

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Gregory B. Jaczko, Chairman
Kristine L. Svinicki
George Apostolakis
William D. Magwood, IV
William C. Ostendorff

In the Matters of)	
)	
UNION ELECTRIC COMPANY	)	Docket No. 52-037-COL
d/b/a AMEREN MISSOURI)	
(Callaway Plant, Unit 2))	
)	
AP1000 DESIGN CERTIFICATION AMENDMENT	)	NRC-2010-0131
(10 C.F.R. Part 52)	)	RIN 3150-AI81
)	
CALVERT CLIFFS NUCLEAR PROJECT, LLC	)	Docket No. 52-016-COL
(Calvert Cliffs Nuclear Power Plant, Unit 3))	
)	
DETROIT EDISON CO.	)	Docket No. 52-033-COL
(Fermi Nuclear Power Plant, Unit 3))	
)	
DUKE ENERGY CAROLINAS, LLC	)	Docket Nos. 52-018-COL
(William States Lee III Nuclear Station, Units 1 and 2)	)	& 52-019-COL
)	
ENERGY NORTHWEST	)	Docket No. 50-397-LR
(Columbia Generating Station))	
)	
ENTERGY NUCLEAR GENERATION CO. and	)	Docket No. 50-293-LR
ENTERGY NUCLEAR OPERATIONS, INC.)	
(Pilgrim Nuclear Power Station))	
)	
ENTERGY NUCLEAR OPERATIONS, INC.	)	Docket Nos. 50-247-LR
(Indian Point Nuclear Generating Station, Units 2 and 3)	)	& 50-286-LR
)	
ESBWR DESIGN CERTIFICATION AMENDMENT	)	NRC-2010-0135
(10 C.F.R. Part 52)	)	RIN-3150-AI85
)	
FIRSTENERGY NUCLEAR OPERATING CO.	)	Docket No. 50-346-LR
(Davis-Besse Nuclear Power Station, Unit 1))	
)	

FLORIDA POWER & LIGHT CO. (Turkey Point, Units 6 and 7)	)	Docket Nos. 52-040-COL & 52-041-COL
LUMINANT GENERATION CO. LLC (Comanche Peak Nuclear Power Plant, Units 3 and 4)	)	Docket Nos. 52-034-COL & 52-035-COL
NEXTERA ENERGY SEABROOK, LLC (Seabrook Station, Unit 1)	)	Docket No. 50-443-LR
PACIFIC GAS AND ELECTRIC CO. (Diablo Canyon, Units 1 and 2)	)	Docket Nos. 50-275-LR & 50-323-LR
PPL BELL BEND, LLC (Bell Bend Nuclear Power Plant)	)	Docket No. 52-039-COL
PROGRESS ENERGY CAROLINAS, INC. (Shearon Harris Nuclear Power Plant, Units 2 and 3)	)	Docket Nos. 52-022-COL & 52-023-COL
PROGRESS ENERGY FLORIDA, INC. (Levy County Nuclear Power Plant, Units 1 and 2)	)	Docket Nos. 52-029-COL & 52-030-COL
SOUTH CAROLINA ELECTRIC & GAS CO. and SOUTH CAROLINA PUBLIC SERVICE AUTHORITY (also referred to as SANTEE COOPER) (Virgil C. Summer Nuclear Station, Units 1 and 2)	)	Docket Nos. 52-027-COL & 52-028-COL
NUCLEAR INNOVATION NORTH AMERICA LLC (South Texas Project, Units 3 and 4)	)	Docket Nos. 52-012-COL & 52-013-COL
SOUTHERN NUCLEAR OPERATING CO. (Vogtle Electric Generating Plant, Units 3 and 4)	)	Docket Nos. 52-025-COL & 52-026-COL
TENNESSEE VALLEY AUTHORITY (Bellefonte Nuclear Power Plant, Units 3 and 4)	)	Docket Nos. 52-014-COL & 52-015-COL
TENNESSEE VALLEY AUTHORITY (Watts Bar, Unit 2)	)	Docket No. 50-391-OL
VIRGINIA ELECTRIC AND POWER CO. d/b/a DOMINION VIRGINIA POWER and OLD DOMINION ELECTRIC COOPERATIVE (North Anna, Unit 3)	)	Docket No. 52-017-COL

CLI-11-05

MEMORANDUM AND ORDER

We have received a series of petitions to suspend adjudicatory, licensing, and rulemaking activities, and requesting additional related relief, in the captioned matters.¹ The petitioners seek relief in light of the recent events at the Fukushima Daiichi Nuclear Power Station, following the March 11, 2011, earthquake and tsunami, to ensure the consideration in these matters of the safety and environmental implications of the Fukushima events. As discussed below, we grant the requests for relief in part and deny them in part. In particular, we decline to suspend the captioned rulemaking proceedings and adjudications, or any final licensing decisions in the captioned matters, but grant the request for a safety analysis to the extent that the NRC is conducting both a short-term and long-term lessons-learned analysis, incorporating stakeholder input.

I. BACKGROUND

A. Events at Fukushima Daiichi Nuclear Power Station

On March 11, 2011, Japan suffered a 9.0 magnitude earthquake, followed by a devastating tsunami. The earthquake and tsunami damaged reactors, power grid and power supply connections, cooling and backup cooling systems, and the spent fuel pools at the six-unit

¹ A complete list of all filings associated with today's decision is provided in an Appendix to the decision. The petitions, amended petitions, and errata, although filed on multiple dockets, are substantively identical. For convenience, page references in today's decision correspond to a single set of pleadings, filed by Mindy Goldstein of the Turner Environmental Law Clinic, on behalf of Dan Kipnis, Mark Oncavage, National Parks Conservation Association, and Southern Alliance for Clean Energy, in *Florida Power & Light Co. (Turkey Point, Units 6 and 7): Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 14, 2011); *Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011); *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011) ("Amended Petition" in citations, "Petition," generally, in the text of today's decision).

Fukushima Daiichi site, located on Japan's coast. Immediately upon learning of the events in Japan, the NRC staffed its Operations Center and deployed technical staff to assist the U.S. ambassador in Japan. Initial reports indicated that the plants, three of which were operating at the time of the events, survived the earthquake without major damage, only to experience significant damage after the tsunami irrevocably damaged backup diesel generators and diesel fuel supplies. Our understanding of the details of the failure modes at the Fukushima Daiichi site continues to evolve, and we continue to learn more about the extent of the damage at the site.

B. Domestic Regulatory Response to the Japanese Events

Following the earthquake and tsunami, the agency began prompt action to verify the safety of nuclear facilities in the United States. The Staff is working to gather and examine all available information in order to analyze the Japanese events and understand their implications for the United States. This effort has included regular Commission briefings.²

On our direction, the Staff established a Task Force to review our processes and regulations to determine, among other things, whether the agency should make additional improvements to our regulatory system. We instructed the Task Force to submit for our consideration recommendations for technical and policy direction.³ In the near term, we directed the Task Force to take a number of actions, including evaluation of currently available information from the Japanese events to identify "potential or preliminary near term/immediate

² See, e.g., Transcript, "Briefing on NRC Response to Recent Nuclear Events in Japan" (Mar. 21, 2011) (Mar. 21 Tr.); Transcript, "Briefing on the Status of NRC Response to Events in Japan and Briefing on Station Blackout" (Apr. 28, 2011) (ADAMS Accession No. ML111390571); Transcript, "Briefing on the Task Force Review of NRC Processes and Regulations Following Events in Japan" (July 19, 2011) (July 19 Tr.).

³ See "NRC Actions Following the Events in Japan," Staff Requirements – Tasking Memorandum COMGBJ-11-0002 (Mar. 23, 2011) (ML110800456) (Tasking Memorandum). See *generally* "Charter for the Nuclear Regulatory Commission Task Force to Conduct a Near-Term Evaluation of the Need for Agency Actions Following the Events in Japan" (Apr. 1, 2011) (ML11089A045).

operational or regulatory issues” affecting domestic operating reactors of all designs, in several areas.⁴ These areas include protection against earthquake, tsunami and other natural events, station blackout, severe accident mitigation, emergency preparedness, and combustible gas control.⁵

The Task Force completed its near-term effort and issued its report on July 12, 2011, for our consideration.⁶ This report includes twelve overarching recommendations for improving the safety of both new and operating nuclear reactors by clarifying our regulatory framework, reevaluating and enhancing protective and mitigative measures, strengthening emergency preparedness, and improving the efficiency of NRC regulatory oversight programs.⁷ However, the Task Force also stated that “continued operation and continued licensing activities do not pose an imminent risk to public health and safety.”⁸ The Task Force

⁴ Tasking Memorandum at 1 (unnumbered).

⁵ *Id.* at 1 (unnumbered). Consistent with direction in the Tasking Memorandum, the Task Force provided an initial status report to the Commission at a public meeting on May 12, 2011. See *generally* Transcript, “Briefing on the Progress of the Task Force Review of NRC Processes and Regulations Following the Events in Japan” (May 12, 2011) (ML111360513) (May 12 Tr.). A second briefing was provided on June 15, 2011. See *generally* Transcript, “Briefing on the Progress of the Task Force Review of NRC Processes and Regulations Following the Events in Japan” (June 15, 2011) (ML111672048) (June 15 Tr.).

⁶ See “Recommendations for Enhancing Reactor Safety in the 21st Century, The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident” (July 12, 2011) (Near-Term Report) (transmitted to the Commission via SECY-11-0093, “Near-Term Report and Recommendations for Agency Actions Following the Events in Japan” (July 12, 2011) (ML11186A950 (package)). Any changes we decide to adopt as a result of these recommendations will be implemented through our normal regulatory processes. See “Near-Term Report and Recommendations for Agency Actions Following the Events in Japan,” Staff Requirements Memorandum SECY-11-0093 (Aug. 19, 2011) (SRM on Near-Term Report) (ML112310021), for our directions to the Staff in response to the Near-Term Report.

⁷ See, e.g., Near-Term Report at 69-70.

⁸ Near-Term Report at vii. The Task Force explained: “The current [U.S.] regulatory approach, and more importantly, the resultant plant capabilities allow the Task Force to conclude that a sequence of events like the Fukushima accident is unlikely to occur in the United States and some appropriate mitigation measures have been implemented, reducing the likelihood of core damage and radiological release.” *Id.*

formally presented the report to us at a briefing on July 19, 2011.⁹

We directed a number of actions in response to the Near-Term Report, including review and assessment, with stakeholder input, of the Task Force recommendations; provision of a draft charter for assessing the Task Force recommendations and conducting the agency's longer-term review; preparation of a notation vote paper that identifies recommended short-term actions; preparation of a notation vote paper that sets recommended priorities for the Task Force recommendations; and formal review of the Task Force recommendations by the Advisory Committee on Reactor Safeguards.¹⁰

In parallel with, and in support of the Task Force's efforts, the Staff has taken several actions to communicate with licensees and to obtain information regarding various aspects of their emergency preparations and compliance. Just a few days after the earthquake, the Staff issued an initial Information Notice to the power-reactor community, describing the circumstances at the Fukushima Daiichi site.¹¹ The Staff asked recipients to review the information to assess its applicability to their facilities, and to consider taking appropriate actions to prevent similar problems.

To date, the Staff also has issued two temporary inspection instructions to examine the readiness of U.S. facilities to respond to design basis and beyond design basis accidents. The

⁹ See *generally* July 19 Tr.

¹⁰ See SRM on Near-Term Report. We also directed a separate consideration of the recommendation that the agency re-evaluate its regulatory framework (Task Force Recommendation 1), followed by the preparation of a notation vote options paper regarding that recommendation. *Id.* at 2 (unnumbered).

¹¹ See *generally* NRC Information Notice 2011-05, "Tohoku-Taiheiyoku-Oki Earthquake Effects on Japanese Nuclear Power Plants" (Mar. 18, 2011) (ML110760432). Shortly thereafter, the Staff issued a second Information Notice to fuel-cycle licensees, updating the status of the Fukushima Daiichi facilities, and highlighting the regulatory requirements applicable to those licensees. See *generally* NRC Information Notice 2011-08, "Tohoku-Taiheiyoku-Oki Earthquake Effects on Japanese Nuclear Power Plants – for Fuel Cycle Facilities" (Mar. 31, 2011) (ML110830824).

first instruction directed the Staff to inspect operating power reactor facilities to assess their readiness to respond to events similar to those that occurred at the Fukushima Daiichi site.¹²

The second instruction directed the Staff to assess each licensee's ability to access and implement the severe accident management guidelines at its facility.¹³

The Staff also issued a bulletin to licensees for currently operating nuclear power reactors, to seek confirmation that they are complying with the requirements of 10 C.F.R. § 50.54(hh)(2)¹⁴ and to obtain information to determine whether additional assessment of

¹² NRC Inspection Manual, Temporary Instruction 2515/183, "Followup to the Fukushima Daiichi Nuclear Station Fuel Damage Event" (Mar. 23, 2011) (ML11077A007). The NRC Staff completed these inspections and issued inspection reports to licensees on May 13, 2011. As a general matter, the reports indicate that none of the observations made during the performance of these examinations raised a significant safety issue. See "Summary of Observations TI 2515/183" and "Results Overview TI 2515/183," both available at <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/follow-up-rpts.html> (released on May 20, 2011). The inspection reports informed the Task Force's near-term efforts; further evaluation of the inspection reports is occurring through the NRC's Reactor Oversight Process.

¹³ NRC Inspection Manual, Temporary Instruction 2515/184, "Availability and Readiness Inspection of Severe Accident Management Guidelines (SAMGs)" (Apr. 29, 2011) (ML11115A053) (TI 2515/184). SAMGs were put into place on a voluntary basis by licensees in the late 1990s. The purpose of SAMGs is to contain or reduce the impact of accidents that damage a reactor core. See May 12 Tr. at 9-10; TI 2515/184 at 1; June 15 Tr. at 15-16. Task Force representatives highlighted these inspections in the May 12 briefing, and stated the expectation that this examination would be of substantial assistance to the Task Force in the formulation of its recommendations. May 12 Tr. at 14. Inspection results were issued in June 2011. The Staff found that SAMGs were available at every location, although there was some inconsistency in how this voluntary program is implemented. The Staff concluded that, individually, none of its observations presented significant safety issues, but is evaluating the information in order to decide if additional agency actions are required. See "Summary of Observations TI 2515/184," and "Results Overview TI 2515/184," both available at <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/SAMGs.html> (released on June 6, 2011).

