which DOE made available up to \$2 billion in loan guarantees for projects at the front-end of the nuclear cycle, such as uranium enrichment facilities (Front-End Solicitation). Both solicitations required applicants to submit Part I applications, due in September 2008, followed by more detailed Part II applications, which were due in December 2008.

DOE had not issued loan guarantees or "conditional commitments" – the interim step pursuant to which DOE provides a commitment to enter into a loan guarantee – to any of the applicants under the Nuclear Power Solicitation or the Front-End Solicitation as of June 30, 2009. However, based on information released to the public by the DOE and certain applicants, the status of the DOE's review is as follows:

With respect to the Nuclear Power Solicitation, DOE received nineteen Part I applications, accounting for twenty-one proposed new power reactors. The aggregate amount of requested loan guarantees was \$122 billion – relative to the \$18.5 billion available under the Nuclear Power Solicitation. As a result of DOE's diligence process, as well as certain projects deciding to drop out of the process, the list of projects was narrowed to four by June 2009. As of June 30, 2009, the four projects that remain under consideration by the DOE, and which are undergoing final due diligence for loan guarantees under the Nuclear Power Solicitation, are: (i) NRG Energy Inc.'s South Texas project; (ii) Scana Corporation's Summer project; (iii) the Southern Company's Vogtle plant and (iv) UniStar Nuclear Energy, L.L.C.'s Calvert Cliffs Unit 3 project.

With respect to the Front End Solicitation, two applicants, AREVA (for its Eagle Rock uranium enrichment facility) and USEC (for its American Centrifuge uranium enrichment project) have submitted Part I and Part II applications to the DOE requesting a combined \$4 billion in loan guarantees – relative to the \$2 billion available under the Front End Solicitation. As of June 30, 2009, DOE's review of both projects is ongoing.

G. DOE Standby Support Program

Title VI of EPLRA 2005 created a framework under which the DOE can enter into contracts, for up to six reactors of no more than three different reactor designs, to provide standby support for certain covered delays (Standby Support Program). Covered delays are delays in the attainment of full power operation due to defined covered events, which include the failure of the NRC to comply with schedules for the review and approval of inspections, tests, analyses and acceptance criteria established under the combined construction permit and operating license (COL) and certain litigation events. Under the Standby Support program, DOE would pay: (i) 100 percent of covered costs (capped at \$500 million) for the first two reactors that receive a COL and for which construction has begun, and (ii) fifty percent of covered costs (capped at \$250 million) for the next four reactors to receive COLs, and for which construction has commenced.

DOE issued regulations implementing the Standby Support Program on August 11, 2006. In December 2007 DOE issued guidance to potential applicants under the Standby Support Program, "Instructions to Request a Conditional Agreement," along with a form of conditional agreement. The conditional agreement is an interim step under the Standby Support Program in which DOE and applicants enter into a contract with certain conditions precedent. After such conditions are satisfied – including the applicant's receipt of the COL for the covered project and the applicant's payment of its DOE-calculated subsidy cost – the applicant and DOE can enter into a Standby Support Contract. As of June 30, 2009, DOE had not publicly announced the execution of any conditional agreements with new reactor applicants.

II. LEGISLATIVE DEVELOPMENTS

A. US-UAE 123 Agreement

On May 21, 2009, President Obama submitted to Congress an "Agreement for Cooperation Between the United States of America and the Government of the United Arab Emirates Concerning Peaceful Uses of Nuclear Energy." Also known as a "123 Agreement" after sections 123b and 123d of the Atomic Energy Act of 1954, the agreement would establish the needed legal framework for the U.S. and the U.A.E. to cooperate in developing nuclear energy for peaceful purposes. The State Department intends for the agreement to "serve as a model for states in the region in developing nuclear energy for peaceful purposes with the full confidence of the international community."⁹ In the agreement, the U.A.E. commits not to engage in enrichment and reprocessing activities within its territory. Instead, the U.A.E. would rely on existing international markets for its nuclear fuel services.¹⁰

9. Press Release, U.S. Dep't of State, Agreement for Cooperation Between the United States of America and the Government of the United Arab Emirates Concerning Peaceful Uses of Nuclear Energy (May 21, 2009).

10. Press Release, White House, Message from the President to Congress on an Agreement for Cooperation Between the United States of America and the Government of the United Arab Emirates Concerning Peaceful Uses of Nuclear Energy (May 21, 2009).

