May 2, 2011

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Commission

In the Matter of	)		
	)		
Progress Energy Carolinas, Inc	)	Docket Nos.	52-022-COL
	)		52-023-COL
(Shearon Harris Nuclear Power Plant,	)		
Units 2 and 3)	)		
	)	ASLBP No.	08-868-04-COL
(Combined License Application)	)		

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

Pursuant to the Commission's Order of April 19, 2011, Applicant Progress Energy Carolina, Inc. ("Progress") hereby responds to and opposes the April 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, which was filed in the above-captioned proceeding by North Carolina Waste Awareness and Reduction Network ("NC WARN") ("Petition").[1]

The same Petition has been filed in twenty-six separate proceedings by fifty individuals and organizations. The Petition requests that the Commission take a two-page list of actions, which can be summarized as including: 1) suspension of all decisions, licensing and rulemaking proceedings, pending completion of the NRC's review of the Fukushima accident; 2) suspension

[1] On April 19, 2011, NC WARN also submitted a 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 ("Makhijani Declaration"). The Makhijani Declaration is discussed below.

of all proceedings, hearings or opportunities for public comment on any issue considered in that review; 3) performance of an environmental analysis of the accident; 4) performance of a safety analysis of the accident's regulatory implications; 5) establishment of procedures and a timetable for raising of new issues in pending licensing proceedings; 6) suspension of all decisions and proceedings pending the outcome of any independent Congressional, Presidential or NRC investigations; and 7) a request for a Presidential investigation.

As further discussed below, petitions to the Commission to suspend proceedings are treated as motions under 10 C.F.R. § 2.323. While the NRC rules require that motions in a pending proceeding be addressed to the Presiding Officer, the Commission has previously indicated that suspension motions such as this are best addressed to it. *AmerGen Energy Company, LLC et al*. (Oyster Creek Nuclear Generating Station et al.), CLI-08-23, 68 NRC 461, 476 (2008); *Pacific Gas & Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-02-23 56 NRC 230, 237 (2002). Given the sweeping requests in the Petition and the fact that it is being filed in numerous pending proceedings, Progress agrees that the Petition should be decided by the Commission instead of by individual licensing boards.

The Petition, however, fails to comply with the procedural and substantive requirements for granting such motions. In addition, the relief it seeks is without legal basis, is unnecessary, and would be inimical to the interests of license applicants such as Progress and to the NRC's commitment to expeditious and efficient decision-making. In addition, NC WARN is no longer a party to this proceeding, and neither are any of the other sponsors of the Petition a party. Consequently, neither NC WARN nor any other petitioner is entitled to seek suspension of this Harris Units 2 and 3 Combined License Application ("COLA") proceeding.

BACKGROUND

A. The NRC Response to the Fukushima Accident

On March 11, 2011, the Tohoku-Taiheiyou-Oki Earthquake occurred near the east coast of Honshu, Japan. This magnitude 9.0 earthquake and the subsequent massive tsunami caused significant damage to at least four of the six units of the Fukushima Daiichi nuclear power station as the result of a sustained loss of both the offsite and on-site power systems. NRC Information Notice 2011-05, Tohoku-Taiheiyou-oki Earthquake Effects on Japanese Nuclear Power Plants (Mar. 18, 2011) at 1 (ADAMS Accession No. ML110760432).

The Commission has been closely monitoring developments in Japan and reviewing all information available.[2] It has dispatched a team of experts to Japan, to support both the Japanese authorities and the U.S. embassy. In addition, the Commission is already conducting extensive reviews to identify and apply the lessons learned from the Fukushima accident.

The Commission has created a Task Force, made up of current senior managers and former NRC experts with relevant experience, to conduct both short-term and long-term analyses of the lessons that can be learned from the Fukushima accident. In the short term, to be completed in 90 days, the Task Force has been directed to:

- evaluate currently available technical and operational information from the events that have occurred at the Fukushima Daiichi nuclear complex in Japan to identify potential or preliminary near term/immediate operational or regulatory issues affecting domestic operating reactors of all designs, including their spent fuel pools, in areas such as protection against earthquake, tsunami, flooding, hurricanes; station blackout and a degraded ability to

[2] Statement by Chairman Jaczko to the Senate Environment and Public Works Committee and Clean Air and Nuclear Safety Subcommittee (Apr. 12, 2011) (ADAMS Accession No. ML111020070) ("Jaczko April 12 Statement").

restore power; severe accident mitigation; emergency preparedness; and combustible gas control.

- develop recommendations, as appropriate, for potential changes to inspection procedures and licensing review guidance, and recommend whether generic communications, orders, or other regulatory requirements are needed.