¹⁴ Section 50.54(hh)(2) requires licensees to "develop and implement guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with loss of large areas of the plant due to explosions or fire. . . ."

mitigating strategy program implementation is required, whether the existing inspection program should be enhanced, or whether additional regulatory action is justified.¹⁵

C. Procedural Background

The initial petitions were filed over a period of days, beginning April 14, 2011. These petitions were followed by a series of amended petitions and errata to the original petitions. On April 19, 2011, the Secretary of the Commission issued an order establishing a briefing schedule.¹⁶ The Scheduling Order authorized two sets of additional filings: (1) supplements to the petition, and (2) answers to the Petition or briefs *amici*. A declaration prepared by Dr. Arjun Makhijani, supporting the petitions, was filed in the majority of the captioned proceedings.¹⁷ The Commonwealth of Massachusetts asked to be allowed to join the petitions to suspend, and asked for additional *Pilgrim*-specific relief.¹⁸ Answers to the petitions also were filed in the majority of the captioned matters. We subsequently received a series of pleadings, styled as

¹⁵ See *generally* NRC Bulletin 2011-01: "Mitigating Strategies" (May 11, 2011) (ML11250360). All operating power reactor licensees provided the requested information by July 11, 2011. The responses are available at <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/mitigating-strategies.html>.

¹⁶ Order (Apr. 19, 2011) (unpublished) (Scheduling Order).

¹⁷ See, e.g., *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 20, 2011), filed by Mindy Goldstein of the Turner Environmental Law Clinic, on behalf of Dan Kipnis, Mark Oncavage, National Parks Conservation Association, and Southern Alliance for Clean Energy, in *Florida Power & Light Co.* (Turkey Point, Units 6 and 7) (Makhijani Declaration). For convenience, page references in today's decision correspond to this filing.

¹⁸ *Commonwealth of Massachusetts Response to Commission Order Regarding Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident, Joinder in Petition to Suspend the License Renewal Proceeding for the Pilgrim Nuclear Power Plant, and Request for Additional Relief* (May 2, 2011) (Commonwealth Petition).

motions to permit replies, replies, and responses opposing the motions to permit replies. We also received filings attaching additional supporting documents.¹⁹

Petitioners²⁰ invoke our supervisory authority under the Atomic Energy Act of 1954, as amended (AEA) and argue that, under the AEA and the National Environmental Policy Act (NEPA), the NRC is precluded “from issuing licenses or approving standardized reactor designs until it has completed its investigation of the Fukushima accident and considered the safety and environmental implications of the accident with respect to its regulatory program.”²¹ In brief summary, petitioners request relief including: suspension of all licensing and rulemaking decisions pending completion by the NRC’s Task Force of its near-term and long-term review; suspension of all proceedings on issues identified for investigation by the Task Force; suspension of proceedings in connection with any other issues identified by the Task Force; analysis of whether the events at Fukushima constitute “new and significant information” under NEPA; safety analysis of the regulatory implications of the events at Fukushima; and establishment of a schedule for raising new issues in pending licensing proceedings.

¹⁹ We have received four sets of substantively identical “supplemental comments” in support of the emergency petition, filed by participants on the *North Anna*, *Summer*, and *Shearon Harris* combined license dockets and by participants in the ESBWR design certification rulemaking. These filings, and corresponding answers, are listed in the Appendix to this decision. The commenters seek consideration of the Near-Term Report in all licensing proceedings and in the ESBWR rulemaking proceeding and raise several general concerns related to the conclusions in the Near-Term Report. The commenters point out that these comments are “substantially similar” to filings that have been made contemporaneously in other pending cases. With respect to the ESBWR-related filing, we refer the comments to the ESBWR design certification rulemaking docket. For the three adjudicatory matters, we have reviewed the comments, and find that none change our conclusion that the captioned licensing reviews and adjudicatory proceedings (as applicable) need not be stayed today. At bottom, the *North Anna*, *Summer*, and *Shearon Harris* commenters appear to seek consideration of their concerns in the corresponding proceedings. However, the appropriate vehicle for doing so is not the submission of comments. The proper mechanism for raising application-specific concerns in these combined license cases is to file a new contention, consistent with the procedural rules applicable to the proceeding. See, e.g., 10 C.F.R. §§ 2.309(c), 2.309(f), 2.326.

²⁰ A list of the petitioners is set out in the Amended Petition at 5-7.

²¹ Amended Petition at 24.

Petitioners included requests to suspend the AP1000 and ESBWR design certification rulemakings. A second, separate petition was filed in the AP1000 rulemaking docket in advance of the initial petitions.²² The second petition requested two remedies: the immediate postponement of the ongoing AP1000 design certification rulemaking and a comprehensive review of the Fukushima events focused on new reactor designs.²³ Westinghouse opposed both the Petition²⁴ and the AP1000 Petition.²⁵ GE Hitachi Nuclear Energy opposed the Petition in connection with the ESWBR rulemaking.²⁶

In mid-August, we received a series of petitions for rulemaking seeking to rescind certain regulations contained in 10 C.F.R. Part 51.²⁷ These petitions, citing 10 C.F.R. § 2.802(d), also

²² *Petition to Suspend AP1000 Design Certification Rulemaking Pending Evaluation of Fukushima Accident Implications on Design and Operational Procedures and Request for Expedited Consideration* (Apr. 6, 2011) (AP1000 Petition).

²³ *Id.* at 23.

²⁴ Ziesing, R.F., Westinghouse Electric Co., letter to Annette L. Vietti-Cook, NRC, Subject: "Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident" (May 2, 2011), endorsing *Brief of Nuclear Energy Institute in Opposition to Emergency Petition* (May 2, 2011).

²⁵ Ziesing, R.F., Westinghouse Electric Co., letter to Secretary, NRC, Subject: "Westinghouse Comments in the AP1000® Design Certification Amendment Rulemaking in Response to Petitions to Suspend Rulemaking" (May 10, 2011).

²⁶ Head, Jerald G., GE Hitachi Nuclear Energy, letter to Secretary, NRC, Subject: "Answer to Petition; SECY Order PR 52 (76FR16549), Docketed 04/19/2011 (NRC Accession No. ML111101277); Proposed Rule, ESBWR Design Certification, NRC-2010-0135, RIN 3150-AI85, 76 Federal Register 16549 (March 24, 2011)" (May 2, 2011).

²⁷ A complete list of these rulemaking petitions, and associated supporting declarations, is included in the Appendix to the decision. For convenience, page references in today's decision correspond to the set filed by Gene Stilp, in *PPL Bell Bend, LLC* (Bell Bend Nuclear Power Plant): *Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision* (Aug. 10, 2011) (Rulemaking Petition); *Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Aug. 8, 2011).

seek suspension of certain of the captioned proceedings pending resolution of these rulemaking petitions. These rulemaking petitions are considered separately, in section III.²⁸

D. Historical Perspective—Parallels to Prior Regulatory Responses

Our decision today is informed by the actions taken by the Commission following the March 28, 1979, accident at Three Mile Island (TMI), and following the events of September 11, 2001. In both instances the agency assessed the events, including implications for existing licenses and pending licensing actions, over a period of time, and considered the impact of the events on pending licensing actions.

1. The Accident at Three Mile Island

The pleadings we consider today vary in their characterizations of the Commission's actions after the TMI accident.²⁹ We therefore set out a brief chronology of NRC decisions from the post-TMI era, as relevant to today's decision. For several months following the TMI accident, the NRC issued no new operating licenses, construction permits, or limited work authorizations.³⁰ In part, this was because Staff resources were reallocated from licensing

²⁸ We also received responses opposing these petitions, a motion for leave to reply to these responses, and an opposition to this motion for leave to reply. A list of these pleadings is included in the Appendix to the decision.

²⁹ Petitioners maintain that the Commission suspended all licensing actions in the aftermath of the TMI accident. Amended Petition at 25. Respondents argue, *e.g.*, that even after the TMI accident, "the Commission chose *not* to suspend ongoing licensing proceedings, but instead, on June 5, 1979, temporarily stopped issuing licenses for a short period pending its initial assessment of the accident." *E.g., Comanche Peak: Luminant Generation Company LLC's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011), at 11 (emphasis in original).

³⁰ Following a May 31, 1979, meeting, the Commission directed the Staff to develop policy guidance addressing general principles for reaching licensing decisions, and to propose specific guidance to be applied for seven near-term operating license cases. See Staff Requirements – Discussion of Options Regarding Deferral of Licenses (May 31, 1979) (ML041900359).

reviews to TMI-related assignments.³¹ The so-called “licensing pause” also resulted from the Commission’s desire to ensure that lessons learned from the TMI accident were appropriately accounted for not only for operating reactors, but additionally for new reactor applications then under review. The Commission did not suspend adjudications during this time, although it did issue several iterations of adjudicatory guidance.

Beginning in October 1979, the Commission took several actions in fairly quick succession to provide guidance for power reactor adjudications. Initially, the Commission issued an interim policy statement where it determined that no new licenses for nuclear power reactors would be authorized by Atomic Safety and Licensing Boards, or issued by the NRC Staff, except after order of the Commission itself.³² Shortly thereafter, the Commission temporarily suspended the immediate effectiveness rule,³³ and set forth guidance for adjudications.³⁴ This policy required both Atomic Safety and Licensing Appeal Board consideration of effectiveness, and a Commission decision on effectiveness, prior to issuance of

³¹ See, e.g., SECY-79-344, “Interim NRR Organization to Deal with Impacts of TMI-2 and Other NRR Priority Tasks” (May 19, 1979) (ADAMS Legacy Library No. 7908030425) (detailing short-term realignment of resources and priorities in the Office of Nuclear Reactor Regulation to support TMI-related activities).

³² See Interim Statement of Policy and Procedure, 44 Fed. Reg. 58,559 (Oct. 10, 1979) (Interim Immediate Effectiveness Policy). At the same time, the Commission made clear that all other adjudicatory proceedings, “including enforcement and license amendment proceedings[,]” could continue, as could issuance of appellate decisions and partial initial decisions not related to issuance of new reactor licenses or permits. *Id.*

³³ See 10 C.F.R. § 2.764. This rule, subsequent to our 2004 10 C.F.R. Part 2 revisions, resides at 10 C.F.R. § 2.340 (See Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. 2182 (Jan. 14, 2004)).

³⁴ See Domestic Licensing Proceedings; Modified Adjudicatory Procedures, 44 Fed. Reg. 65,049 (Nov. 9, 1979). The amended procedures were set out as Appendix B to 10 C.F.R. Part 2. Appendix B, as a practical matter, provided for direct Commission review of licensing board decisions. In an *uncontested* operating license proceeding, the Commission would review informally the Staff recommendations, and the license would issue only after Commission action. *Id.* at 65,050.

any construction permit or operating license.³⁵ The Commission also directed the Boards, in deciding issues before them, to use the existing regulations, with the understanding that post-TMI analyses were still under way, and that, ultimately, compliance with then-existing rules might not be sufficient for an application to be approved.³⁶ Then-Chairman Hendrie formally announced a “licensing pause” on November 5, 1979.³⁷ The “licensing pause” lasted just a few months, ending in February 1980 with the issuance of a five percent power operating license for the Sequoyah facility.³⁸

After acting on three operating license applications and considering lessons learned, the

³⁵ *Id.* at 65,050. The “Appendix B” process nominally resulted in some delay in the issuance of operating licenses. One and a half years later, the Commission amended the immediate effectiveness rule as to operating license applications, by requiring direct, expedited Commission review of licensing board decisions in favor of granting operating licenses. The amendment eliminated the Appeal Board review required by Appendix B. These changes removed Appendix B and incorporated the revised procedures into 10 C.F.R. § 2.764. See *generally* Final Rule, Commission Review Procedures for Power Reactor Operating Licenses; Immediate Effectiveness Rule, 46 Fed. Reg. 28,627 (May 28, 1981). Shortly thereafter, the Commission again modified the rule, to delete the requirement that the Commission conduct an effectiveness review prior to fuel loading and low-power (up to five percent of rated power) testing. See *generally* Final Rule, Commission Review Procedures for Power Reactor Operating Licenses; Immediate Effectiveness Rule, 46 Fed. Reg. 47,764 (Sept. 30, 1981). Concurrently, the Commission issued a brief policy statement reiterating its intention that in uncontested cases the Commission still would authorize full power operation. Statement of Policy on Issuance of Uncontested Fuel Loading and Low Power Testing Operating Licenses, 46 Fed. Reg. 47,906 (Sept. 30, 1981).

³⁶ 44 Fed. Reg. at 65,050-51. The Commission advised that it would provide “case-by-case guidance” on changes as part of its own reviews in adjudicatory proceedings, which the Boards should apply in cases before them. *Id.*

³⁷ See Steve Wynkoop, *Gossick Resigns; NRC Responds to Kemeny with License ‘Pause,’* NUCLEONICS WEEK, Nov. 8, 1979, at 1.

³⁸ See NUREG/BR-0175, Rev. 2, “A Short History of Nuclear Regulation, 1946-2009” (Oct. 2010), at 59; Dircks, W.J., NRC, letter to R.J. Sherman, Atomic Industrial Forum, Inc. (Apr. 17, 1980). Six months later, the NRC issued the first full-power operating license following the TMI accident. *Id.*

Commission issued a third statement of policy in June 1980.³⁹ The Commission determined that operating license applications should be measured against our regulations, as augmented by several new requirements.⁴⁰ To facilitate adjudications, the Commission explained how to litigate TMI-related issues in operating license proceedings, and included guidance on certain case management issues.⁴¹ Notably, the Commission considered the question of timeliness, and directed that, where the time for filing contentions had expired in a given case, no new TMI-related contentions would be accepted absent a showing of good cause and a balancing of the late-filing factors.⁴² The Commission also directed boards to adhere strictly to our standards for reopening records, where applicable.⁴³

Just a few months later, in November 1980, the Commission approved a revision to its TMI Action Plan,⁴⁴ and shortly thereafter issued a revised policy statement.⁴⁵ Of note, the

³⁹ See Further Commission Guidance for Power Reactor Operating Licenses; Statement of Policy, 45 Fed. Reg. 41,738 (June 20, 1980) (June 1980 Policy Statement). Commissioners Gilinsky and Bradford provided separate and dissenting views, respectively.

⁴⁰ *Id.* at 41,739 (citing NUREG-0660, “NRC Action Plan Developed as a Result of the TMI-2 Accident” (May 1980) (ML072470526) (TMI Action Plan)).

⁴¹ *Id.* at 41,740. This guidance essentially expanded the scope of permissible contentions to include issues associated with TMI-related requirements that supplemented existing regulations.

⁴² *Id.* (citing 10 C.F.R. § 2.714(a)(1), now renumbered as 10 C.F.R. § 2.309(c), (f)(2)).

⁴³ “[F]or example, where initial decisions have been issued, the record should not be reopened to take evidence on some TMI-related issue unless the party seeking reopening shows that there is significant new evidence, not included in the record, that materially affects the decision.” *Id.* When challenged on this the following year, the Commission reiterated its expectation that parties would adhere to these requirements. See *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant), CLI-81-5, 13 NRC 361, 364-65 (1981).