For a term of thirty years, transfer to U.A.E. of technology, material, equipment (including reactors), and components for nuclear research and nuclear power production would be permitted. Transfer of Restricted Data and sensitive nuclear technology and nuclear facilities would not be permitted. The agreement requires that the U.A.E. bring into force the Additional Protocol to its safeguards agreement prior to U.S. licensing of exports of nuclear material, equipment, components, or technology pursuant to the agreement.

This marks the first time a U.S. agreement for peaceful nuclear cooperation has included such a provision. Congress can vote to approve the agreement, with or without conditions. However, under the Atomic Energy Act, the agreement will go into force if not acted upon (e.g., by a resolution of disapproval) by Congress after ninety days of continuous session.

B. US-India 123 Agreement

On September 10, 2008, President Bush submitted to Congress an “Agreement for Cooperation between the United States of America and the Government of India Concerning Peaceful Uses of Nuclear Energy.” After approval by Congress, Secretary of State Condoleezza Rice signed the 123 Agreement for the United States on October 11, 2008.

Like the 123 Agreement with the U.A.E., the U.S.-India agreement permits transfer of technology, material, equipment (including reactors), and components for nuclear research and nuclear power production and does not permit transfer of Restricted Data. The agreement also permits uranium to be enriched up to twenty percent. Reprocessing and other alterations in the form or content of nuclear material subject to the agreement is also permitted. Transfer of sensitive nuclear technology and facilities, major critical components of such facilities, and heavy-water production technology is not permitted. India, however, must first establish a new national reprocessing facility under IAEA safeguards and both parties must agree on the arrangements and procedures for any reprocessing.¹¹

The agreement will remain in force for forty years, after which it will continue in force for additional periods of ten years unless either party gives notice to terminate the agreement six months before the end of the period. In addition, either party may terminate the agreement upon one year notice and may immediately cease cooperation under the agreement if it determines that an acceptable resolution cannot be achieved through consultations.

III. LITIGATION

A. Entergy v. Riverkeeper

This Supreme Court case involved judicial review of the Environmental Protection Agency’s use of cost-benefit analysis in setting performance standards for cooling water intake structures at existing power plants. Section 316(b) of the Clean Water Act¹² requires a “best technology available for

11. Press Release, White House, Message from the President to Congress on an Agreement for Cooperation Between the United States of America and the Government of India Concerning Peaceful Uses of Nuclear Energy (September 10, 2008).

12. Clean Water Act 33 U.S.C. § 1326(b) (2006).

minimizing adverse environmental impact” standard. The EPA set national performance standards requiring facilities to reduce, by specific percentages, the mortality rates of aquatic organisms in the vicinity of their cooling water intake structures. The standards were based on technology EPA described as “commercially available and economically practicable.”¹³ EPA expressly declined to require closed-cycle cooling systems as it had in new power plants because of the “generally high costs” to modify existing facilities to meet such a standard and because the technologies EPA did require approached the performance of closed-cycle systems.

Riverkeeper challenged the EPA regulations in the Second Circuit. The Court of Appeals remanded on the issue of whether EPA had relied on cost-benefit analysis in setting the national performance standards, or had only used cost-effectiveness analysis. The Supreme Court granted certiorari, limited to the question of whether the statute permits EPA “to compare costs with benefits in determining ‘the best technology available for minimizing adverse environmental impact’ at cooling water intake structures.”¹⁴ Riverkeeper argued that “minimizing” means reducing to the greatest extent possible and that the standard must be the “economically feasible technology that achieves the greatest possible reduction in environmental harm.”¹⁵

The Supreme Court disagreed and held that EPA permissibly relied on cost-benefit analysis in setting national performance standards. First, the court concluded that “minimizing admits of degree and is not necessarily used to refer exclusively to the ‘greatest possible reduction’”. Other Clean Water Act provisions, the court stated, show that Congress used plain language when it wished to require the greatest feasible reduction in pollution. The court also highlighted the fact that EPA had been weighing costs against benefits on a case-by-case basis for over thirty years. No statutory basis exists, the court concluded, for limiting comparison of costs and benefits to situations where the benefits are de minimis rather than significantly disproportionate.¹⁶

B. United States v. Eurodif

On January 26, 2009, the Supreme Court determined that separative work unit (SWU) contracts are sales of goods subject to the antidumping laws and not sales of services exempt from those laws.¹⁷ In so doing, the court reversed the Federal Circuit’s decision on the issue and agreed that the Department of Commerce’s interpretation in this area had been reasonable.