Tasking Memorandum – COMGBJ-11-0002 – NRC Actions Following the Events In Japan (Mar. 23, 2011) at 1 (ADAMS Accession No. ML110800456). This effort will be informed by stakeholder input, and the Task Force report will be released to the public. *Id*. The longer-term actions, which will begin as soon as NRC has sufficient technical information from the events in Japan with the goal of no later than the completion of the 90 day near-term report, will include evaluation of all technical and policy issues related to the event to identify potential research, generic issues, changes to the reactor oversight process, rulemakings, and adjustments to the regulatory framework that should be conducted by NRC. *Id.* at 2. They will also include evaluation of potential interagency issues such as emergency preparedness. *Id.*

The longer-term review will receive input from and interact with all key stakeholders. *Id.* Within six months, the Task Force will provide a report with recommendations to the Commission, which will be released to the public under the NRC's normal procedures. *Id.*

In addition, the nuclear power industry has taken a number of actions at each licensed reactor site, including:

- Verifying each plant's capability to manage major challenges, such as aircraft impacts and losses of large areas of the plant due to natural events, fires or explosions. Specific actions include testing and inspecting equipment required to mitigate these events, and verifying that qualifications of operators and support staff required to implement them are current;

- Verifying each plant's capability to manage a total loss of off-site power. This will require verification that all required materials are adequate and properly staged and that procedures are in place, and focusing operator training on these extreme events;

- Verifying the capability to mitigate flooding and the impact of floods on systems inside and outside the plant. Specific actions include verifying required materials and equipment are properly located to protect them from flood;

- Performing walk-downs and inspection of important equipment needed to respond successfully to extreme events like fires and floods. This work will include analysis to identify any potential that equipment functions could be lost during seismic events appropriate for the site, and development of strategies to mitigate any potential vulnerabilities.

Statement of Charles Pardee (Chief Operating Officer Exelon Generation Company), United States Senate Committee on Environment and Public Works, Subcommittee on Clean Air and Nuclear Safety, on U.S. Nuclear Safety after Fukushima, Apr. 12, 2011, at 5-6, *available at* http://epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=74d96f65-a0cf-4ecd-8424-d79425cb97eb**.** These actions by the industry are being taken in conjunction with industry expert organizations such as the Institute for Nuclear Power Operations ("INPO"), the Nuclear Energy Institute ("NEI") and the World Association of Nuclear Operators ("WANO"). *Id.* at 3-4, 6.

The NRC Staff ("Staff") also is proceeding with independent assessments of nuclear power plant readiness to address beyond design-basis natural phenomena. NRC Information Notice 2011-5 at 4-5.

The Commission will use the information from these activities to impose any requirements it deems necessary:

> NRC has already announced its plan to draw upon "lessons learned" from the Japan events, as the agency has done previously after natural or man-made disasters. As in the past, NRC will conduct rulemaking, or issue orders and other directives, to make upgrades required to implement whatever short-term or longer-term safety improvements emerge from the Task Force directed by the Commission to analyze the Fukushima Daiichi disaster.

Federal Respondents' Memorandum on the Events at the Fukushima Daiichi Nuclear Power Station at 21-22, *New Jersey Envt'l Fed'n v. NRC*, No. 09-2567 (3d Cir. Apr. 4, 2011) ("Federal Respondents' Memorandum"). The NRC has also made it clear that it has the authority to do so.

> In response to the disaster at Fukushima Daiichi, NRC has authority to order . . . licensees of operating nuclear plants[], to adopt whatever measures NRC determines are needed in the short term for continued assurance of the public health and safety while NRC considers longer-term measures, including changes in its safety regulations. Such measures may be subject to site-specific considerations.

Id. at 2-3.

While the Commission is thus carefully examining the implications of the Fukushima accident, its current, informed assessment is that U.S. plants remain safe.

> [W]e have been very closely monitoring the activities in Japan and reviewing all currently available information. Review of this information, combined with our ongoing inspection and licensing oversight, gives us confidence that the U.S. plants continue to operate safely.

Jaczko Apr. 12 Statement at 3.

> NRC has stated that licensed nuclear power reactors in the United States are currently safe, and may continue to operate under NRC's comprehensive scheme of safety regulations and inspections, pending development of any new safety measures that emerge as NRC's "lessons-learned" project moves forward.

Federal Respondents' Memorandum at 3.

It is evident that the Commission is already conducting extensive reviews to identify and apply the lessons learned from the Fukushima accident and will use the information from these activities to impose any new licensing requirements it deems necessary to protect public health and safety. In a parallel effort, the nuclear industry (including individual plant operators, INPO, NEI and WANO) and the NRC Staff are also acting to enhance the safety of nuclear reactor operations in light of the Fukushima events.

B. Status of Harris Units 2 and 3 COLA Proceeding

This proceeding involves the Harris Units 2 and 3 COLA submitted by Progress on February 18, 2008. NC WARN filed a Petition for Intervention and Request for Hearing on August 4, 2008, alleging eleven contentions. On October 30, 2008, the Atomic Safety and Licensing Board ("Board") granted NC WARN's petition to intervene, finding that it had standing to participate as a party in this proceeding and admitting one of NC WARN's contentions, designated as "Contention TC-1." *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), LBP-08-21, 68 NRC 544 (2008) ("LBP-08-21").[3] Following Progress's appeal of the Board's admission of Contention TC-1, the Commission remanded consideration of that Contention to the Board. *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-09-8, 69 NRC 317, 330 (2009).