⁴⁴ See generally NUREG-0737, “Clarification of TMI Action Plan Requirements” (Nov. 1980). Among other things, NUREG-0737 included revisions to previous requirements, more explicit requirements, and different schedules for implementation of actions.

⁴⁵ See Statement of Policy: Further Commission Guidance for Power Reactor Operating Licenses, CLI-80-42, 12 NRC 654 (1980) (December 1980 Policy Statement); *corrected by* Statement of Policy; Further Commission Guidance for Power Reactor Operating Licenses, 46 Fed. Reg. 15,242 (Mar. 4, 1981). Chairman Ahearne dissented.

Commission observed that many matters in the TMI Action Plan appropriately were addressed on a generic basis, rather than in individual adjudications. The Commission therefore recommended that litigants seeking to challenge new requirements provide additional, specific information supporting their challenges.⁴⁶

In 1981, the Commission proposed a rule that would have codified the TMI-related procedural provisions for operating license cases.⁴⁷ But the NRC never implemented a final rule because experience showed that the proposed guidance was rarely needed. The Commission observed that TMI-related issues were litigated in very few operating license proceedings, and concluded that the absence of a rule would not cause unnecessary delays in proceedings where such issues were raised.⁴⁸

Once all regulatory revisions implementing the TMI Action Plan had been completed, special TMI-related guidance no longer was needed. The Commission therefore rescinded the December 1980 Policy Statement in 1989.⁴⁹

⁴⁶ *Id.* at 660 (recommending that parties state “the nexus of the issue to the TMI-2 accident, . . . the significance of the issue, and . . . any differences between their positions and the rationale underlying the Commission[s] consideration of additional TMI-related requirements.”). The December 1980 Policy Statement reiterated the Commission’s expectations regarding the applicability of the late-filing and reopening rules. *Id.* at 661.

⁴⁷ See *generally* Proposed Rule, Licensing Requirements for Pending Operating License Applications, 46 Fed. Reg. 26,491 (May 13, 1981).

⁴⁸ Withdrawal of Proposed Rule, Licensing Requirements for Pending Operating License Applications, 48 Fed. Reg. 13,987, 13,988 (Apr. 1, 1983).

⁴⁹ See Statement of Policy on Litigation of TMI-Related Issues in Power Reactor Operating License Proceedings; Revocation of Superseded Policy Statement Concerning TMI-Related Procedures, 54 Fed. Reg. 7897 (Feb. 23, 1989). The Commission offered guidance for the litigation of TMI-related issues in operating license proceedings where the guidance might still be pertinent. *Id.* at 7898. As an administrative matter, the Commission also rescinded the October 1979 Interim Immediate Effectiveness Policy. *Id.* Concurrently, the Commission made minor revisions to the immediate effectiveness rule, to remove “TMI-related” portions of the rule that were no longer necessary. See Final Rule, Issuance or Amendment of Power Reactor License or Permit Following Initial Decision, 54 Fed. Reg. 7756, 7757 (Feb. 23, 1989). The “automatic stay” provisions were removed from 10 C.F.R. § 2.340 in 2007. See Final Rule, (continued . . .)

As this brief summary of the agency's actions makes clear, the NRC initiated a comprehensive analysis of the TMI accident immediately after it occurred. This analysis included thoughtful consideration of the potential ramifications of lessons learned for licensing decisions and ongoing adjudications. On the procedural front, the Commission provided guidance to facilitate adjudications and considered making formal changes to its Part 2 rules to codify this guidance. But throughout the evolution of this guidance, the Commission adhered to the fundamental premise that its procedural rules—as they related, for example, to new or amended contentions and to motions to reopen—should be applied in accordance with existing adjudicatory precedent and practices.

2. *Events of September 11, 2001*

The events of September 11, 2001, generated a flurry of litigation, including requests to suspend ongoing adjudications and licensing reviews. The Commission declined to suspend ongoing proceedings and licensing reviews. Instead, the agency pursued a top-to-bottom reassessment of its regulations and policies on terrorism generically, outside the adjudicatory process.

In October 2001, intervenor Georgians Against Nuclear Energy (GANE) and another requester filed a petition to suspend the mixed-oxide fuel fabrication proceeding (*MOX*) in view of the events of September 11.⁵⁰ The Commission denied the petition, finding no health and safety reason justifying suspension of the proceeding, no injury beyond litigation costs, ample time to implement new rules if appropriate, and value in moving forward with the proceeding in a timely and efficient way.⁵¹

Licenses, Certifications, and Approvals for Nuclear Power Plants, 72 Fed. Reg. 49,352, 49,415 (Aug. 28, 2007).

⁵⁰ See *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-01-28, 54 NRC 393, 397-98 (2001), *reconsideration denied*, CLI-02-2, 55 NRC 5 (2002).

⁵¹ *MOX*, CLI-01-28, 54 NRC at 398-401.

As GANE had in *MOX*, the State of Utah, in the *Private Fuel Storage* independent spent fuel storage installation (ISFSI) proceeding, petitioned the Commission to suspend licensing proceedings for the proposed ISFSI in light of the events of September 11.⁵² The Commission made three principal findings, which led it to deny Utah's suspension petition. First, the Commission found that even if the licensing, construction, and shipping processes went forward as planned, no radiological materials would be present onsite for at least two years, so there was no immediate threat to public safety.⁵³ Second, the Commission found that the interest in efficient adjudication would best be served if the proceeding went forward to resolve the numerous safety and environmental issues—many with no link to terrorism—at issue; moreover, the relief requested by Utah—suspension of the entire proceeding—was not narrowly tailored to the goal of adjudicatory efficiency.⁵⁴ Finally, the Commission found that continuing the proceeding would not thwart regulatory review, and that suspending the proceeding was not necessary to guarantee that the full benefit of the agency's post-September 11 review would be realized at the proposed facility.⁵⁵

In the *Catawba/McGuire* license renewal proceeding, intervenor Blue Ridge Environmental Defense League (BREDL) moved to dismiss an application to renew the operating licenses of four nuclear power units, as legally invalid.⁵⁶ In the alternative, BREDL asked the Commission to hold the proceeding in abeyance pending the Commission's

⁵² See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 377-78 (2001).

⁵³ *Id.* at 380-81.

⁵⁴ *Id.* at 381-83.

⁵⁵ *Id.* at 383-84.

⁵⁶ *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 388 (2001).

comprehensive post-September 11 review of its rules and policies.⁵⁷ The Commission denied both the request to dismiss the proceeding and the alternative request to hold it in abeyance.⁵⁸ Noting the early stage of the proceeding—contentions had only just been submitted and the Board had not yet ruled on them—the Commission found that there was no risk of immediate threat to public health and safety, that there were non-terrorism related contentions to be considered, and that the only “harm” to BREDL would be inevitable litigation costs.⁵⁹ The Commission pointed out that any changes in rules that might bear on license renewal reviews could be addressed via late-filed contentions.⁶⁰ Additionally, the Commission reasoned that there would be time to apply any new rules that might result from the generic review of terrorism-related issues.⁶¹

While bearing in mind the history of Commission actions following the TMI accident, we look to the more recent post-September 11 “suspension-of-proceedings” cases for the framework under which we consider the current petitions.⁶²

II. DISCUSSION

A. Legal Framework

The petitions do not fall neatly within our regulations—the sole provision explicitly authorizing stay applications is available only to parties to adjudicatory proceedings seeking stays of decisions or actions of a presiding officer pending the filing and resolution of a petition

⁵⁷ *Id.*

⁵⁸ *Id.* at 388, 392.

⁵⁹ *Id.* at 390-91.

⁶⁰ *Id.* at 391.

⁶¹ *Id.*

⁶² See also *Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-02-23, 56 NRC 230 (2002).

for review.⁶³ That is not the situation here. We previously considered requests to suspend or hold proceedings in abeyance in a number of proceedings following the September 11 terrorist attacks, as well as more recently, pursuant to our inherent supervisory authority over agency proceedings.⁶⁴ We exercise this supervisory authority again today.⁶⁵

We consider “suspension of licensing proceedings a ‘drastic’ action that is not warranted absent ‘immediate threats to public health and safety,’”⁶⁶ or other compelling reason. The three criteria articulated in the post-September 11 *Private Fuel Storage* proceeding are apt here, where we face analogous circumstances, and we apply them today. Thus, we consider, first, “whether moving forward . . . will jeopardize the public health and safety.”⁶⁷ Second, we

⁶³ See 10 C.F.R. § 2.342.

⁶⁴ See *Private Fuel Storage*, CLI-01-26, 54 NRC 376; *Catawba/McGuire*, CLI-01-27, 54 NRC 385; *MOX*, CLI-01-28, 54 NRC 393; *Diablo Canyon*, CLI-02-23, 56 NRC 230. See also *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station); *Entergy Nuclear Operations, Inc.* (Indian Point, Units 2 and 3); *Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station); *Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-08-23, 68 NRC 461, 484-85 (2008) (citing *Private Fuel Storage*, CLI-01-26, 54 NRC 376; *Diablo Canyon*, CLI-02-23, 56 NRC 230; *MOX*, CLI-01-28, 54 NRC 393) (considering petitions to suspend multiple license renewal proceedings in view of an Inspector General’s report on the agency’s license renewal process).

⁶⁵ Because we consider the petitions, and take action, in our supervisory capacity, we need not address a number of procedural issues that would merit further discussion in a traditional adjudication. As Entergy Nuclear Operations, Inc. (Entergy) points out: “While the NRC rules require that motions be addressed to the Presiding Officer when a proceeding is pending, the Commission has previously indicated that suspension motions such as this are best addressed to it.” *Pilgrim & Indian Point: Entergy’s Answer Opposing Petition to Suspend Licensing Proceedings* (May 2, 2011), at 2 (citing *Oyster Creek/Indian Point/Pilgrim/Vermont Yankee*, CLI-08-23, 68 NRC at 476; *Diablo Canyon*, CLI-02-23, 56 NRC at 237). We agree that the filings here are appropriately brought before us in this instance. We do not address whether certain of the petitions (for example, filed on the *Callaway* and *Columbia Generating Station* dockets), are appropriate, given that they were filed in the absence of an ongoing adjudication. We also do not address the procedural propriety of a number of filings not contemplated by the Secretary’s Scheduling Order, including petitioners’ motions for leave to reply, answers to those motions, and various supplements filed after the date specified in the Scheduling Order. The participants should assume our familiarity with all relevant filings.

⁶⁶ *Oyster Creek/Indian Point/Pilgrim/Vermont Yankee*, CLI-08-23, 68 NRC at 484.

⁶⁷ *Private Fuel Storage*, CLI-01-26, 54 NRC at 380.

examine whether continuing the review process will “prove an obstacle to fair and efficient decision[-]making.”⁶⁸ Third, we decide whether going forward will “prevent appropriate implementation of any pertinent rule or policy changes that might emerge from our . . . ongoing evaluation.”⁶⁹

B. Analysis

As stated above, petitioners ask for a number of remedies. We consider each in turn.

1. Suspension Requests

The first three remedies sought by petitioners relate to suspension of decisions or proceedings for reasons related to the NRC’s review of the implications of the events at Fukushima. Petitioners request:

- Suspension of “all decisions regarding the issuance of construction permits, new reactor licenses, [Combined Licenses (COLs)], [Early Site Permits (ESPs)], license renewals, or standardized design certification pending completion by the NRC’s Task Force of its investigation of the near-term and long-term lessons of the Fukushima accident and the issuance of any proposed regulatory decisions and/or environmental analyses of those issues.”⁷⁰
- Suspension of all proceedings—specifically, all hearings and opportunities for public comment—on reactor or spent fuel pool issues identified for investigation by the Task Force, including external event issues, station blackout, severe accident measures, implementation of 10 C.F.R. § 50.54(hh)(2) requirements on response to fire or explosions, and emergency preparedness.⁷¹
- Suspension of proceedings in connection with any other issues identified by the Task Force pending completion of the Task Force’s investigation of those issues and issuance of any proposed regulatory decisions and/or environmental analyses.⁷²

As discussed below, we deny these requests.

⁶⁸ *Id.*

⁶⁹ *Id.* There, the evaluation pertained to terrorism-related policies. Here, the evaluation relates to the domestic implications of the Fukushima events.

⁷⁰ Amended Petition at 28. *See also id.* at 1-2.

⁷¹ *Id.* at 2, 28.

⁷² *Id.* at 2, 28-29.

According to petitioners, should the NRC continue to issue licenses and apply any lessons-learned retrospectively, its actions would be inconsistent with the AEA and NEPA.⁷³ Petitioners argue that “the NRC may not issue a license for a reactor if it would pose an ‘undue risk’ to public health and safety or the common security.”⁷⁴ To support their argument, petitioners point to the AEA’s prohibition against issuing a license if issuance would be “inimical to the common defense and security or to the health and safety of the public.”⁷⁵ Petitioners argue that “[t]he list of issues identified for investigation in the Task Force Charter demonstrates that the Fukushima accident raises significant questions about the adequacy of the NRC’s regulatory program,” and that it would be “almost impossible” for the NRC to make definitive findings on safety until after the Task Force completes its work.⁷⁶

Respondents reason, as a general matter, that the Petition does not offer a basis for suspending proceedings because the standards we have previously applied, as enumerated in the *Private Fuel Storage* proceeding, have not been satisfied.⁷⁷ Respondents argue that moving forward with ongoing Staff safety and environmental reviews and with hearings on admitted contentions will not threaten public health and safety or impede implementation of any regulatory changes necessitated by the NRC’s evaluation of the events in Japan, and that stopping the licensing process would be needlessly inefficient.⁷⁸ Respondents argue that the NRC has wide discretion to proceed with its usual licensing activities while the agency’s

⁷³ *Id.* at 27.

⁷⁴ *Id.* at 25.

⁷⁵ AEA § 103(d), 42 U.S.C. § 2133. (Petitioners cite 42 U.S.C. § 2311, Amended Petition at 25; we expect they intended § 2133.)

⁷⁶ Amended Petition at 25.

⁷⁷ *Columbia Generating Station: Energy Northwest’s Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011), at 14-15.

⁷⁸ See, e.g., *Calvert Cliffs: Opposition to Emergency Petition to Suspend Licensing Decisions and Proceedings* (May 2, 2011), at 5.

investigation of the implications of the Fukushima accident for U.S. facilities proceeds.

Respondents maintain that the NRC already has “exercised this discretion by allowing pending licensing actions to continue without interruption while the agency evaluates the regulatory significance of the Fukushima events.”⁷⁹

As discussed above, the events at Fukushima have prompted a comprehensive review of our regulations and practices and, as a result of this review, we may determine that regulatory or procedural changes are warranted. However, nothing we have learned to date puts the continued safety of our currently operating regulated facilities, including reactors and spent fuel pools, into question. Similarly, nothing learned to date requires immediate cessation of our review of license applications or proposed reactor designs. Significantly, the Petition fails to identify specific problems with any captioned COL application, license renewal application, or design certification rulemaking. This lack of a specific link between the relief requested and the particulars of the individual applications makes it difficult to conclude that moving forward with any individual licensing decision or proceeding will have a negative impact on public health and safety.