Under a SWU contract, a utility provides feed uranium to an enricher who provides enriched uranium at a desired enrichment level (assay) and in the desired quantity. In return for the enriched uranium, the utility pays for the work required to produce its order. The uranium returned to the utility is not necessarily produced from the feed uranium provided, much like a fungible commodity, and the SWU contracts do not require the same uranium feed to be returned.

13. *Entergy Corp. v. Riverkeeper, Inc.*, No. 07-588, slip op. at 5. (U.S. April 1, 2009).

14. *Id.* at 7.

15. *Id.*

16. *Id.* at 14.

17. *United States v. Eurodif*, No. 07-1059, slip op. (U.S. Jan. 26, 2009).

The Supreme Court found that “where cash and an untracked fungible commodity are exchanged for a substantially transformed version of the same commodity, the Department of Commerce may reasonably treat the transaction as the sale of a good rather than a service.”¹⁸ By way of analogy, the court distinguished the situation from that in which a dry cleaning customer brings cash and a dirty shirt to a laundry. In that situation, the shirt is tracked through the cleaning process and the customer expects to receive his own shirt back. There is no transfer of ownership in this case, and the laundry’s activity is purely a service.

The Court also hypothesized that a variety of contracts could be restructured if uranium enrichment was considered only a service. “Contracts for imported pasta would be replaced by separate contracts for wheat and wheat processing services, sweater imports would give way to separate contracts for wool and knitting services, and antidumping duties would primarily chastise the uncreative.”¹⁹ The Court endorsed the Department of Commerce’s “attempt to foreclose this absurd result.”

C. Other Pending Litigation Developments

1. EnergySolutions v. Northwest Compact

The Northwest Compact sought to block EnergySolutions, a Utah-based radioactive waste disposal company, from bringing 1600 tons of low-level radioactive waste from Italy to its facility in Clive, Utah. The Compact argued that the site was under the Compact’s jurisdiction as a regional waste disposal facility and that it had authority to restrict the flow of out-of-region waste into the region. In May 2009, the District Court for the District of Utah Central Division, granting in part and denying in part motions for summary judgment, disagreed and ruled that Congress had not expressed an unambiguous intent to waive Commerce Clause restrictions on regulation by regional compacts of private low-level radioactive waste facilities which operate in interstate commerce but are not covered by the Compact system. The decision allows the NRC to continue its review of EnergySolutions’ license application filed in September 2007 to import 20,000 tons of waste.²⁰

2. New York v. NRC

New York, Massachusetts, and Connecticut, in consolidated lawsuits in the Second Circuit, are challenging NRC’s denial of petitions for rulemaking seeking changes to the generic environmental findings for license renewal of nuclear power plants. The states argue that NRC has not sufficiently considered “new and significant” information on the risk of fires in spent nuclear fuel pools.²¹

18. *Id.* at 16.

19. *Id.*

20. EnergySolutions v. Nw. Interstate Compact, No. 2:08-CV-3522009, WL 1392836 (D. Utah C.D. 2009).

21. New York v. NRC, No. 08-3903 (2d Cir. 2008).

3. Public Citizen v. NRC

Public Citizen and San Luis Obispo Mothers for Peace filed suit in the Ninth Circuit, challenging the NRC's Design Basis Threat Rule for physical security at nuclear power facilities. The petitioners argue that the NRC's new rule does not require nuclear plants to defend against air attacks such as those that occurred on September 11, 2001. In addition, they argue the rule gives too much weight to licensees' cost-based defense capabilities. The NRC argues that including only those threats which a licensee can reasonably be expected to defend against is consistent with court rulings and prior Commission decisions.²²

IV. STATE COST RECOVERY FOR NEW NUCLEAR PROJECTS

A number of states have amended their laws and regulations to allow the recovery by utilities of pre-construction costs and construction work in progress (CWIP) to encourage the development of new nuclear power plants within their borders. Oversight for such recovery is provided through a pre-approval process by the state public utility commissions.

A. Florida

The Florida Public Service Commission (Florida PSC) must approve alternative cost recovery mechanisms for the recovery of costs incurred in the siting, design, licensing and construction of a nuclear power plant, including (i) preconstruction costs, and (ii) carrying costs on the utility's projected construction costs.²³ Any utility that brings a new nuclear unit into commercial operation is entitled to include the projected cost of such plant in base rates using the utility's existing allowed return.²⁴

If the utility does not complete construction of the nuclear power plant, the utility is allowed to recover all prudent preconstruction and construction costs incurred following the Commission's issuance of a final order granting a determination of need for such plant.²⁵ The utility can recover such costs over a period equal to the period during which the costs were incurred or five years, whichever is greater.²⁶

In October 2008, the Florida PSC approved cost recovery for Florida Power & Light Company (FPL) and Progress Energy Florida (PEF).²⁷ The cost recovery from customers began in January 2009 through implementation of the capacity cost recovery charge.