Upon reconsideration of Contention TC-1 as directed by the Commission, the Board found Contention TC-1 inadmissible and denied NC WARN's petition to intervene because NC WARN had not alleged an admissible contention. *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), LBP-09-8, 69 NRC 736, 745 (2009) ("LBP-09-8"). The Board held that, because NC WARN's petition to intervene was denied, "the proceeding is terminated." *Id.* at 746.[4] The Commission denied NC WARN's appeal of LBP-09-8. *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-10-09, 73

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[3] On November 13, 2008, NC WARN sought admission of a new, twelfth contention. On December 23, 2008, the Board found that contention inadmissible. Memorandum and Order (Ruling on Request to Admit New Contention) (Dec. 23, 2008).

[4] Since there were no admissible contentions, the Board also denied as moot the requests of the South Carolina Office of Regulatory Staff and the North Carolina Utilities Commission to participate in any hearing as interested governmental entities. LBP-09-8 at 746.

NRC __, slip op. (Mar. 11, 2010) ("CLI-10-09"). Accordingly, the contested portion of this proceeding has been terminated and there are no intervenors in this proceeding.

ARGUMENT

The Commission has made clear on numerous occasions that suspension of licensing proceedings is a "drastic" action that is not warranted absent "immediate threats to public health and safety." *Oyster Creek,* CLI-08-23, 68 NRC at 484; *Private Fuel Storage, LLC,* (Independent Spent Fuel Storage Installation) ("*PFS*"), CLI-01-26, 54 NRC 376 (2001). *See also Diablo Canyon*, 56 NRC at 230; *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-01-28, 54 NRC 393 (2001). Here, continuing to conduct the Harris COLA proceeding obviously poses no immediate threat to the public health and safety. Moreover, the Petition is deficient both procedurally and substantively.

I. NC WARN IS NOT A PARTY ENTITLED TO SEEK SUSPENSION OF THIS PROCEEDING

NC WARN is no longer a party to this proceeding and, therefore, cannot seek suspension or stay of this proceeding. The Board in LBP-09-8 denied NC WARN's petition to intervene, and the Commission affirmed that decision in CLI-10-09.

The Commission's rules provide that, aside from being permitted to make oral or written limited appearance statements in a proceeding, nonparties "may not otherwise participate in the proceeding." 10 C.F.R. § 2.315(a). This limitation means that, unless otherwise authorized by the Commission or presiding officer, a nonparty motion will not be entertained.[5] *Metropolitan*

[5] The Commission does allow motions by persons who have submitted petitions to intervene and are awaiting rulings – *see Duke Energy Corp.* (McGuire Nuclear Stations, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 398 n.8 (2001) – but that is not the situation here.

Edison Co. (Three Mile Island Nuclear Station, Unit 1), CLI-83-25, 18 NRC 327, 330, 333 (1983) (holding that, in light of petitioner's failure to intervene in a proceeding, the Commission would not entertain petitioner's disqualification motion). *See also Carolina Power & Light Co., et al.* (Shearon Harris Nuclear Power Plant), 1986 WL 328110 at *1 (July 11, 1986) (unpublished Appeal Board decision) (holding that a petitioner whose intervention petition is denied "is not a proper party to seek a stay of any Licensing Board action in this operating license proceeding"). Similarly, the Commission has held that only a party to a proceeding (or an interested state with similar rights) may seek suspension of a proceeding under 10 C.F.R. § 2.802 (pending a petition for rulemaking). *Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station & Pilgrim Nuclear Power Station), CLI-07-3, 65 NRC 13, 22 n.37, *reconsideration denied,* CLI-07-13, 65 NRC 211, 214-14 (2007). While the current Petition is not submitted under 10 C.F.R. § 2.802, the authorization in 10 C.F.R. § 2.802(d) would be meaningless if non-parties had a general right to seek suspension of proceedings. Under normal standards of statutory construction,[6] 10 C.F.R. § 2.802(d), which allows a party to seek suspension of a proceeding, implies that a non-party has no such right.

II. THE PETITION IS PROCEDURALLY DEFECTIVE AND DOES NOT MEET THE REQUIREMENTS FOR MOTIONS TO STAY

Petitions to the Commission to suspend proceedings are treated as motions under 10 C.F.R. § 2.323. *AmerGen Energy Co., LLC, et al.* (Oyster Creek Nuclear Generating Station, *et al.*), Unpublished Order (Jan. 11, 2008) at 1 (ADAMS Accession No. ML080110284); *Diablo Canyon*, CLI-02-23, 56 NRC at 237. Because of the nature of the relief sought, a request for suspension is, in effect, a motion for stay of a proceeding.

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[6] *Expressio unius est exclusio alterius* (the expression of one thing is the exclusion of another).

Under typical Commission practice, in order to determine whether to grant a motion for a stay the Commission will weigh four factors, which are derived from federal court case law:

> (1) Whether the moving party has made a strong showing that it is likely to prevail on the merits;
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> (2) Whether the party will be irreparably injured unless a stay is granted;
>
> (3) Whether the granting of a stay would harm other parties; and
>
> (4) Where the public interest lies.