Petitioners have not shown that any of the license applications would pose an immediate threat to the public health and safety, if licensing activities are continued. At bottom, this is a practical consideration—in the case of every captioned new reactor license application, for

⁷⁹ *Levy County: Progress Energy Florida, Inc.’s Response Opposing Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident* (May 2, 2011), at 14. In this connection, respondents note the approval of the Vermont Yankee license renewal application on March 28, 2011, and the approval of the renewal of the licenses for the Palo Verde Nuclear Generating Station units on April 29, 2011. *Id.* (citing Entergy Nuclear Operations, Inc.; Vermont Yankee Nuclear Power Station; Notice of Issuance of Renewed Facility Operating License No. DPR-28 for an Additional 20-Year Period; Record of Decision, 76 Fed. Reg. 17,162 (Mar. 28, 2011); Arizona Public Service Company; Palo Verde Nuclear Generating Station, Units 1, 2, and 3, Notice of Issuance of Renewed Facility Operating License Nos. NPF-41, NPF-51, and NPF-74 for an Additional 20-Year Period; Record of Decision, 76 Fed. Reg. 24,064 (Apr. 29, 2011)).

example, the proposed plants are years away from being placed into operation. We have factored this concept of immediacy into past decisions where suspension of a proceeding has been sought after significant and unusual events. We denied requests to immediately suspend proceedings in the aftermath of the September 11 attacks, finding suspension neither necessary nor appropriate. In the *Private Fuel Storage* case, where shipments of spent fuel to the facility were at least two years down the road, we found no immediate threat that the facility might be targeted for terrorists.⁸⁰ Similarly, in the post-September 11 *Diablo Canyon* proceeding, we denied a request for suspension, finding that there was “no reason to believe that any danger to public health and safety would result from *mere continuation of this adjudicatory proceeding*.”⁸¹

The same reasoning holds true for the matters for which petitioners request suspension. For example, licensing decisions for pending COL applications are months and, in many cases, years away and fuel loading into completed reactors is still further away; continuation of these reviews poses no immediate threat to public health and safety.⁸²

⁸⁰ *Private Fuel Storage*, CLI-01-26, 54 NRC at 378.

⁸¹ *Diablo Canyon*, CLI-02-23, 56 NRC at 239 (emphasis in original). See also *Potential Implications of Chernobyl Accident for All NRC-Licensed Facilities*, DD-87-21, 26 NRC 520 (1987).

⁸² *Callaway*—Staff’s review was suspended at the applicant’s request, proceeding terminated in August 2009 pursuant to settlement agreement (*Ameren Missouri Response to Emergency Petition* (May 2, 2011), at 2-3); *Calvert Cliffs*—final safety evaluation report (SER) scheduled for completion in January 2013 (*Calvert Cliffs Opposition to Emergency Petition to Suspend Licensing Decisions and Proceedings* (May 2, 2011), at 4); *Fermi*—final SER is scheduled for completion in September 2012, followed by final environmental impact statement (EIS) in November 2012 (*Detroit Edison Opposition to Emergency Petition to Suspend Licensing Decisions and Proceedings* (May 2, 2011), at 4); *William States Lee III*—final decision on the application is not expected until late 2012 or early 2013 (*Answer of Duke Energy Carolinas LLC Opposing Petition to Suspend All Pending Reactor License Proceedings* (May 2, 2011), at 7); *Turkey Point*—reactors are “years away” from receiving licenses and are at least ten years away from operation (*Florida Power & Light Response Opposing Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident* (May 2, 2011), at 12); *Comanche Peak*—a petition for review of a board contention admissibility decision is pending before the Commission, and a final decision on the complete application is not expected until late 2013 (*Luminant Generation Company LLC’s Answer in Opposition to* (continued . . .)

Our regulatory processes provide sufficient time and avenues to ensure that design certifications and COLs satisfy any Commission-directed changes before any new power plant commences operations.⁸³ This is demonstrated by the implementation strategy for new reactor licensing outlined in the Near-Term Report. Whether we adopt the Task Force recommendations or require more, or different, actions associated with certified designs or COL

Emergency Petition to Suspend Licensing Proceedings (May 2, 2011), at 3, 10); *Bell Bend*—final SER expected in August 2012, no date for final EIS; (*Opposition to Emergency Petition* (May 2, 2011), at 3); *Shearon Harris*—the current projected start date for the first of the two units is, at the earliest, the first quarter of 2026, and the final EIS is not due to be issued until January 2014 (*Progress Energy Carolina, Inc.’s Response Opposing Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident* (May 2, 2011), at 12, 20); *Levy County*—the current projected start date for operation of the first unit is projected for the second quarter of 2021, at the earliest (*Progress Energy Florida, Inc.’s Response Opposing Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident* (May 2, 2011), at 10); *Virgil C. Summer*—the applicant expects a final decision on its COL application in the fall of 2011, but construction would not be completed for at least several years thereafter (*South Carolina Electric & Gas Company’s Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011), at 10); *South Texas*—the applicant expects a decision on the *South Texas* COL application sometime in 2012, but even if granted, construction would not be completed for at least several years (*Nuclear Innovation North America LLC’s Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011), at 9); *Vogtle*—“Vogtle Unit 3 will not go online until 2016, five years from now” (*Southern Nuclear Operating Company’s Answer to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 2, 2011), at 13); *Bellefonte*—currently deferred, with no decision on whether the units ever will be constructed (*Tennessee Valley Authority’s Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011), at 11); *North Anna*—the projected date for completing the mandatory hearing is in November 2013 (*Dominion’s Answer Opposing Petition to Suspend Pending Licensing Proceedings* (May 2, 2011), at 4).

⁸³ With respect to the timing associated with the Watts Bar operating license application, TVA states that it does not expect the proceeding to be completed until 2012, with operations to start sometime later. *Tennessee Valley Authority’s Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011), at 11. Here again, the agency has ample authority and time to make appropriate changes prior to commencement of operation of the plant. Any necessary changes that may be implemented post-license issuance would be imposed on the facility in the same manner as for operating reactors. Similarly, therefore, we find no imminent risk that would compel a stay of either the ongoing licensing review, or the associated adjudication.

applications, we have the authority to ensure that certified designs and combined licenses include appropriate Commission-directed changes before operation. We therefore find no imminent risk to public health and safety or to the common defense and security that necessitates a stay of new reactor licensing actions or adjudications.

The situation is similar for pending license renewal applications, where the period of extended operation, provided renewed licenses are issued, will not begin for, at a minimum, nearly a year, and, in the majority of cases, for several years.⁸⁴ In our view, there is no imminent threat to public health and safety that requires suspension of any of these proceedings or the associated licensing decisions now.⁸⁵

We further find that it is in the public interest that adjudicatory proceedings (as applicable) and licensing reviews continue. During the pendency of the agency's review, as respondents point out, safety and environmental contentions raised in our ongoing proceedings, "many with no conceivable connection to the accident in Japan or the issues identified in the

⁸⁴ *Columbia Generating Station*—current operating license expires on December 20, 2023 (*Energy Northwest's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011), at 17); *Pilgrim*—current operating license expires on June 8, 2012 (*Entergy's Answer Opposing Petition to Suspend Pending Licensing Proceedings* (May 2, 2011), at 4); *Indian Point*—for Unit 2, the current operating license expires on September 9, 2013, and for Unit 3, the current operating license expires on December 12, 2015 (*Entergy's Answer Opposing Petition to Suspend Pending Licensing Proceedings* (May 2, 2011), at 5); *Davis-Besse*—current operating license expires on April 22, 2017 (*FirstEnergy's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011), at 3); *Seabrook*—NRC decision on license renewal is not expected until December 2012 (*Answer of NextEra Energy Seabrook LLC Opposing Petition to Suspend Pending Licensing Proceedings* (May 2, 2011), at 2-3); and, *Diablo Canyon*—the final decision on the license renewal application has been significantly delayed (see Holian, Brian E., NRC, letter to John Conway, Pacific Gas and Electric Co., "Response to Request for Deferral of Issuance of Renewed Operating Licenses and Revision of Schedule for the Review of the Diablo Canyon Nuclear Power Plant, Units 1 and 2, License Renewal Application" (May 31, 2011) (ML111520068); *Pacific Gas & Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), Notice of 52-Month Delay and Order Requiring Status Reports (June 7, 2011) (unpublished)).

⁸⁵ See generally *Catawba/McGuire*, CLI-01-27, 54 NRC at 390-91.

Task Force Charter,” can, and should, be resolved.⁸⁶ As we stated in *Private Fuel Storage*, we have “a responsibility to go forward with other regulatory and enforcement activities even while” the agency conducts its review.⁸⁷ To the extent that our comprehensive review leads to new rules applicable to any pending application, we have sufficient authority and time to apply them to any new license that may be issued.

License renewal presents an additional circumstance factoring into our decision. As respondents argue, our license renewal review is a limited one, focused on aging management issues.⁸⁸ It is not clear whether any enhancements or changes considered by the Task Force will bear on our *license renewal* regulations, which encompass a more limited review. The NRC’s ongoing regulatory and oversight processes provide reasonable assurance that each facility complies with its “current licensing basis,” which can be adjusted by future Commission order or by modification to the facility’s operating license outside the renewal proceeding (perhaps even in parallel with the ongoing license renewal review).⁸⁹ As one respondent points out, “the Commission is conducting extensive reviews to identify and apply the lessons learned from the Fukushima Daiichi accident, and has made it clear that it will use the information from these activities to impose any requirements it deems necessary, irrespective of whether a plant

⁸⁶ *Columbia Generating Station: Energy Northwest’s Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011), at 17.

⁸⁷ *Private Fuel Storage*, CLI-01-26, 54 NRC at 381 (citing *Statement of Policy on Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18 (1998), reaffirming the Commission’s commitment to efficient and expeditious processing of adjudications).

⁸⁸ See, e.g., *Columbia Generating Station: Energy Northwest’s Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011), at 20. See generally *Pilgrim*, CLI-10-14, 71 NRC ___, ___ (June 17, 2010) (slip op. at 4-8).

⁸⁹ See Final Rule, Nuclear Power Plant License Renewal, 56 Fed. Reg. 64,943, 64,949, 64,953-54 (Dec. 13, 1991) (explaining that the current licensing basis can be modified at any time to resolve emerging concerns, and expressly noting a change in the final rule to the definition of “current licensing basis” to ensure that changes could be made to the existing 10 C.F.R. Part 50 license while the 10 C.F.R. Part 54 license renewal application is under review).

is applying for or has been granted a renewed operating license.”⁹⁰ We agree. Further, we do not believe that an imminent risk will exist during the time period needed to apply any necessary changes to operating plants, whether a license renewal application is pending or not.⁹¹ Therefore, allowing these proceedings to continue will not prevent the appropriate implementation of any rule or policy changes we may make as a result of our post-Fukushima review.

Moreover, nothing in the Petition or in Dr. Makhijani’s Declaration persuades us otherwise. Respondents argue that Dr. Makhijani “provides no information showing that U.S. plants (particularly those on the east coast) are vulnerable to the type of accident scenarios that occurred at Fukushima Daiichi. In particular, he makes no showing that tsunami or station blackout risk at these plants is higher than previously assumed, or that spent fuel pool risk at U.S. plants is anything other than very low.”⁹² We essentially agree—Dr. Makhijani provides mostly speculation, not facts or evidence, on potential implications for U.S. facilities. He states

⁹⁰ *Pilgrim & Indian Point: Entergy’s Answer Opposing Petition to Suspend Pending Licensing Proceedings* (May 2, 2011), at 3.

⁹¹ However, to the extent that issues appropriately within the scope of license renewal are identified, our procedural rules provide avenues for the submission of proposed contentions on those issues. See 10 C.F.R. § 2.309(c), (f)(1)-(2). For example, prior to issuance of the Near-Term Report, one intervenor (in the *Pilgrim* proceeding) filed two new contentions associated with the Fukushima events. See *Pilgrim Watch Request for Hearing on Post Fukushima SAMA Contention* (May 12, 2011); *Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post Fukushima* (June 1, 2011). (The Board has since ruled on these requests, and rejected them pursuant to 10 C.F.R. §§ 2.326, 2.309(c), and 2.309(f)(1). See *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), LBP-11-23, 74 NRC ____ (Sept. 8, 2011) (Young, J., concurring in part and dissenting in part).) Since issuance of the report, new contentions have been filed in a number of ongoing license renewal cases. See, e.g., *Motion to Admit New Contention Regarding the Safety and Environmental Implications of the Nuclear Regulatory Commission Task Force Report on the Fukushima Dai-ichi Accident* (Aug. 11, 2011) (Diablo Canyon); *Friends of the Coast and New England Coalition’s Contention Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report* (Aug. 11, 2011) (Seabrook).

⁹² *Id.* at 22.

that he “believe[s]” that “if” new information from the Japanese event is taken into account in the NRC’s analyses, then “it is likely” to change those analyses.⁹³ In connection with safety issues, he says that information learned as a result of the Japan event “is likely to result in more rigorous regulation.”⁹⁴ He goes on to predict that “[i]t is likely that more . . . protective features will be needed . . . [and i]t is also likely that additional measures involving significant costs will have to be taken,”⁹⁵ and, consequently, an economic analysis “may well result in a decision that licensing of new reactors and re-licensing of existing reactors is not cost-effective.”⁹⁶ And “[t]herefore . . . [he] believe[s] it is reasonable and necessary for the NRC to suspend licensing and re-licensing decisions and standardized design certifications until the NRC completes its review of the regulatory implications of the Fukushima accident.”⁹⁷

As discussed further in Section II.B.3., *infra*, to the extent that the petitions seek agency consideration of issues that were within the scope of the near-term Task Force charter or that we subsequently direct the Staff to review, the request is granted. In fact, the Makhijani Declaration points to a number of the same areas that the Task Force examined, and it may be that we take actions that will address concerns similar to Dr. Makhijani’s. On balance, however, Dr. Makhijani’s broad assertions are insufficient to support an immediate freeze of licensing decisions, and we do not institute one today.

As discussed above, the Task Force has provided us with its recommendations for short-term and long-term agency action. Our consideration of the Task Force’s recommendations, and the efforts we have directed the Staff to undertake based on those

⁹³ Makhijani Declaration at 12, ¶ 34.

⁹⁴ *Id.*

⁹⁵ *Id.* at 12, ¶ 36.