FPL was allowed to recover \$220,529,243 in 2009 for the uprate of existing nuclear plants at Turkey Point and St. Lucie and for its proposed new nuclear

22. Public Citizen and San Luis Obispo Mothers for Peace v. NRC, No. 07-71868 (9th Cir. Mar. 3, 2008).

23. FLA. STAT. § 366.93.

24. *Id.*

25. *Id.*

26. *Id.*

27. In re Nuclear Cost Recovery Clause, Docket No. 080009-EI, Order No. PSC-08-0749-FOF-EI (Nov. 12, 2008).

Units 6 & 7 at Turkey Point.²⁸ The new Turkey Point Units 6 & 7 are expected to come online in 2018 and 2020.²⁹

PEF was allowed to recover \$418,311,136 in 2009 for the uprate of its existing Crystal River nuclear plant and its proposed new nuclear facility in Levy County.³⁰ The new Levy Units 1 & 2 are expected to come online in 2016 and 2017.³¹ PEF pushed back its construction schedule of the Levy County project, lowering its 2009 and 2010 nuclear cost recovery estimates. In March 2009, the Florida PSC granted PEF's request to defer recovery of \$198 million of its allowed 2009 preconstruction costs to 2010.³² The Florida PSC will hold hearings on PEF's 2010 nuclear cost recovery in September.

B. North Carolina

Costs that have been reviewed and approved by the North Carolina Utilities Commission (NCUC) during construction can be recovered through rates in a general rate case regardless of whether construction was completed.³³ The NCUC can also pre-approve costs for the construction of an out-of-state plant, provided that the plant will serve North Carolina customers, after an application for a construction certificate has been filed (but not necessarily approved) in the host state.³⁴

Further, the NCUC must approve the utility's decision to incur project development costs if the utility demonstrates by a preponderance of the evidence that the decision to incur such costs is reasonable and prudent.³⁵ All such costs will be fully recoverable through rates.³⁶ If the utility is allowed to cancel the project, the NCUC will permit the utility to recover all reasonable and prudently incurred project development costs in a general rate case proceeding amortized over a period equal to the period during which the costs were incurred, or five years, whichever is greater.³⁷

In March 2007, the NCUC issued a declaratory ruling stating that it was "appropriate in general" for Duke Energy to pursue preliminary development work (siting, design, and licensing) for the proposed William States Lee III Nuclear Station to be located in South Carolina.³⁸ In June 2008, the NCUC issued an order allowing Duke Energy to incur project development costs of up to \$160 million in 2008.³⁹

28. *Id.*

29. *Id.*

30. *Id.*

31. *Id.*

32. In re Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor, Docket No. 090001-EI, Order No. PSC-09-0208-PAA-EI (Apr. 6, 2009).

33. N.C. GEN. STAT. § 62-110.1 (2008).

34. N.C. GEN. STAT. § 62-110.6 (2008).

35. N.C. GEN. STAT. § 62-110.7 (2008).

36. N.C. GEN. STAT. § 62-110.1 (2008).

37. *Id.*

38. Order Issuing Declaratory Ruling, Docket No. E-7 Sub 819 (Mar. 20, 2007).

39. See Docket No. E-7 Sub 819 (June 11, 2008).

C. South Carolina

In May 2007, South Carolina enacted the “Base Load Review Act,” which allows the South Carolina Public Service Commission (SC PSC) to grant a project development order for new nuclear power plants.⁴⁰ Under the Act, the SC PSC may allow a utility’s pre-construction and development costs for a new nuclear power plant to be included in rates when the plant goes into service. If the project is prudently abandoned, the costs can still be included in rates during the next rate review.