10 C.F.R. § 2.342(e). *See also*, *Shieldalloy Metallurgical Corp.* (License Amendment Request for Decommissioning of the Newfield, New Jersey Site), CLI-10-08, 71 NRC __, slip op. at 11 (Jan. 7, 2010); *Virginia Petroleum Jobbers Ass'n v. FPC*, 259 F.2d 921, 925 (D.C.Cir.1958). Failure to address these factors requires that a motion to stay be denied. *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Unit 2), CLI-93-2, 37 NRC 55, 58 & n.2 (1993).

NC WARN has not addressed, let alone satisfied, any of these factors. The most important of the four is the second, irreparable injury to the moving party if the stay is not granted. *Shieldalloy*, CLI-10-08 at 12. The NRC requires "a showing of a 'threat of immediate and irreparable harm' that will result absent a stay." *Id.*, citing *Oyster Creek*, CLI-08-13, 67 NRC at 400. No such harm exists here. The injury claimed by the Petition is:

> If the Commission fails to [grant the relief sought], intervenor groups will be placed in the position of rushing to file contentions, rulemaking comments, and motions to re-open closed hearing records, based on whatever evaluations they are able to make of slowly-emerging and ever-evolving information from the accident. Such a process would not only be cumbersome, but its effectiveness would be limited by whatever limitations the intervenors or petitioners had on their resources for making a technical evaluation of the information yielded by the accident. It would place an unfair burden on intevenors and petitioners by forcing them to perform analyses that should be performed by the government in the first instance.

Petition at 23-24. Not only is this alleged injury speculative, but it does not constitute the type of harm that supports a motion to stay. The cost and inconvenience of litigating challenges to pending applications are not the kind of injury that warrants postponing licensing proceedings, and a petitioner "is not injured or prejudiced in a cognizable sense simply because it may incur litigating costs and inconvenience from moving forward with the adjudication before the generic review is completed." *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-01-28, 54 NRC 393, 400 (2001).

In considering whether moving forward with proceedings would prove an obstacle to fair and efficient decision making, the Commission has specifically rejected arguments like the one presented in the Petition that proceedings should be stayed because the normal processes for filing new contentions, rulemaking comments and motions to reopen would be "cumbersome," "place an unfair burden on intervenors," and be limited by intervenors' resources:

> We are unpersuaded by [Petitioners'] assertion that the "piecemeal" nature of the adjudication "makes it impossible to perform a complete or effective presentation of the issues . . . with the scope of the current hearing" and "is wasteful of [the Petitioners'] resources." . . . We have repeatedly rejected such resource-related arguments in prior proceedings, and do so again here. As we stated just this March in *Indian Point*, CLI-01-8, 53 NRC [225] at 229-30 [2001], "litigation inevitably results in parties' loss of both time and money. We cannot postpone cases by many weeks or months simply because going forward will prove difficult for litigants or their lawyers."

McGuire/Catawba, CLI-01-27, 54 NRC at 391.

In addition, there is no urgency to NC WARN's request. The lack of immediacy of any potential harm to NC WARN is made evident by the fact that the Harris Units 2 and 3 reactors are years away from being constructed and placed into operation. The current projected in-service date for Harris Unit 2 (the first of the two new reactors to be placed into service) is the first quarter of 2026 (or later). COLA, FSAR Section 1.1.5 (Rev. 3). As the Commission has ruled, "[a] site that currently contains no radiological materials and will not for at least 2 years cannot present an immediate threat to public safety. Therefore, this consideration does not warrant a halt to the current proceeding." *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 381 (2001) ("*PFS*"). The Commission's reasoning in *PFS* clearly applies to the Harris Units 2 and 3 reactors.

Other factors to be considered in deciding whether to grant a motion to stay include whether the granting of a stay would harm other parties or be inconsistent with the public interest. The NRC has made it clear that it will not grant requests to suspend licensing processes pending consideration of generic issues because it would be contrary to the agency's duties to the applicants and the general public. *See, e.g.*, *Savannah River*, where the Commission rejected a petition to suspend licensing of a mixed-oxide fuel fabrication facility in the wake of the September 11, 2001 events in the following terms:

> During the time when the NRC is pursuing its top-to-bottom reassessment of its regulations and policies on terrorism, the agency must also continue to meet its statutory responsibilities for licensing and regulation of all nuclear facilities and materials in a timely and efficient manner. *See Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18 (1998). Permitting unnecessary delays would contravene the Commission's fundamental duties to the general public, as well as to applicants and licensees. The Commission's objectives are to provide a fair hearing process, to avoid unnecessary delays in the

> NRC's review and hearing processes, and to produce an informed adjudicatory record that supports agency decision making on matters related to the NRC's responsibilities for protecting public health and safety, the common defense and security, and the environment. *Id.* at 19. Consistent with this policy, the Commission has a history of *not* delaying adjudications to await extrinsic actions, absent special needs of efficiency or fairness. *See Private Fuel Storage*, CLI-01-26, 54 NRC at 381-83, and references cited therein; [*Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2); Catawba Nuclear Station, Units 1 and 2)], CLI-01-27, 54 NRC [385, 390-91 (2001)].