⁹⁶ *Id.*

⁹⁷ *Id.* at 13, ¶ 37.

recommendations⁹⁸ may result in actions including the issuance of regulatory and policy direction. Moreover, as the report reflects, the mechanisms and consequences of the events at Fukushima are not yet fully understood. If our consideration of the Near-Term Report or the results of the longer-term review of hazards like those that damaged reactors at the Fukushima site ultimately causes the NRC to revise its requirements, licensees may well become subject to new regulations or agency orders. But safety and environmental regulation is by its very nature a dynamic process. Outside the context of the events at Fukushima, new information and new analyses constantly emerge and may lead to fresh regulatory approaches. That is not a reason to halt ongoing regulatory activity in the meantime. Even for the licenses that the NRC issues before completing its review, any new Fukushima-driven requirements can be imposed later, if necessary to protect the public health and safety.⁹⁹

In sum, we find no imminent risk to public health and safety if we allow our regulatory processes to continue. Instead of finding obstacles to fair and efficient decision-making, we see benefits from allowing our processes to continue so that issues unrelated to the Task Force's review can be resolved. We have well-established processes for imposing any new requirements necessary to protect public health and safety and the common defense and security. Moving forward with our decisions and proceedings will have no effect on the NRC's ability to implement necessary rule or policy changes that might come out of our review of the Fukushima Daiichi events.

⁹⁸ See SRM on Near-Term Report.

⁹⁹ See *Private Fuel Storage*, CLI-01-26, 54 NRC at 383-84.

2. National Environmental Policy Act

Our licensing reviews include (among other things) assessment of the environmental impacts of severe accidents, as well as severe accident mitigation alternatives.¹⁰⁰ Petitioners request that the NRC conduct a separate generic NEPA analysis regarding whether the Fukushima events constitute “new and significant information” under NEPA that must be analyzed as part of the environmental review for new reactor and license renewal decisions.¹⁰¹ At bottom, according to petitioners, such a review is required now because the NRC has “admitted” that it “has new information that concededly could have a significant effect on its regulatory program and the outcome of its licensing decisions for individual reactors.”¹⁰²

This request is premature. Although the Task Force completed its review and provided its recommendations to us, the agency continues to evaluate the accident and its implications for U.S. facilities and the full picture of what happened at Fukushima is still far from clear. In short, we do not know today the full implications of the Japan events for U.S. facilities. Therefore, any generic NEPA duty—if one were appropriate at all—does not accrue now.

If, however, new and significant information comes to light that requires consideration as part of the ongoing preparation of application-specific NEPA documents, the agency will assess

¹⁰⁰ See, e.g., 10 C.F.R. § 51.53(c)(3)(ii)(L) (requiring a site-specific consideration of severe accident mitigation alternatives at the time of license renewal, unless a previous consideration of such alternatives regarding plant operation has been included in a final environmental impact statement, final environmental assessment, or a related supplement); 10 C.F.R. Part 51, Subpart A, Appendix B, Table B-1, “Summary of Findings on NEPA Issues for License Renewal of Nuclear Power Plants” (reflecting the conclusion for the generic analysis of severe accidents, that the probability-weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to groundwater, and societal and economic impacts of severe accidents are of small significance for all plants); 10 C.F.R. §§ 51.45 (requiring consideration of alternatives in environmental reports), 51.50(c) (requiring an environmental report for a combined license application); *Limerick Ecology Action v. NRC*, 869 F.2d 719 (3d Cir. 1989) (requiring that the NRC include consideration of certain SAMAs in environmental reviews performed under NEPA Section 102(2) in conjunction with operating license applications).

¹⁰¹ Amended Petition at 2, 29.

¹⁰² *Id.* at 26-27.

the significance of that information, as appropriate. Our regulations specify the circumstances under which the Staff must prepare supplemental environmental review documents. Section 51.72(a) requires preparation of a supplemental draft EIS when:

- (1) There are substantial changes in the proposed action that are relevant to environmental concerns; or
- (2) There are significant *new circumstances or information* relevant to environmental concerns and *bearing on the proposed action or its impacts*.¹⁰³

To merit this additional review, information must be both “new” and “significant,” and it must bear on the proposed action or its impacts. As we have explained, “[t]he new information must present ‘a seriously different picture of the environmental impact of the proposed project from what was previously envisioned.’”¹⁰⁴ That is not the case here, given the current state of information available to us. For these reasons, we decline petitioners’ request to commence a generic NEPA review today.

3. Request for Safety Analysis

Petitioners request that the NRC perform a safety analysis of the regulatory implications of the events at Fukushima. Petitioners request that long-term measures be issued as proposed rules (with opportunity for comment).¹⁰⁵

¹⁰³ 10 C.F.R. § 51.72(a) (emphasis added). Section § 51.92(a) sets forth substantively identical requirements for preparation of supplemental final EISs. In addition, the NRC Staff has the option of preparing a supplement to a draft or final EIS “when, in its opinion, preparation of a supplement will further the purposes of NEPA.” See 10 C.F.R. §§ 51.72(b), 51.92(c).

¹⁰⁴ See *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 14 (1999) (citing *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 373 (1989); *Sierra Club v. Froehlke*, 816 F.2d 205, 210 (5th Cir. 1987)). As to license renewal in particular, the NRC Staff currently is preparing an update to the 1996 Generic Environmental Impact Statement (GEIS) for license renewal. See *generally* Proposed Rule, Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 74 Fed. Reg. 38,117 (July 31, 2009).

¹⁰⁵ Amended Petition at 2, 29.

This request has, in essence, been granted. As explained above, we initiated a comprehensive examination of the implications of the Fukushima accident for U.S. facilities, establishing a Task Force instructed to undertake near-term review and to make recommendations for future actions.¹⁰⁶ After we received the Near-Term Report, we directed further Staff action, including longer-term review of the implications of the accident for U.S. facilities. As a result, the NRC may implement changes to its regulations and regulatory processes. These changes may be accomplished in a variety of ways, such as via issuance of Commission orders, or by formal changes to our regulations, all pursuant to our normal processes, which include appropriate opportunities for public and stakeholder input.

4. *Scheduling and Procedural Request*

Petitioners request that we “establish procedures and a timetable for raising new issues relevant to the Fukushima accident in pending licensing proceedings” to include a sixty-day period for raising new issues following the publication of regulatory proposals or environmental decisions.¹⁰⁷ Petitioners also seek the suspension of the requirement to satisfy late-filing standards if the relevance of the new issue to the Fukushima events can be demonstrated.¹⁰⁸

Petitioners maintain that we should modify our procedural rules by creating special timeliness definitions for new contentions and by setting out special processes for judging motions to reopen. Petitioners seek to ensure that boards in the various proceedings apply uniform standards for admitting contentions spawned by the events in Fukushima and to

¹⁰⁶ Petitioners request that we publish the results of our analysis for public comment. *Id.* at 2, 29. While the analysis will not be published specifically for public comment, we grant the request to the extent that we directed the Task Force efforts to be “informed by some stakeholder input,” and that, during the longer-term review, the agency should “receive input from and interact with all key stakeholders.” Tasking Memorandum at 1, 2 (unnumbered).

¹⁰⁷ Amended Petition at 29.

¹⁰⁸ *Id.*

establish an ordered process for applying “lessons learned” from those events.¹⁰⁹ Petitioners claim that the Commission will be better served if it establishes such an ordered process; without it, “intervenor groups will be placed in the position of rushing to file contentions, rulemaking comments, and motions to reopen closed hearing records, based on whatever evaluations they are able to make of slowly-emerging and ever-evolving information from the accident.”¹¹⁰

Respondents disagree, arguing that “NRC regulations and case law already provide clear and uniform standards to determine the timeliness of motions to add new contentions or to reopen the record” and this situation should not be treated differently.¹¹¹

As a general matter, we agree with the respondents’ assessment. Our normal processes for filing new or amended contentions, submitting rulemaking comments, and motions (including motions to reopen) carry with them costs typically associated with participation in litigation and rulemaking. Participants accept these costs when they elect to participate in our proceedings; our rules require a level of engagement that far exceeds simple interest in the outcome of a proceeding. For example, our rules deliberately place a heavy burden on proponents of contentions, who must challenge aspects of license applications with specificity, backed up with substantive technical support; mere conclusions or speculation will not suffice.¹¹² An even heavier burden applies to motions to reopen.¹¹³

¹⁰⁹ *Id.* at 23.

¹¹⁰ *Id.* at 23-24.

¹¹¹ *Comanche Peak: Luminant Generation Company LLC’s Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011), at 17.

¹¹² *See, e.g., AmerGen Energy Company, LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 259-61 (2009).

¹¹³ *See, e.g., id.* at 286-87. *See generally* 10 C.F.R. § 2.326.

Following the events of September 11, 2001, in ruling on petitions to intervene, the admissibility of new or amended contentions filed after initial petitions, and motions to reopen, the Commission did not deviate from its usual application of the Part 2 procedural rules. In the *Private Fuel Storage* case, intervenor State of Utah petitioned the Board for admission of a late-filed contention related to the risk of a terrorist attack on the ISFSI. The Board applied the late-filed contention standards to Utah's petition, and found the contention timely,¹¹⁴ but nonetheless denied admission of both the safety and environmental aspects of the contention.¹¹⁵ The Board referred its rulings to the Commission for further consideration.¹¹⁶ The Commission accepted review of the Board's ruling on the safety and environmental aspects of the contention, but declined the referral with respect to the Board's application of the late-filing factors.¹¹⁷

In another example, a proceeding in which the adjudicatory record had closed, the intervenors submitted a contention arguing that the September 11 events required additional environmental analysis of the proposed action. The Board applied, and found that the intervenors had satisfied, our rules for reopening the record and for late-filed contentions, but found that the contention was inadmissible. The Board referred its ruling to the Commission,¹¹⁸ which subsequently affirmed the Board's decision.¹¹⁹

¹¹⁴ *Private Fuel Storage*, LBP-01-37, 54 NRC 476, 483-84 (2001).

¹¹⁵ *Id.* at 484-87.

¹¹⁶ *Id.* at 487-88.

¹¹⁷ *Private Fuel Storage*, CLI-02-3, 55 NRC 155, 156 & 156 n.9 (2002). The Commission ultimately affirmed the Board's decision. *Private Fuel Storage*, CLI-02-25, 56 NRC 340, 357 (2002).

¹¹⁸ *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-02-5, 55 NRC 131, 145 (2002) (involving a license amendment request for reconfiguring a spent fuel pool).

¹¹⁹ *Millstone*, CLI-02-27, 56 NRC 367, 371-72 (2002).

In these post-September 11 cases, the Boards applied the existing procedural rules for issues raised late in ongoing adjudications.¹²⁰ We see no reason to proceed differently here. Reactor adjudications should go forward, including those that may involve proposed contentions based on issues implicated by the Fukushima events. To the extent that the Fukushima events provide the basis for contentions appropriate for litigation in individual proceedings, our procedural rules contain ample provisions through which litigants may seek admission of new or amended contentions, seek stays of licensing board decisions, appeal adverse decisions, and file motions to reopen the record, as appropriate. And, should a licensing board decision raise novel legal or policy questions, we encourage the boards to certify to us, in accordance with 10 C.F.R. §§ 2.319(l) and 2.323(f), those questions that would benefit from our consideration. All of these procedural mechanisms contribute towards guaranteeing the propriety of adjudicatory decisions, and allow proceedings to continue with minimal disruption to all participants. Neither new procedures nor a separate timetable for raising new issues related to the Fukushima events are therefore warranted.¹²¹

¹²⁰ And, as discussed above, in the post-TMI time frame, the Commission, although providing for some modified procedures, continued to apply the existing rules for filing new contentions and motions to reopen the record. See June 1980 Policy Statement, 45 Fed. Reg. at 41,470; December 1980 Policy Statement, CLI-80-42, 12 NRC at 661; *Diablo Canyon*, CLI-81-5, 3 NRC at 364-65.

¹²¹ Indeed, participants in a number of matters have availed themselves of our rules, and seek to raise issues related to the Fukushima events. See *supra* n.91; *Motion to Amend Contentions 1, 2, and 5 of the CASE Revised Petition to Intervene*, (August 20, 2010) (Apr. 18, 2011); *Amended Contentions 1, 2 and 5* (Apr. 18, 2011) (filed in the *Turkey Point* proceeding prior to issuance of the Near-Term Report). The *Turkey Point* Board denied the revised intervention petition; the intervenor is seeking reconsideration of the Board decision, as well as admission of new contentions. See LBP-11-15, 73 NRC ____ (June 29, 2011) (slip op.); *Citizens Allied for Safe Energy, Inc., Motion for Reconsideration of Amended Contentions 1, 2, and 5 and New Contentions Following Fukushima Near-Term Task Force Recommendations* (Aug. 11, 2011, revised Aug. 16, 2011). Following issuance of the Near-Term Report, a number of new contentions have been filed. *E.g.*, *Contention Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report* (Aug. 10, 2011) (Bell Bend); *Contention Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report* (Aug. 11, 2011) (Watts Bar).

Although we do not establish a timetable for future adjudicatory pleadings today, we will monitor our ongoing adjudicatory proceedings and will reassess this determination if it becomes apparent that additional guidance would be appropriate. To this end, boards in particular proceedings are welcome to notify us if additional procedures would assist the board in effectively managing the filings arising from the Fukushima events.

5. *Separate Requests for Relief filed by Commonwealth of Massachusetts*

The Commonwealth of Massachusetts asked to be allowed to join the petitions to suspend, and asked for additional, *Pilgrim*-specific relief. The Commonwealth requests that we suspend the *Pilgrim* license renewal proceeding pending the Commission's consideration of "new and significant" information related to spent fuel pools, related risks, and regulatory requirements; and "[g]rant the Commonwealth and the public an additional reasonable time following completion of the release of the NRC's own findings on the lessons of Fukushima to comment on them and propose licensing or regulatory changes as appropriate."¹²² Consistent with our decisions on the requests for relief contained in the primary Petition, above, we deny the Commonwealth of Massachusetts's similar requests for relief. The Commonwealth's petition, like the primary Petition, fails to satisfy our three-part *Private Fuel Storage* test and therefore does not support suspending the *Pilgrim* proceeding pending evaluation of information obtained as a result of the events in Japan.

¹²² Commonwealth Petition at 13-14. The Commonwealth also requested an additional thirty days, through June 2, 2011, to make additional filings in the *Pilgrim* proceeding. *Id.* at 13. Because it now has made these filings, this request is moot. See generally *Commonwealth of Massachusetts' Petition for Waiver of 10 C.F.R. Part 51, Subpart A, Appendix B or, in the Alternative, Petition for Rulemaking to Rescind Regulations Excluding Consideration of Spent Fuel Storage Impacts from License Renewal Environmental Review* (June 2, 2011); *Commonwealth of Massachusetts' Conditional Motion to Suspend Pilgrim Nuclear Power Plant License Renewal Proceeding Pending Resolution of Petition for Rulemaking to Rescind Spent Fuel Pool Exclusion Regulations* (June 2, 2011). These new filings will be addressed separately, in the *Pilgrim* proceeding.