Under the Act, the SC PSC may grant a base load review order for any “base load” plant.⁴¹ A base load review order is a final and binding determination that a plant is “used and useful,” and that its capital costs are prudent and can be included in rates, so long as the plant is constructed in accordance with the parameters defined in the order.⁴² A utility may also submit a revised rate request with the base load review order or one year after such order is granted, and every year thereafter.⁴³ A revised rate request allows the utility to collect the carrying cost of CWIP. When the plant goes into service, the final revised rate request will incorporate the ongoing “in-service expenses” (including operating costs and the revenue requirements related to cost of capital) into rates.⁴⁴

South Carolina Electric & Gas Company (SCE&G) applied for a Base Load Review Order for the construction and operation of a nuclear facility, as well as for a Certificate of Environmental Compatibility and Public Convenience and Necessity (Combined Application).⁴⁵ In October 2008, the SC PSC approved the commencement of initial construction activities. In March 2009, the SC PSC approved the Combined Application, allowing SCE&G to annually adjust rates during the construction of the units to recover costs associated with the project; provided that SCE&G complete the new units for approximately \$4.5 billion in 2007 dollars or obtain the SC PSC’s approval of a change in such costs, if needed.⁴⁶ In May 2009, SCE&G filed a rate request for an overall 1.1% increase to its electric rates for costs associated with the construction of two 1,117 MW units at the V.C. Summer Nuclear Station.⁴⁷

In June 2008, Duke Energy Carolinas was authorized by the SC PSC to incur the South Carolina allocable share of the \$230 million in project development costs of the William States Lee III Nuclear Station.⁴⁸

40. S.C. CODE § 58-33-210.

41. S.C. CODE § 58-33-270.

42. S.C. CODE § 58-33-275.

43. S.C. CODE § 58-33-280.

44. *Id.*

45. *See* Combined Application for Certificate of Env'tl. Compatibility, Public Convenience and Necessity and for a Base Load Review Order, Docket No. 2008-196-E (March 2, 2009).

46. *Id.*, In re Combined Application of South Carolina Elec. & Gas Co. For a Certificate of Env'tl. Compatibility, Docket No. 2008-196-E, Order No. 2009-104(A) (Mar. 2, 2009).

47. In re South Carolina Elec. & Gas Co. 2009 Annual Request for Revised Rates, Docket No. 2009-211-E (May 2009).

48. Application of Duke Energy Carolinas, L.L.C. for Approval of Decision to Incur Nuclear Generation Pre-Construction Costs for the Lee Nuclear Station in Cherokee County, Docket No. 2007-440-E, Order No. 2008-417 (June 9, 2008).

D. Georgia

Under Georgia's Integrated Resource Planning Act, the state requires that any proposed electric plant receive certification by the Georgia Public Service Commission (GA PSC) prior to construction.⁴⁹ To receive certification, a utility must demonstrate that the proposed plant will provide an economical and reliable supply of electric power and energy for the retail customers in Georgia.⁵⁰ Once certified, a utility is entitled to recover any pre-approved costs after the plant is built or cancelled.⁵¹ Excess costs will be permitted only if the utility shows that the costs were reasonable and prudent.⁵²

In July 2007, the GA PSC adopted Georgia Power's Integrated Resource Plan (IRP), finding it reasonable for Georgia Power to investigate new nuclear opportunities.⁵³ In August 2008, Georgia Power submitted an updated IRP, as well as an application for certification of Vogtle Units 3 and 4. In March 2009, the GA PSC approved the IRP and application for certification for an in-service cost of approximately \$6.4 billion. The GA PSC also granted Georgia Power's request to place the new units' CWIP into its 2010 rate case.⁵⁴

On April 21, 2009 the Georgia Nuclear Energy Financing Act was enacted into law (Nuclear Financing Act).⁵⁵ The Nuclear Financing Act provides that a Georgia utility shall recover its costs of financing associated with the construction of a nuclear generating facility during the construction period after the GA PSC issues a certification.⁵⁶ The financing costs are to be recovered in a separate tariff on all base tariffs that collect capacity costs.⁵⁷ This cost recovery will not only apply to the construction of Georgia Power's proposed Vogtle Units 3 and 4, but also to any future nuclear facilities built in Georgia.

49. GA. CODE § 46-3A-1.

50. GA. CODE § 46-3A-2.

51. GA. CODE § 46-3A-7.

52. *Id.*

53. *See* In re Georgia Power Co.'s Application for Approval of Its 2007 Integrated Resource Plan, Docket No. 24505-U (2007).

54. *See* In re Georgia Power Co.'s Application for the Certification of Units 3 and 4 at Plant Vogtle and Updated Integrated Resource Plan, Docket No. 27800-U (Dec. 2008).

55. GA. CODE § 46-2-25(c.1).

56. *Id.*

57. *Id.*

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