CLI-01-25, 54 NRC at 400 (emphasis in original) (footnote omitted). In this case, the relief sought by NC WARN – "suspend[ing] all decisions regarding the issuance of construction permits, new reactor licenses, COLs, ESPs, license renewals, or standardized design certification" for an indefinite time would be detrimental to Progress and would contravene the Commission's fundamental duties to the general public and the NRC's policy to avoid unnecessary delays in the NRC's review and hearing processes. Finally, NC WARN has not shown that it would prevail on the merits of any contention that it may tender in the future relating to the Fukushima accident.

Failing to meet the requirements for the issuance of a stay, the Petition must be denied.

III. THERE IS NO LEGAL BASIS FOR THE RELIEF SOUGHT IN THE PETITION

The Petition asks that the NRC take the following "immediate" actions:

- Suspend all decisions regarding the issuance of construction permits, new reactor licenses, COLs, ESPs, license renewals, or standardized design certification pending completion by the NRC's Task Force to Conduct a Near-Term Evaluation of the Need for Agency Actions Following the Events in Japan ("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;
- Suspend all proceedings with respect to hearings or opportunities for public comment, on any reactor-related or spent fuel pool-related issues that have been identified for investigation in the Task Force's Charter of April 1, 2011 (NRC

Accession No. ML11089A045). These issues include external event issues (i.e., seismic, flooding, fires, severe weather); station blackout; severe accident measures (e.g., combustible gas control, emergency operating procedures, severe accident management guidelines); implementation of 10 C.F.R. § 50.54(hh)(2) regarding response to explosions or fire; and emergency preparedness. *Id.* The Commission should also suspend all licensing and related rulemaking proceedings with regard to any other issues that the Task Force subsequently may identify as significant in the course of its investigation. The proceedings should be suspended pending completion of the Task Force's investigation into those issues and the issuance of any proposed regulatory decisions and/or environmental analyses of those issues;

- Conduct an analysis, as required by NEPA, of whether the March 11, 2011 Tohoku-Chihou-Taiheiyo-Oki earthquake and ensuing radiological accident poses new and significant information that must be considered in environmental impact statements to support the licensing decisions for all new reactors and renewed licenses;

- Conduct a safety analysis of the regulatory implications of the March 11, 2011 Tohoku-Chihou-Taiheiyo-Oki earthquake and ensuing radiological accident and publish the results of that analysis for public comment;

- Establish procedures and a timetable for raising new issues relevant to the Fukushima accident in pending licensing proceedings. The Commission should allow all current intervenors in NRC licensing proceedings, all petitioners who seek to re-open closed licensing or re-licensing proceedings, and all parties who seek to comment on design certification proposed rules, a period of at least 60 days following the publication of proposed regulatory measures or environmental decisions, in which to raise new issues relating to the Fukushima accident.

- Suspend all decisions and proceedings regarding all licensing and related rulemaking proceedings, as discussed above, 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 to complement or supersede the work of the Task Force.

- Request that the President establish an independent investigation of the Fukushima accident and its implications for the safety and environmental impacts of U.S. reactors and spent fuel pools similar to the President's Commission on the Accident at Three Mile Island, chaired by John G. Kemeny.

Petition at 1-3 (emphasis in original). NC WARN claims that both the Atomic Energy Act ("AEA") and the National Environmental Policy Act ("NEPA") require that the NRC take these actions. *Id.* at 24-25.

NC WARN acknowledges, as it must, that under the AEA the NRC has wide discretion to proceed with reactor licensing while it investigates the potential applicability of the Fukushima accident to the licensing of domestic nuclear facilities. *Id.* at 25. As the Supreme Court has held, absent constitutional constraints or extremely compelling circumstances, administrative agencies should be free to fashion their own rules of procedure to pursue methods of inquiry capable of permitting them to discharge their multitudinous duties. *Vermont Yankee Nuclear Power Corp. v. NRDC,* 435 U.S. 519, 543 (1978).

The NRC has already exercised this discretion by allowing pending licensing actions to continue without interruption while the agency evaluates the regulatory significance of the Fukushima events. For example, in the early stages of the Fukushima accident, the NRC approved the renewal of the operating license of the Vermont Yankee nuclear power plant, a facility with a General Electric reactor similar to the one in place at Fukushima Unit 1. *See* 76 Fed. Reg. 17,162 (Mar. 28, 2011). Even after the Petition was filed, the NRC proceeded to approve the renewal of the licenses for all three of the Palo Verde Nuclear Generating Station units. *See* 76 Fed. Reg. 24,064 (Apr. 29, 2011). The AEA provides no legal support for *requiring* the NRC to change course and take the actions sought in the Petition. [7]

Nor is there a precedent in NRC case law and the agency's practice for the extraordinary relief sought in the Petition. To the contrary, it is the practice of the NRC to decline to hold proceedings in abeyance pending the outcome of other Commission actions or adjudications. *Entergy Nuclear Vermont Yankee, L.L.C. & Entergy Nuclear Operations, Inc.* (Vermont Yankee

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[7] NC WARN nonetheless claims that to continue licensing actions "would constitute a [sic] abuse of the NRC's discretion in its interpretation of the 'adequate assurance' standard, because in the current climate of uncertainty, it would be almost impossible for the NRC to reach the 'definitive finding' on safety required by *Power Reactor Development Corp*. [*v. Int'l Union of Elec., Radio & Mach. Workers,* 367 U.S. 396, 402-03 (1961)]." Petition at 26. Such an argument represents only the opinion of NC WARN and lacks legal significance.