We also reject the Commonwealth's premature request for additional time to comment on the agency's post-Fukushima findings and to propose licensing or regulatory changes of its own. As noted above, we directed the Task Force to consider stakeholder input in the development of its recommendations.¹²³ There will be further opportunities for stakeholder input as the agency's review proceeds, and public and stakeholder participation will be sought consistent with the established processes for any actions that we direct the NRC Staff to undertake.¹²⁴

6. *Requests for Relief: Design Certification Rulemaking Proceedings*

In addition to the requests for relief contained within the initial Petition directed at both the AP1000 and the ESBWR design certification rulemakings, we received requests for relief directed specifically to the ongoing AP1000 design certification rulemaking. The additional requests were made in a petition filed by a set of public interest groups.¹²⁵ These petitioners seek immediate postponement of the ongoing AP1000 design certification rulemaking,¹²⁶ and request initiation by the Commission of "a comprehensive review of the Fukushima accident to

¹²³ With respect to stakeholder involvement, the Near-Term Report notes that members of the Task Force: (1) met with representatives of the Institute of Nuclear Power Operations to gather information on the industry's post-Fukushima actions; (2) met with representatives of the Federal Emergency Management Agency to discuss offsite emergency preparedness, and to obtain insights on the U.S. National Response Framework; and (3) "appropriately screened and considered information and suggestions received from internal and external stakeholders." Near-Term Report at 2. The Task Force also held a public meeting with stakeholders on July 28, 2011. Transcript, "Public Meeting on the Results of the NRC's Near-Term Task Force Review of NRC Processes and Regulations Following Events in Japan." (July 28, 2011). We have since provided additional direction to the Staff for engaging internal and external stakeholders in our processes. See "Engagement of Stakeholders Regarding the Events in Japan," Staff Requirements Memorandum COMWDM-11-0001/COMWCO-11-0001 (Aug. 22, 2011) (ML112340693).

¹²⁴ The Commonwealth is free at any time to file a petition for rulemaking, pursuant to 10 C.F.R. § 2.802, to issue, amend, or rescind any regulation.

¹²⁵ AP1000 Petition. The AP1000 petitioners are a subset of the petitioners. See *id.* at 1 for a complete listing. This has been placed on the AP1000 rulemaking docket.

¹²⁶ *Id.* at 23.

develop lessons learned for new reactor designs and the subsequent development and implementation of new regulatory safeguards to protect public health and safety.”¹²⁷ We deny the request for immediate postponement of the AP1000 and ESBWR design certification rulemakings for the same reasons we decline to suspend ongoing adjudications and licensing decisions. However, insofar as these and other filings made with respect to the AP1000 rulemaking bear on the propriety of the AP1000 design, or suggest that additional substantive work on the rulemaking is needed, these filings are referred to the NRC Staff for consideration as comments on the AP1000 design certification rulemaking amendment.¹²⁸ We also refer the elements of the Petition that relate to the ESBWR rulemaking to the Staff for consideration as a rulemaking comment.

III. REQUESTS TO SUSPEND ASSOCIATED RULEMAKING PETITIONS

The fifteen petitions for rulemaking that we received in mid-August are substantively similar.¹²⁹ The rulemaking petitions seek to rescind regulations in 10 C.F.R. Part 51—in particular, petitioners cite 10 C.F.R. Part 51, Appendix B, and 10 C.F.R. §§ 51.45, 51.53, and 51.95—that “draw generic conclusions about the environmental impacts of severe reactor and

¹²⁷ *Id.*

¹²⁸ See, e.g., *Additional Comments Supporting the Petition by the AP1000 Oversight Group et al. to Suspend AP1000 Design Certification Rulemaking Pending Evaluation of Fukushima Accident Implications on Design and Operational Procedures and Request for Expedited Consideration* (May 24, 2011); E-mails from John Runkle to Docket ID NRC-2010-0131 (dated May 10, 2011, at 6:19 p.m. and 6:21 p.m.); Bell, R.J., Nuclear Energy Institute, letter to Secretary, NRC, “Comments on AP1000 Design Certification Amendment; Docket ID NRC 2010-0131, *Federal Register* Notice 76 FR 10269” (May 10, 2011). To the limited extent the recently filed request to terminate the AP1000 design certification raises issues or makes requests analogous to those in the Petition or the AP1000 Petition, we refer those items also to the Staff for consideration as rulemaking comments. (See Runkle, John D., Esq., letter to Gregory B. Jaczko, Chairman, NRC, Re “Petition to Terminate the Rulemaking on Design Certification of the AP1000 Reactor and Declare It Null and Void (Docket ID NRC-2010-0131)” (June 16, 2011)).

¹²⁹ See n.27, *supra*. The NRC has not yet determined whether the petitions are acceptable for docketing under 10 C.F.R. § 2.802.

spent fuel pool accidents and that preclude consideration of those issues in individual licensing proceedings.”¹³⁰ Related to their petitions, the rulemaking petitioners seek suspension of the associated licensing proceedings, pending disposition of the rulemaking petitions.¹³¹

Section 2.802(d) of our rules provides that a rulemaking petitioner “may request the Commission to suspend all or any part of any licensing proceeding to which the petitioner is a party pending disposition of the petition for rulemaking.” Of the petitioners, most are parties to ongoing adjudicatory proceedings.¹³² Although the petitioners provide no separate grounds for suspending the proceedings pending disposition of their rulemaking petition, they do reiterate the argument that the NRC must suspend the proceedings while it considers the environmental impacts of the Near-Term Report, including with respect to severe reactor and spent fuel pool accidents.¹³³

For the reasons discussed above, the rulemaking petitioners’ request does not support suspension of the named proceedings at this time. These petitioners have not shown that continuation of licensing proceedings, pending consideration of the rulemaking petition, would “jeopardize the public health and safety, prove an obstacle to fair and efficient decisionmaking, or prevent appropriate implementation of any pertinent rule or policy changes that might emerge” from our continued evaluation of the impacts of the events in Japan.¹³⁴ As we stated

¹³⁰ Rulemaking Petition at 2 (unnumbered).

¹³¹ *Id.* at 3 (unnumbered).

¹³² This is not true in all cases. For example, Mr. Stilp, proponent of the suspension request in the *Bell Bend* matter, is not a party to an ongoing proceeding. We may nonetheless consider the request of a non-party as an exercise of our inherent supervisory powers over proceedings. See *Petition for Rulemaking to Amend 10 C.F.R. § 54.17(c)*, CLI-11-1, 74 NRC __ (Jan. 24, 2011) (slip op. at 2 n.5) (quoting *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 484-85 (2008)).

¹³³ Rulemaking Petition at 3 (unnumbered).

¹³⁴ *Private Fuel Storage*, CLI-01-26, 54 NRC at 380.

above, until we have a complete understanding of the Fukushima events, and have provided direction as to potential changes to regulatory requirements, we will not know whether, or the extent to which, an individual NEPA review might be impacted. If the NRC determines that changes to its current environmental assessment rules are warranted, we can revisit whether an individual licensing review or adjudication should be held in abeyance pending the outcome of a relevant rulemaking.

Additionally, the rules cited by the rulemaking petitioners that reach “generic conclusions” regarding severe reactor and spent fuel accidents appear to be those that pertain to license renewal.¹³⁵ None of the license renewal applications implicated here is on the verge of being granted, and those proceedings involve a number of issues unrelated to the rulemaking petitions; a request to suspend is therefore premature.¹³⁶ As we noted in the *Pilgrim* and *Vermont Yankee* matters, after considering the rulemaking petitions, the NRC will make a decision whether to deny the petitions, or proceed to make revisions to Part 51. Depending on the timing and outcome of the NRC Staff’s resolution of the rulemaking petitions, the Staff itself potentially could seek the Commission’s permission to suspend one or more of the generic determinations in the license renewal environmental rules, and include a new analysis in pending, plant-specific environmental impact statements.¹³⁷

¹³⁵ See 10 C.F.R. § 51.53(c)(3)(i), and Appendix B to Subpart A (excluding from individual analysis in an environmental report associated with a license renewal application certain “Category 1” issues, including severe accidents and onsite storage of spent fuel). It is not immediately clear that all petitioners would be affected even if the rulemaking petition is successful, in whole or in part. A number of the rulemaking petitioners are participants in combined license proceedings, associated with new reactors, where no such generic conclusions have been drawn.

¹³⁶ See *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station; Pilgrim Nuclear Power Station), CLI-07-3, 65 NRC 13, 22 n.37 (2007), *aff’d*, *Massachusetts v. United States*, 522 F.3d 115 (1st Cir. 2008).

¹³⁷ See *Vermont Yankee/Pilgrim*, CLI-07-3, 65 NRC at 22 (citing Final Rule, Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 61 Fed. Reg. 28,467, 28,472 (June 5, 1996) (providing that, if a commenter in a license renewal matter provides new, generic (continued . . .)

Given that the NRC will have the opportunity to further consider the concerns that the rulemaking petitioners have expressed, and as we further consider actions related to the Japan events, we decline to suspend any proceeding pending resolution of the rulemaking petition. No harm will accrue to the petitioners by continuation of ongoing proceedings, as we have discussed above. Nor does the ordinary burden to parties pursuing litigation pending the rulemaking justify disrupting our ongoing reviews.¹³⁸ For all of these reasons, we deny the rulemaking petitioners' request for suspension.

IV. CONCLUSION

For the reasons provided above, we:

- *Deny* petitioners' request to suspend licensing and standardized design certification decisions pending completion of the NRC Task Force's evaluation of the implications of the Fukushima accident and issuance of any proposed regulatory decisions and/or environmental analyses.
- *Deny* petitioners' request to suspend proceedings with respect to hearings and opportunities for public comment on reactor or spent fuel pool issues identified for investigation by the Task Force.
- *Deny* petitioners' request to suspend proceedings in connection with any other issues identified by the Task Force pending completion of the Task Force's investigation and issuance of any proposed regulatory decisions and/or environmental analyses.
- *Deny* petitioners' request for a separate generic NEPA analysis of the potential impacts of the Fukushima events.
- *Grant* petitioners' request for a safety analysis of the regulatory implications of the events at Fukushima, to the extent we directed the Task Force to undertake this analysis and to the extent we subsequently directed the Staff to further this analysis, incorporating stakeholder input as we have directed.
- *Refer* to the NRC Staff those elements of the Petition that relate specifically to design certification, for consideration as rulemaking comments. *Refer* to the NRC Staff for

information that demonstrates the analysis of an impact codified in the rule is incorrect, the Staff will seek Commission approval to either suspend the application of the rule on a generic basis with respect to the analysis, or delay granting the affected license renewal application (and possibly other pending applications) until its analysis is completed, and the rule amended.)

¹³⁸ See *Petition to Amend 10 C.F.R. § 54.17(c)*, CLI-11-1, 74 NRC at __ (slip op. at 5).

resolution as comments in the AP1000 rulemaking proceeding, all additional filings relevant to the AP1000 rulemaking proceeding.

- *Deny* petitioners' request to revise our procedural rules.
- *Deny* the requests for relief made by the Commonwealth of Massachusetts.
- *Deny* the requests to suspend certain of the captioned proceedings pending resolution of petitions for rulemaking arising from the events in Japan.

IT IS SO ORDERED.¹³⁹

For the Commission

[NRC SEAL]

/RA/

Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this 9th day of September, 2011.

¹³⁹ Petitioners also request that we suspend all decisions and proceedings regarding all licensing and related rulemaking proceedings, "pending the outcome of any *independent* investigation of the Fukushima accident that may be ordered by Congress or the President or instigated by the Commission" and request that the President establish an independent investigation of the Fukushima accident and its implications, similar to the President's Commission on the Accident at Three Mile Island. Amended Petition at 3 (emphasis in original). The initiation of independent investigations by Congress or the President lies beyond the scope of our authority; to date no such investigations have been initiated. We have confidence in the objectivity of our Task Force and ongoing agency review and have no plans to establish an additional investigatory body at this time.

Commissioner Apostolakis's approval does not pertain to the *Pilgrim* and *Indian Point* license renewal proceedings, in which he is not participating.

APPENDIX

I. Initial and Revised Petitions

1. *Union Electric Company, d/b/a Ameren Missouri* (Callaway Plant Unit 2), Missouri Coalition for the Environment, Missourians for Safe Energy: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 15, 2011); *Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011); *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011).
2. AP1000 Design Certification Amendment (10 C.F.R. Part 52), AP1000 Oversight Group, Bellefonte Efficiency and Sustainability Team, Blue Ridge Environmental Defense League, Citizens Allied for Safe Energy, Friends of the Earth, Georgia Women's Action for New Directions, Green Party of Florida, Mothers Against Tennessee River Radiation, North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Service, Nuclear Watch South, South Carolina Chapter-Sierra Club, Southern Alliance for Clean Energy: *Petition to Suspend AP1000 Design Certification Rulemaking Pending Evaluation of Fukushima Accident Implications on Design and Operational Procedures and Request for Expedited Consideration* (Apr. 6, 2011).
3. *Calvert Cliffs Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), Nuclear Information and Resource Service: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 14, 2011); *Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 21, 2011); *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 21, 2011).
4. *Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), Keith Gunter, Michael J. Keegan, Edward McArdle, Leonard Mandeville, Frank Mantei, Marcee Meyers, Henry Newnan, Sierra Club (Michigan Chapter), Don't Waste Michigan, Inc., Citizens Environment Alliance of Southwestern Ontario, Beyond Nuclear, George Steinman, Shirley Steinman, Harold L. Stokes, Citizens for Alternatives to Chemical Contamination, Marilyn R. Timmer: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 14, 2011); *Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 21, 2011).
5. *Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 and 2), Blue Ridge Environmental Defense League: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011).
6. *Energy Northwest* (Columbia Generating Station), Northwest Environmental Advocates: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related*

APPENDIX

Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 18, 2011).

7. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), *Pilgrim Watch: Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 14, 2011); *Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011); *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011).

8. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), *Commonwealth of Massachusetts: Commonwealth of Massachusetts Response to Commission Order Regarding Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident, Joinder in Petition to Suspend the License Renewal Proceeding for the Pilgrim Nuclear Plant, and Request for Additional Relief* (May 2, 2011).

9. *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Station, Units 2 and 3), *Hudson River Sloop Clearwater, Inc.: Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011).

10. *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), *Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, Green Party of Ohio: Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 14, 2011); *Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 21, 2011).

11. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), *Citizens Allied for Safe Energy, Inc.: Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 14, 2011); *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011).

12. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), *Village of Pinecrest, Florida: Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011).

13. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), *Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 14, 2011); *Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation*

APPENDIX

of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 18, 2011); Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 18, 2011).

14. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Beyond Nuclear: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 18, 2011); Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 19, 2011); Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 19, 2011).*

15. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Friends of the Coast, New England Coalition: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 15, 2011); Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 20, 2011); Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 20, 2011).*

16. Pacific Gas and Electric Co. (Diablo Canyon Power Plant, Units 1 and 2), San Luis Obispo Mothers for Peace: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 14, 2011); Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 18, 2011); Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 18, 2011).*

17. PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), Gene Stilp: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 14, 2011); Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 19, 2011).*

18. Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 18, 2011).*

19. Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 14, 2011); Amendment*

APPENDIX

and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 18, 2011); *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011).

20. *South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper)* (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011).

21. *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011).

22. *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 14, 2011); *Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011); *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011).

23. *Tennessee Valley Authority* (Bellefonte Nuclear Power Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Bellefonte Efficiency and Sustainability Team: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011).

24. *Tennessee Valley Authority* (Watts Bar, Unit 2), Southern Alliance for Clean Energy: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 14, 2011); *Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011); *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011).

25. *Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative* (North Anna, Unit 3), Blue Ridge Environmental Defense League, People's Alliance for Clean Energy: *Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 18, 2011).

APPENDIX

II. Supplemental Filings

1. *Union Electric Company, d/b/a Ameren Missouri* (Callaway Plant Unit 2), Missouri Coalition for the Environment, Missourians for Safe Energy: *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 20, 2011).
2. AP1000 Design Certification Amendment (10 C.F.R. Part 52), AP1000 Oversight Group, Bellefonte Efficiency and Sustainability Team, Blue Ridge Environmental Defense League, Citizens Allied for Safe Energy, Friends of the Earth, Georgia Women's Action for New Directions, Green Party of Florida, Mothers Against Tennessee River Radiation, North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Service, Nuclear Watch South, South Carolina Chapter-Sierra Club, Southern Alliance for Clean Energy: *Inquiry by the AP1000 Oversight Group et al. on the Status of Their Petition to Suspend AP1000 Design Certification Rulemaking Pending Evaluation of Fukushima Accident Implications on Design and Operational Procedures and Request for Expedited Consideration* (Apr. 29, 2011); E-mails from John Runkle to Docket ID NRC-2010-0131 (dated May 10, 2011, at 6:19 p.m. and 6:21 p.m.); *Additional Comments Supporting the Petition by the AP1000 Oversight Group et al. to Suspend AP1000 Design Certification Rulemaking Pending Evaluation of Fukushima Accident Implications on Design and Operational Procedures and Request for Expedited Consideration* (May 24, 2011).
3. *Calvert Cliffs Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), Nuclear Information and Resource Service: *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 21, 2011).
4. *Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), Keith Gunter, Michael J. Keegan, Edward McArdle, Leonard Mandeville, Frank Mantei, Marcee Meyers, Henry Newnan, Sierra Club (Michigan Chapter), Don't Waste Michigan, Inc., Citizens Environment Alliance of Southwestern Ontario, Beyond Nuclear, George Steinman, Shirley Steinman, Harold L. Stokes, Citizens for Alternatives to Chemical Contamination, Marilyn R. Timmer: *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 21, 2011).
5. *Energy Northwest* (Columbia Generating Station), Northwest Environmental Advocates: *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 20, 2011).
6. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), Pilgrim Watch: *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011).
7. *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Station, Units 2 and 3), Hudson River Sloop Clearwater, Inc.: *Declaration of Dr. Arjun Makhijani in Support of*

APPENDIX

Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident (Apr. 19, 2011).

8. *FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, Green Party of Ohio: Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 21, 2011).

9. *Florida Power & Light Co. (Turkey Point, Units 6 and 7), Village of Pinecrest, Florida: Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 20, 2011).

10. *Florida Power & Light Co. (Turkey Point, Units 6 and 7), Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 20, 2011).

11. *NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Beyond Nuclear: Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 20, 2011).

12. *NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Friends of the Coast, New England Coalition: Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 20, 2011).

13. *Pacific Gas and Electric Co. (Diablo Canyon Power Plant, Units 1 and 2), San Luis Obispo Mothers for Peace: Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011).

14. *PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), Gene Stilp: Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011).

15. *Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: Supplement to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011); *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011).

APPENDIX

16. *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service: *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011).
17. *South Carolina Electric & Gas Co. and South Carolina Public Service Authority* (also referred to as *Santee Cooper*) (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011).
18. *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League: *Supplement to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 20, 2011); *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 20, 2011).
19. *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy: *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 20, 2011).
20. *Tennessee Valley Authority* (Watts Bar, Unit 2), Southern Alliance for Clean Energy: *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011).
21. *Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative* (North Anna, Unit 3), Blue Ridge Environmental Defense League, People's Alliance for Clean Energy: *Supplement to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Apr. 20, 2011), *Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident* (Apr. 19, 2011).

III. Responsive Pleadings

1. Served in all captioned proceedings except design certification rulemaking proceedings: *Brief of the Nuclear Energy Institute as Amicus Curiae in Opposition to the Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions* (May 2, 2011).
2. Served in all captioned proceedings except design certification rulemaking proceedings: *NRC Staff Answer to Emergency Petition to Suspend All Pending Reactor Licensing Decisions*

APPENDIX

and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (May 2, 2011).

3. *Union Electric Company, d/b/a Ameren Missouri* (Callaway Plant Unit 2), Missouri Coalition for the Environment, Missourians for Safe Energy: *Ameren Missouri Response to Emergency Petition* (May 2, 2011).
4. AP1000 Design Certification Amendment (10 C.F.R. Part 52), AP1000 Oversight Group, Bellefonte Efficiency and Sustainability Team, Blue Ridge Environmental Defense League, Citizens Allied for Safe Energy, Friends of the Earth, Georgia Women's Action for New Directions, Green Party of Florida, Mothers Against Tennessee River Radiation, North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Service, Nuclear Watch South, South Carolina Chapter-Sierra Club, Southern Alliance for Clean Energy: Ziesing, R.F., Westinghouse Electric Co., letter to Annette L. Vietti-Cook, NRC, "Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident" (May 2, 2011); Bell, R.J., Nuclear Energy Institute, letter to Secretary, NRC, "Comments on AP1000 Design Certification Amendment; Docket ID NRC 2010-0131, Federal Register Notice 76 FR 10269" (May 10, 2011); Ziesing, R.F., Westinghouse Electric Co., letter to Secretary, NRC, Subject: "Westinghouse Comments in the AP1000® Design Certification Amendment Rulemaking in Response to Petitions to Suspend Rulemaking" (May 10, 2011).
5. *Calvert Cliffs Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), Nuclear Information and Resource Service: *Opposition to Emergency Petition to Suspend Licensing Decisions and Proceedings* (May 2, 2011).
6. *Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), Keith Gunter, Michael J. Keegan, Edward McArdle, Leonard Mandeville, Frank Mantei, Marcee Meyers, Henry Newnan, Sierra Club (Michigan Chapter), Don't Waste Michigan, Inc., Citizens Environment Alliance of Southwestern Ontario, Beyond Nuclear, George Steinman, Shirley Steinman, Harold L. Stokes, Citizens for Alternatives to Chemical Contamination, Marilyn R. Timmer: *Opposition to Emergency Petition to Suspend Licensing Decisions and Proceedings* (May 2, 2011).
7. *Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 and 2), Blue Ridge Environmental Defense League: *Answer of Duke Energy Carolinas LLC Opposing Petition to Suspend All Pending Reactor Licensing Proceedings* (May 2, 2011).
8. *Energy Northwest* (Columbia Generating Station), Northwest Environmental Advocates: *Energy Northwest's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011).
9. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), Pilgrim Watch: *Entergy's Answer Opposing Petition to Suspend Pending Licensing Proceedings* (May 2, 2011).
10. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), Commonwealth of Massachusetts: *Entergy's Answer Opposing Commonwealth's Joinder in Petition to Suspend the License Renewal Proceedings for the Pilgrim Nuclear Power Plant and Request for Additional Relief* (May 12, 2011).

APPENDIX

11. *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Station, Units 2 and 3), Hudson River Sloop Clearwater, Inc.: *Entergy's Answer Opposing Petition to Suspend Pending Licensing Proceedings* (May 2, 2011).
12. ESBWR Design Certification Amendment (10 C.F.R. Part 52), Head, Jerald G., GE Hitachi Nuclear Energy, letter to Secretary, NRC, Subject: "Answer to Petition; SECY Order PR 52 (76FR16549), Docketed 04/19/2011 (NRC Accession No. ML111101277); Proposed Rule, ESBWR Design Certification, NRC-2010-0135, RIN 3150-AI85, 76 Federal Register 16549 (March 24, 2011)" (May 2, 2011).
13. *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, Green Party of Ohio: *FirstEnergy's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011).
14. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), Citizens Allied for Safe Energy, Inc.; Village of Pinecrest, Florida; Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: *Florida Power & Light Response Opposing Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident* (May 2, 2011).
15. *Luminant Generation Co. LLC* (Comanche Peak Nuclear Power Plant, Units 3 and 4), Public Citizen, SEED Coalition: *Luminant Generation Company LLC's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011).
16. *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), Beyond Nuclear; Friends of the Coast, New England Coalition: *Answer of NextEra Energy Seabrook LLC Opposing Petition to Suspend Pending Licensing Proceedings* (May 2, 2011).
17. *Pacific Gas and Electric Co.* (Diablo Canyon Power Plant, Units 1 and 2), San Luis Obispo Mothers for Peace: *Opposition to Emergency Petition to Suspend Licensing Decisions and Proceedings* (May 2, 2011).
18. *PPL Bell Bend, LLC* (Bell Bend Nuclear Power Plant), Gene Stilp: *Opposition to Emergency Petition* (May 2, 2011).
19. *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: *Progress Energy Carolina, Inc.'s Response Opposing Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident* (May 2, 2011).
20. *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service: *Progress Energy Florida, Inc.'s Response Opposing Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident* (May 2, 2011).
21. *South Carolina Electric & Gas Co. and South Carolina Public Service Authority* (also referred to as *Santee Cooper*) (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the

APPENDIX

Earth, South Carolina Chapter of Sierra Club: *South Carolina Electric & Gas Company's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011).

22. Nuclear Innovation North America LLC (South Texas Project, Units 3 and 4), Public Citizen, SEED Coalition: *Nuclear Innovation North America LLC's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011).

23. Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League (Runkle); Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy (Goldstein): *Southern Nuclear Operating Company's Answer to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 2, 2011).

24. Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Bellefonte Efficiency and Sustainability Team: *Tennessee Valley Authority's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011).

25. Tennessee Valley Authority (Watts Bar, Unit 2), Southern Alliance for Clean Energy: *Tennessee Valley Authority's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings* (May 2, 2011).

26. Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative (North Anna, Unit 3), Blue Ridge Environmental Defense League, People's Alliance for Clean Energy: *Dominion's Answer Opposing Petition to Suspend Licensing Proceedings* (May 2, 2011).

IV. Reply Pleadings

1. Union Electric Company, d/b/a Ameren Missouri (Callaway Plant Unit 2), Missouri Coalition for the Environment, Missourians for Safe Energy: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 6, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 6, 2011); *Certificate Regarding Consultation* (May 6, 2011).

2. AP1000 Design Certification Amendment (10 C.F.R. Part 52), AP1000 Oversight Group, Bellefonte Efficiency and Sustainability Team, Blue Ridge Environmental Defense League, Citizens Allied for Safe Energy, Friends of the Earth, Georgia Women's Action for New Directions, Green Party of Florida, Mothers Against Tennessee River Radiation, North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Service, Nuclear Watch South, South Carolina Chapter-Sierra Club, Southern Alliance for Clean Energy: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 10, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 10, 2011).

APPENDIX

3. *Calvert Cliffs Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), Nuclear Information and Resource Service: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 9, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 9, 2011); *Certificate Regarding Consultation* (May 9, 2011).
4. *Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), Keith Gunter, Michael J. Keegan, Edward McArdle, Leonard Mandeville, Frank Mantei, Marcee Meyers, Henry Newnan, Sierra Club (Michigan Chapter), Don't Waste Michigan, Inc., Citizens Environment Alliance of Southwestern Ontario, Beyond Nuclear, George Steinman, Shirley Steinman, Harold L. Stokes, Citizens for Alternatives to Chemical Contamination, Marilyn R. Timmer: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 6, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 6, 2011); *Certificate of Consultation* (May 6, 2011).
5. *Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 and 2), Blue Ridge Environmental Defense League: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 12, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 12, 2011); *Certificate Regarding Consultation* (May 12, 2011).
6. *Energy Northwest* (Columbia Generating Station), Northwest Environmental Advocates: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 9, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 9, 2011); *Certificate Regarding Consultation* (May 9, 2011).
7. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), Pilgrim Watch: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 6, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 6, 2011); *Certificate Regarding Consultation* (May 6, 2011).
8. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), Commonwealth of Massachusetts: *Commonwealth of Massachusetts Motion to Reply to Entergy's Answer Opposing Commonwealth's Joinder in Petition to Suspend the License Renewal Proceeding for the Pilgrim Nuclear Power Plant and Request for Additional Relief* (May 19, 2011); *Commonwealth of Massachusetts Reply to Entergy's Answer Opposing Commonwealth's Joinder in Petition to Suspend the License Renewal Proceeding for the Pilgrim Nuclear Power Plant and Request for Additional Relief* (May 19, 2011); *Commonwealth of Massachusetts Motion to Reply to NRC Staff and Entergy Oppositions to the Commonwealth of Massachusetts Motion to Suspend the License Renewal Proceeding for the Pilgrim Nuclear*

APPENDIX

Power Plant (June 16, 2011) (with integrated *Certificate of Counsel*); *Commonwealth of Massachusetts Reply to Oppositions of NRC Staff and Entergy to Commonwealth Motion to Suspend Pilgrim License Renewal Proceeding* (June 16, 2011).

9. *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Station, Units 2 and 3), *Hudson River Sloop Clearwater, Inc.*: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 6, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 6, 2011); *Certificate Regarding Consultation* (May 6, 2011).

10. *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), *Citizens Environment Alliance of Southwestern Ontario*, *Don't Waste Michigan*, *Green Party of Ohio*: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 6, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 6, 2011); *Certificate of Consultation* (May 6, 2011).

11. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), *Citizens Allied for Safe Energy, Inc.*: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 9, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 9, 2011).

12. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), *Village of Pinecrest, Florida*: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 6, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 6, 2011); *Certificate Regarding Consultation* (May 6, 2011).

13. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), *Dan Kipnis*, *Mark Oncavage*, *National Parks Conservation Association*, *Southern Alliance for Clean Energy*: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 6, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 6, 2011); *Certificate Regarding Consultation* (May 6, 2011).

14. *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), *Beyond Nuclear*: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 6, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 6, 2011); *Certificate Regarding Consultation* (May 6, 2011).

15. *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), *Friends of the Coast*, *New England Coalition*: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order*

APPENDIX

to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (May 6, 2011); Certificate Regarding Consultation (May 6, 2011).