Nuclear Power Station), CLI-10-17, 72 NRC __, slip op. at 10 (July 8, 2010). *See also*, *Pacific Gas & Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-03-4, 57 NRC 273 , 275-77 (2003); *Diablo Canyon*, CLI-02-23, 56 NRC at 237-40; *PFS*, CLI-01-26, 54 NRC at 380-84; *McGuire/Catawba*, CLI-01-27, 54 NRC at 389-91; *Savannah River*, CLI-01-28, 54 NRC at 399-401.

The Three Mile Island Unit 2 ("TMI-2") precedent cited by NC WARN (Petition at 4) does not provide support for the relief they seek, and NC WARN's description of the NRC's post-accident actions (i.e., that the NRC "suspended all licensing decisions until conclusion of the lessons learned process") (*id.* at 22) is incorrect. In reality, as the Commission explained in the *PFS* proceeding,

> Immediately after the accident, the Commission chose not to halt ongoing licensing proceedings, but instead temporarily stopped issuing licenses for any new facilities pending its assessment of the accident. Later, the Commission issued a Statement of Policy announcing that pending consideration of changes in safety requirements and procedures, the Commission itself would decide whether to grant final approval for new construction permits, limited work authorizations, or operating licenses for reactors. All other adjudicatory proceedings, including enforcement and license amendment proceedings, were allowed to continue. The agency also rejected a petition claiming that the TMI-2 incident required that all similar operating reactors be immediately shut down.

PFS, CLI-01-26, 54 NRC at 381-82 (footnote omitted).[8] Thus, even the TMI-2 accident, which had a much more direct and significant impact on U.S. reactors, did not elicit from the NRC the wide-ranging actions sought in the Petition.

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[8] The temporary suspension in issuing new licenses was not prompted by safety concerns but was due to administrative reasons. The NRC's resources were diverted from reviewing operating licensing reviews to focus on addressing TMI-2 issues. *See, e.g.,* letter dated June 29, 1979 from Lee V. Gossick (NRC Executive Director of Operations) to Congressman John Breaux, available in ADAMS (Legacy Library), Accession No. 7907310244. The letter states at 1 that "[t]he accident at Three Mile Island Unit 2 on March 28, is diverting significant managerial and technical resources of the Office of Nuclear Reactor Regulation (NRR) from its previous work. It is clear that certain activities related to that accident require higher priority. As a result of the

The Petition also asserts that, under the NEPA, the Commission "must take all necessary measures to protect the integrity of the NEPA decision-making process, by immediately suspending all pending licensing and related design-certification rulemaking decisions until it has addressed the significance of the new information revealed by the Fukushima accident in environmental assessments and/or EISs." Petition at 27 (footnote omitted). This interpretation of the requirements of NEPA is erroneous.

The courts have held that "a supplemental EIS is only required where new information provides a *seriously* different picture of the environmental landscape." *Nat'l Comm. for the New River, Inc. v. FERC*, 373 F.3d 1323, 1330 (D.C. Cir. 2004) (emphasis in original; internal quotations omitted) (quoting *City of Olmsted Falls v. FAA,* 292 F.3d 261, 274 (D.C. Cir. 2002)). *See also Sierra Club v. U.S. Army Corps of Eng'rs,* 295 F.3d 1209, 1215-16 (11th Cir. 2002) (significant impact not previously covered); *S. Trenton Residents Against 29 v. FHA*, 176 F.3d 658, 663 (3d Cir. 1999) ("seriously different picture of the environmental impact"). The Commission has adopted that standard. *Hydro Resources, Inc.*, CLI-01-4, 53 NRC 31, 52 (2001) ("The new circumstance must reveal a seriously different picture of the environmental impact of the proposed project'') (citation omitted).[9] The Petition does not point to any "seriously different" picture of the environmental impact of Harris Units 2 and 3. Indeed, other than vague, generalized claims, the Petition presents no information suggesting that either the probabilities or

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realignment of resources and priorities, the expected accomplishments on casework related to the issuance of construction permits (CPs) and operating licenses (OLs) will be severely limited." No such situation exists at the present time.

[9] Also, NEPA does not prescribe how an agency is to determine the existence of new and significant information that would require supplementation under NEPA. *Price Rd. Neighborhood Ass'n v. DOT*, 113 F.3d 1505, 1509-10 (9th Cir. 1997); *see also Idaho Sporting Cong., Inc. v. Alexander*, 222 F.3d 562, 566 (9th Cir. 2000) ("NEPA and the CEQ regulations are silent on the issue of how agencies are to determine the significance of new information"). Accordingly, the courts have allowed agencies to employ different approaches that utilize various types of non-NEPA processes and documentation for determining whether alleged new impacts are sufficiently significant to warrant supplemental analysis and formal supplementation of existing NEPA documents.

consequences of severe accidents are significantly different because of Fukushima from those presented in the existing NRC guidance documents, either generically or on a plant-specific basis.[10]

NC WARN has submitted the Makhijani Declaration in support of its NEPA claim, but that declaration (which does not even make specific reference to Harris Units 2 and 3) is largely irrelevant to those units.[11] Also, while Dr. Makhijani's Declaration claims that the Fukushima accident affects the NRC's NEPA severe accident determinations, the events and facts relied upon by Dr. Makhijani do not support his assertions.

Dr. Makhijani focuses mainly on spent fuel pool accidents.[12] He claims that Fukushima "significantly undermines the NRC's conclusion that high-density pool storage of spent fuel poses a "very low risk"' (citing the NRC's 2008 denial of the rulemaking petitions filed by the

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[10] The Petition incorrectly claims that "by its own admission, the NRC has new information that concededly could have a significant effect on its regulatory program and the outcome of its licensing decisions for individual reactors." Petition at 26-27. The NRC has never stated or admitted that Fukushima alters the probability or consequences of severe accidents as previously determined by the NRC. The impact of Fukushima, if any, on these determinations will be determined by the Commission's subsequent investigation and evaluation.

[11] Dr. Makhijani provides no information showing that U.S. plants (much less the Harris units) are vulnerable to accident scenarios such as that which occurred at Fukushima. In particular, he makes no showing that these plants would be susceptible to station blackout conditions caused by a tsunami.

[12] The only specific claim regarding severe reactor accidents is Dr. Makhijani's assertion that the occurrence of accidents at three reactors should change the underlying frequency data that go into computing the probability of a severe accident at a given reactor. Makhijani Declaration at ¶¶ 16-19. This claim, however, is clearly erroneous because severe reactor accident frequency is calculated on the basis of the probability of occurrence of events that could cause a severe accident at a particular reactor. *See, e.g.*, Final Environmental Impact Statement for an Early Site Permit (ESP) at the Vogtle ESP Electric Generating Plant Site (NUREG-1872) (Aug. 2008) at 5-81. The fact that the same event could cause severe accidents at more than one plant does not, by itself, change the frequency of basis for calculating the occurrence of that particular initiating event for purposes of calculating the severe accident frequency for a given reactor. Likewise, because the frequency of severe accidents is calculated on a per year of reactor operation basis, the analysis of consequences of severe accidents at sites with multiple reactors can be determined from summing the annual frequency for each unit being considered. *See* NUREG-1872 at 5-81 ("The risks presented in the tables that follow are risks per year of reactor operation. Southern has indicated that the VEGP site could hold two reactors of the Westinghouse AP1000 reactor design. . . . . [I]f two new Westinghouse AP1000 reactors were built, the risks would apply to each reactor, and the total risk for new reactors at the site would be twice the risk for a single reactor.").

Massachusetts and California Attorney Generals).[13] Makhijani Declaration at ¶ 21. He refers to an apparent hydrogen explosion at the Fukushima Unit 4 spent fuel pool and claims that hydrogen explosions were not considered in the NRC analysis of spent fuel fires. *Id.* at ¶ 22. However, Dr. Makhijani ignores the fact that the most recent study (NUREG-1738)[14] relied upon in the Rulemaking Denial "conservatively assumed" that, for any drop of the spent fuel pool water level below the top of the spent fuel, a "zirconium fire involving all of the spent fuel would occur . . ."[15] This conservative assumption would automatically encompass any SFP event during which hydrogen is generated. Thus, the Commission's studies bound and do not ignore this potential mechanism. As noted by the Rulemaking Denial, even with its conservative assumptions NUREG-1738 "found the risk of an SFP fire to be low and well within the Commission's Safety Goals." 73 Fed. Reg. at 46,207.

Dr. Makhijani also claims, based on reports of boiling behavior at three of the Fukushima spent fuel pools, that the "NRC's estimate of loss of cooling probability accompanied by a fire is far too low." Makhijani Declaration at ¶ 22. However, there have been no reports of fire at any of the Fukushima spent fuel pools and the reported loss of cooling events at all three units were

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[13] The Attorney General of Commonwealth of Massachusetts; the Attorney General of California; Denial of Petitions for Rulemaking, 73 Fed. Reg. 46,204, 46,207 (Aug. 8, 2008) ("Rulemaking Denial"). In its denial of the rulemaking petitions, the NRC referred to a long series of NRC studies which showed that the risk of a spent fuel pool fire is "very low" as well as provisions made at U.S. plants to provide mitigation measures to deal with a complete loss of both offsite and emergency power.

[14] Although NUREG-1738 is a study of spent fuel pool accident risk at decommissioned plants, the Commission has treated NUREG-1738 as the latest in the line of NRC studies for spent fuel accidents also applicable to operating plants. *See, e.g.*, Rulemaking Denial, 42 Fed. Reg. at 46,208-209; Waste Confidence Decision Update, 75 Fed. Reg. 81,037, 81,069-70, 81,073 (Dec. 23, 2010). NUREG-1738 conducted analyses for plants that had only recently been shut down (starting at 30 or 60 days after final shutdown depending on the analyses) and moreover assumed that, because the plant was permanently shutting down, the full core would be unloaded into the spent fuel pool. NUREG-1738 at 2-1, 3-28, A1A-3 – A1A-4, A4-2. Because of its assumption that the full core had just recently been off-loaded to the spent fuel pool, the analysis in NUREG-1738 would generally be conservative compared to an operating plant where typically only one-third of the core is off-loaded to the spent fuel pool at each refueling outage.