16. *Pacific Gas and Electric Co. (Diablo Canyon Power Plant, Units 1 and 2), San Luis Obispo Mothers for Peace: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (May 6, 2011); Certificate of Counsel Regarding Consultation (May 6, 2011).*

17. *Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 9, 2011); Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (May 9, 2011); Certificate Regarding Consultation (May 9, 2011).*

18. *Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (May 6, 2011); Certificate Regarding Consultation (May 6, 2011).*

19. *South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 9, 2011); Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (May 9, 2011); Certificate Regarding Consultation (May 9, 2011).*

20. *Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (May 6, 2011); Certificate Regarding Consultation (May 6, 2011).*

21. *Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Bellefonte Efficiency and Sustainability Team: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 12, 2011); Petitioners' Reply to Responses to Emergency Petition to Suspend All*

APPENDIX

Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (May 12, 2011); *Certificate Regarding Consultation* (May 12, 2011).

22. Tennessee Valley Authority (Watts Bar, Unit 2), Southern Alliance for Clean Energy: *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 6, 2011); *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 6, 2011); *Certificate of Counsel Regarding Consultation* (May 6, 2011).

23. Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative (North Anna, Unit 3), Blue Ridge Environmental Defense League, People's Alliance for Clean Energy: *Petitioners' Reply to Responses to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (May 9, 2011); *Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 9, 2011); *Certificate Regarding Consultation* (May 9, 2011).

V. Responses to Reply Pleadings

1. Served in all captioned proceedings except design certification rulemaking proceedings: *NRC Staff's Answer to Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 16, 2011).

2. Union Electric Company, d/b/a Ameren Missouri (Callaway Plant Unit 2), Missouri Coalition for the Environment, Missourians for Safe Energy: *Ameren Missouri's Response Opposing Motion to Permit Filing of Unauthorized Reply* (May 16, 2011).

3. Calvert Cliffs Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), Nuclear Information and Resource Service: *Applicants' Response to Motion for Leave to Reply* (May 16, 2011).

4. Detroit Edison Co. (Fermi Nuclear Power Plant, Unit 3), Keith Gunter, Michael J. Keegan, Edward McArdle, Leonard Mandeville, Frank Mantei, Marcee Meyers, Henry Newnan, Sierra Club (Michigan Chapter), Don't Waste Michigan, Inc., Citizens Environment Alliance of Southwestern Ontario, Beyond Nuclear, George Steinman, Shirley Steinman, Harold L. Stokes, Citizens for Alternatives to Chemical Contamination, Marilyn R. Timmer: *Applicant's Response to Motion for Leave to Reply* (May 16, 2011).

5. Duke Energy Carolinas, LLC (William States Lee III Nuclear Station, Units 1 and 2), Blue Ridge Environmental Defense League: *Duke Energy's Answer Opposing Motion to Allow Unauthorized Reply* (May 23, 2011).

6. Energy Northwest (Columbia Generating Station), Northwest Environmental Advocates: *Energy Northwest's Answer in Opposition to Petitioners' Motion to Permit a Consolidated Reply* (May 16, 2011).

7. Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), Pilgrim Watch; and Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Station, Units 2 and 3), Hudson River Sloop Clearwater, Inc.: *Entergy's Answer Opposing Motion to Permit Unauthorized Reply* (May 16, 2011).

APPENDIX

8. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), Commonwealth of Massachusetts: *Entergy's Answer Opposing Commonwealth of Massachusetts Motion to Permit Unauthorized Reply* (May 31, 2011); *Entergy Answer Opposing Commonwealth of Massachusetts Motion to Permit Unauthorized Reply to Entergy and NRC Staff Answers Opposing Conditional Motion for Suspension* (June 24, 2011).
9. *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, Green Party of Ohio: *FirstEnergy's Answer Opposing Petitioners' Motion to Permit a Consolidated Reply* (May 16, 2011).
10. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), Citizens Allied for Safe Energy, Inc.; Village of Pinecrest, Florida; Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: *Florida Power & Light Company's Response Opposing Motion to Permit Filing of Unauthorized Reply* (May 16, 2011).
11. *Luminant Generation Co. LLC* (Comanche Peak Nuclear Power Plant, Units 3 and 4), Public Citizen, SEED Coalition: *Luminant Generation Company LLC's Answer in Opposition to Petitioners' Motion to Permit a Consolidated Reply* (May 16, 2011).
12. *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), Beyond Nuclear; Friends of the Coast, New England Coalition: *Answer of NextEra Energy Seabrook, LLC Opposing Motion to Permit Unauthorized Reply* (May 16, 2011).
13. *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: *Progress Energy Carolinas, Inc.'s Response Opposing Motion to Permit Filing of Unauthorized Reply* (May 16, 2011).
14. *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service: *Progress Energy Florida, Inc.'s Response Opposing Motion to Permit Filing of Unauthorized Reply* (May 16, 2011).
15. *South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper)* (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: *South Carolina Electric & Gas Company's Answer in Opposition to Petitioners' Motion to Permit a Consolidated Reply* (May 16, 2011).
16. *Nuclear Innovation North America LLC* (South Texas Project, Units 3 and 4), Public Citizen, SEED Coalition: *Nuclear Innovation North America LLC's Answer Opposing Petitioners' Motion to Permit a Consolidated Reply* (May 16, 2011).
17. *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League (Runkle); Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy (Goldstein): *Southern Nuclear Operating Company's Answer in Opposition to Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply* (May 16, 2011).
18. *Tennessee Valley Authority* (Bellefonte Nuclear Power Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Bellefonte Efficiency and Sustainability Team: *Tennessee Valley Authority's Answer Opposing Petitioners' Motion to Permit a Consolidated Reply* (May 16,

APPENDIX

2011); *Tennessee Valley Authority's Answer Opposing Petitioners' Motion to Permit a Consolidated Reply* (May 16, 2011) (corrected certificate of service).

19. *Tennessee Valley Authority* (Watts Bar, Unit 2), Southern Alliance for Clean Energy: *Tennessee Valley Authority's Answer Opposing Petitioners' Motion to Permit a Consolidated Reply* (May 16, 2011); *Tennessee Valley Authority's Answer Opposing Petitioners' Motion to Permit a Consolidated Reply* (May 20, 2011) (corrected certificate of service).

20. *Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative* (North Anna, Unit 3), Blue Ridge Environmental Defense League, People's Alliance for Clean Energy: *Dominion's Answer Opposing Motion to Permit Unauthorized Reply* (May 19, 2011).

VI. Supplemental Comments and Supporting Declarations

1. AP1000 Design Certification Amendment (10 C.F.R. Part 52), AP1000 Oversight Group, Bellefonte Efficiency and Sustainability Team, Blue Ridge Environmental Defense League, Citizens Allied for Safe Energy, Friends of the Earth, Georgia Women's Action for New Directions, Green Party of Florida, Mothers Against Tennessee River Radiation, North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Service, Nuclear Watch South, South Carolina Chapter-Sierra Club, Southern Alliance for Clean Energy: *Petition to Terminate the Rulemaking on Design Certification of the AP1000 Reactor and Declare it Null and Void* (June 16, 2011) (*SECOND PETITION, rather than Supplemental Comments*).

2. ESBWR Design Certification Amendment (10 C.F.R. Part 52), Beyond Nuclear, Citizens Environment Alliance, Citizens for Alternatives to Chemical Contamination, Don't Waste Michigan, Sierra Club-MI Chapter: *Supplemental Comments by the ESBWR Intervenors et al. Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report* (Aug. 11, 2011).

3. *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: *Supplemental Comments by NC WARN in Support of Emergency Petition Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report* (Aug. 11, 2011); *Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Aug. 8, 2011).

4. *South Carolina Electric & Gas Co. and South Carolina Public Service Authority* (also referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: *Supplemental Comments by Friends of the Earth and the South Carolina Chapter of the Sierra Club in Support of Emergency Petition Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report* (Aug. 10, 2011); *Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Aug. 8, 2011).

5. *Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative* (North Anna, Unit 3), Blue Ridge Environmental Defense League: *Supplemental Comments by the Blue Ridge Environmental Defense League in Support of Emergency Petition Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report* (Aug. 11, 2011); *Declaration of Dr. Arjun*

APPENDIX

Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).

VII. Answers to Supplemental Comments

1. AP1000 Design Certification Amendment (10 C.F.R. Part 52), AP1000 Oversight Group, Bellefonte Efficiency and Sustainability Team, Blue Ridge Environmental Defense League, Citizens Allied for Safe Energy, Friends of the Earth, Georgia Women's Action for New Directions, Green Party of Florida, Mothers Against Tennessee River Radiation, North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Service, Nuclear Watch South, South Carolina Chapter-Sierra Club, Southern Alliance for Clean Energy: Ziesing, R.F., Westinghouse Electric Co., letter to Annette L. Vietti-Cook, NRC, "Petition to Terminate the Rulemaking on Design Certification of the AP1000 Reactor and Declare it Null and Void" (Aug. 15, 2011) (*RESPONSE TO SECOND PETITION, rather than Answer to Supplemental Comments*).
2. *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: *Progress Energy Carolina's Objection to the North Carolina Waste Awareness and Reduction Network's Supplemental Comments Relating to Petition to Suspend Licensing Proceedings* (Aug. 22, 2011).
3. *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: *NRC Staff's Answer to Supplemental Comments in Support of Emergency Petition Regarding Fukushima Task Force Report* (Aug. 22, 2011).
4. *South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper)* (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: *South Carolina Electric & Gas Company's Answer in Opposition to Supplemental Comments Regarding Fukushima Task Force Report* (Aug. 22, 2011).
5. *South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper)* (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: *NRC Staff Answer to Supplemental Comments in Support of Emergency Petition Regarding Fukushima Task Force Report* (Aug. 22, 2011).
6. *Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative* (North Anna, Unit 3), Blue Ridge Environmental Defense League: *Dominion's Objection to the Blue Ridge Environmental League's Supplemental Comments Relating to Petition to Suspend Pending Licensing Proceedings* (Aug. 22, 2011).
7. *Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative* (North Anna, Unit 3), Blue Ridge Environmental Defense League: *NRC Staff's Answer to Supplemental Comments in Support of Emergency Petition Regarding Fukushima Task Force Report* (Aug. 22, 2011).

VIII. Rulemaking Petitions/Requests to Suspend; Supporting Declarations

1. *Calvert Cliffs Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), Nuclear Information and Resource Service: *Rulemaking Petition to Rescind Prohibition Against*

APPENDIX

Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Requests to Suspend Licensing Decision (Aug. 11, 2011); *Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Aug. 8, 2011).

2. *Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), Keith Gunter, Michael J. Keegan, Edward McArdle, Leonard Mandeville, Frank Mantei, Marcee Meyers, Henry Newnan, Sierra Club, Don't Waste Michigan, Inc., Citizens Environment Alliance of Southwestern Ontario, Beyond Nuclear, George Steinman, Shirley Steinman, Harold L. Stokes, Citizens for Alternatives to Chemical Contamination, Marilyn R. Timmer, Derek Coronado, Sandra Bihn, Richard Coronado: *Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Requests to Suspend Licensing Decision* (Aug. 11, 2011); *Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Aug. 8, 2011).

3. *Energy Northwest* (Columbia Generating Station), Northwest Environmental Advocates: *Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision* (Aug. 22, 2011); *Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Aug. 8, 2011).

4. *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Station, Units 2 and 3), Hudson River Sloop Clearwater, Inc., Riverkeeper: *Riverkeeper, Inc. and Hudson River Sloop Clearwater, Inc. Rulemaking Petition to Rescind Prohibition Against Consideration to Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision* (Aug. 11, 2011); *Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Aug. 8, 2011).

5. *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, Green Party of Ohio, Beyond Nuclear: *Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents And Request to Suspend Licensing Decision* (Aug. 12, 2011); *Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Aug. 8, 2011).

6. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), Citizens Allied for Safe Energy, Inc.: *Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents And Request to Suspend Licensing Decision* (Aug. 12, 2011); *Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Aug. 8, 2011).

7. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: *Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision* (Aug. 11, 2011); *Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of*

APPENDIX

NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).

8. *Luminant Generation Co. LLC (Comanche Peak Nuclear Power Plant, Units 3 and 4), Public Citizen, SEED Coalition: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).*

9. *NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Beyond Nuclear, Seacoast Anti-Pollution League, Sierra Club of New Hampshire: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).*

10. *NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Friends of the Coast, New England Coalition: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).*

11. *Pacific Gas and Electric Co. (Diablo Canyon Power Plant, Units 1 and 2), San Luis Obispo Mothers for Peace: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).*

12. *PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), Gene Stilp: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 10, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).*

13. *Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service, The Ecology Party of Florida, Green Party of Florida: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).*

14. *Nuclear Innovation North America LLC (South Texas Project, Units 3 and 4), Public Citizen, SEED Coalition: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Sever Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding*

APPENDIX

Safety and Environmental Significance of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).

15. *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy: *Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision* (Aug. 11, 2011); *Declaration of Dr. Arjun Makhijani Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Aug. 8, 2011).

16. *Tennessee Valley Authority* (Watts Bar, Unit 2), Southern Alliance for Clean Energy: *Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision* (Aug. 11, 2011); *Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident* (Aug. 8, 2011).

IX. Responses to Rulemaking Petitions/Requests to Suspend

1. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), Citizens Allied for Safe Energy, Inc.: *Florida Power & Light Company's Response Opposing Request for Stay of Licensing Proceedings Pending Resolution of Rulemaking Petition* (Aug. 20, 2011).

2. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: *Florida Power & Light Company's Response Opposing Request for Stay of Licensing Proceedings Pending Resolution of Rulemaking Petition* (Aug. 20, 2011).

3. *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), Beyond Nuclear, Seacoast Anti-Pollution League, Sierra Club of New Hampshire: *NextEra Energy Seabrook, LLC's Response Opposing Request to Suspend Licensing Proceedings Pending Resolution of Rulemaking Petition* (Aug. 22, 2011).

4. *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), Friends of the Coast, New England Coalition: *NextEra Energy Seabrook, LLC's Response Opposing Request to Suspend Licensing Proceedings Pending Resolution of Rulemaking Petition* (Aug. 22, 2011).

5. *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service, The Ecology Party of Florida, Green Party of Florida: *Progress Energy Florida, Inc.'s Response Opposing Request for Suspension of Licensing Proceedings Pending Resolution of Rulemaking Petition* (Aug. 22, 2011).

X. Reply to Responses to Rulemaking Petitions/Requests to Suspend

1. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: *Joint Intervenor's Motion for Leave to Reply to Florida Power & Light Company's Response Opposing Request for Stay of Licensing Proceedings Pending Resolution of Rulemaking Petition* (Aug. 29, 2011).

APPENDIX

XI. Opposition to Reply to Responses to Rulemaking Petitions/Requests to Suspend

1. *Florida Power & Light Co.* (Turkey Point, Units 6 and 7), Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: *Florida Power & Light Company's Response Opposing Joint Intervenors' Motion for Leave to Reply* (Sept. 8, 2011).