[15] 73 Fed. Reg. at 46, 207. In fact, the actual assumption in NUREG-1738 was even more conservative. NUREG-1738 assumed that a spent fuel fire involving all of the spent fuel assemblies would occur whenever the "water level reached 3 feet from the top of the spent fuel." NUREG-1738 at 3-1.

precipitated by the same event – station blackout. The NRC study of the potential of spent fuel pool fires (NUREG-1738) assumes no on-site power is available and addresses loss of off-site power.[16]

Finally, Dr. Makhijani provides no explanation of how the spent fuel pool performance in the BWR Mark I reactors at Fukushima has any bearing on spent fuel pool risk at Harris Units 2 and 3. The AP1000 units proposed for Harris do not have elevated spent fuel pools in the reactor building, like the BWR Mark I design. Instead, the spent fuel storage facility is located within the seismic Category 1 auxiliary building structure. AP1000 Design Control Document (Rev. 17) at § 9.1.2.2. Further, the AP1000 is designed to provide spent fuel pool cooling water for at least seven days without power. *Id.* at § 9.1.3.4.3 In addition, unlike the units at Fukushima, Progress is required to develop and implement guidance and strategies intended to maintain and restore spent fuel pool cooling water capabilities under the circumstances associated with loss of large areas of the plant due to explosions or fire, in accordance with 10 C.F.R. § 50.54(hh). Consequently, there is no apparent relationship between the accident at Fukushima and the probability or consequence of a spent fuel pool accident at Harris Units 2 and 3.

In summary, the information presented in the Petition and in Dr. Makhijani's Declaration does not suggest the existence of new and significant information from the Fukushima events that would materially affect, and paint a *seriously* different picture of the environmental landscape from that previously considered by the NRC and in the Harris COLA.

Moreover, in the specific case of Harris Units 2 and 3, the current schedule calls for issuance of the draft EIS in January of 2013 and the final EIS in January of 2014. *See*

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[16] NUREG-1738 at A2A-33 to A2A-52.

http://www.nrc.gov/reactors/new-reactors/col/harris/review-schedule.html . Accordingly, there is sufficient time to incorporate any applicable lessons from the Fukushima accident into the EIS without needing to suspend the Harris COLA proceeding. As the Commission observed in *McGuire/Catawba*:

> [T]o the extent the Commission does, during a later stage of this adjudication, modify this agency's safety, environmental, or safeguards rules in a manner that affects issues material to this adjudication, our procedural rules allow for the possibility of late-filed contentions to address such new developments. Moreover, if our generic review leads to new rules applicable here, there will be time enough to apply them.

CLI-01-27, 54 NRC at 391 (footnote omitted). That observation is equally applicable to the Harris COLA proceeding. In addition, the Commission's rules provide appropriate procedures for submitting new contentions if the NRC's review of the Fukushima Daiichi accident identifies new requirements or concerns that give rise to admissible contentions.

IV. THE RELIEF SOUGHT BY NC WARN IS UNNECESSARY

In addition to being unsupported in law, the relief sought by NC WARN is unnecessary because, as discussed earlier, the NRC is already taking effective actions to address the domestic implications of the Fukushima event. The Commission has created a Task Force, made up of current senior managers and former NRC experts with relevant experience, to conduct both short-term and long-term analyses of the lessons that can be learned from the Fukushima accident and develop recommendations for any required regulatory changes. The Staff also is proceeding with independent assessments of nuclear power plant readiness to address beyond design-basis natural phenomena. NRC Information Notice 2011-5 at 4-5.

The Commission has made it clear that it will use the information from the ongoing activities to impose any requirements it deems necessary. Federal Respondents' Memorandum at

21-22. In short, the NRC has developed a thoughtful and comprehensive plan that will allow the agency to develop in the near future any required changes to the licensing framework for new facilities such as Harris Units 2 and 3 without needing to suspend the ongoing proceedings and Staff reviews for those facilities. Accordingly, the relief sought by NC WARN is unnecessary.[17]

CONCLUSION

For the above stated reasons, the Petition must be denied.

Respectfully Submitted,

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Dated: May 2, 2011

[17] The approach currently being followed by the Commission is essentially the same as that which it employed after the TMI-2 accident. *See PFS*, CLI-01-26, 54 NRC at 381-82.

May 2, 2011

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Commission

In the Matter of	)		
	)	Docket Nos.	52-022-COL
Progress Energy Carolinas, Inc.	)		52-023-COL
	)		
(Shearon Harris Nuclear Power Plant,	)	ASLBP No.	08-868-04-COL
Units 2 and 3)	)		

CERTIFICATE OF SERVICE

I hereby certify that on May 2, 2011 a copy of the foregoing "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," dated May 2, 2010, was provided to the Electronic Information Exchange for service upon the following persons.

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