UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the Matter of:

RIN 3150-AJ20

Consideration of Environmental Impacts of Temporary Storage of Spent Nuclear Fuel After Cessation of Reactor Operation

NRC-2012-0246

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PETITION FOR REVIEW OF NRC STAFF SCOPING DECISION

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INTRODUCTION

The State of Vermont with the Vermont Department of Public Service, the State of Connecticut, the State of New York, and the Commonwealth of Massachusetts ("Petitioners") are participants in some or all of the rulemaking proceeding for proposed rule 10 C.F.R. § 51.23(a), the proceeding for proposed waste confidence findings, and the waste confidence generic environmental impact statement ("GEIS") proceeding. Petitioners request that the Commission review and reverse certain conclusions reached by the Regulatory Staff in the Waste Confidence Generic Environmental Impact Statement Scoping Process Summary Report (March 2013) ML13060A128 ("Staff Scoping Decision"). The Commission has inherent supervisory authority over the Staff and should act now in furtherance of the Commission's stated goal of resolving the pending proceedings expeditiously. In particular, Petitioners request that the Commission reverse the following errors that were made in the Staff Scoping Decision:

- 1. Refusing to consider the following alternatives:
 - a. the alternative of requiring dry cask storage of spent fuel rather than continued use of spent fuel pools for spent fuel that is more than 5 years old; and
 - b. the alternative of not allowing further production of spent fuel until NRC determines that there is a safe and environmentally acceptable permanent waste repository to receive the additional spent fuel—a consideration that the U.S. Court of Appeals for the D.C. Circuit explicitly recognized to be reasonable in *New York v. NRC*, 681 F.3d 471, 474 (D.C. Cir. 2012);
- 2. Failing to provide any guidance on which issues will be allowed to be considered on a site-specific basis following issuance of the GEIS, including failure to consider

amendments to 10 C.F.R. §§ 51.23(b), 51.53(c)(2), and 51.95(c)(2) to allow consideration of site-specific spent fuel related issues for the period after plant shutdown.

JURISDICTION

The Commission has the legal authority to supervise the activities of the Regulatory Staff (Reorganization Plan No. 1 of 1980, 5 USC App. I, Section 1), including supervision over any rulemaking proceeding. *Private Fuel Storage L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-11, 55 N.R.C. 260 (2002) (Commission chose to "exercise . . . [its] inherent supervisory authority over adjudications and rulemakings"). Thus, it has the legal authority to review and reverse decisions of the Regulatory Staff, particularly ones related to the ongoing waste confidence and temporary storage rule proceedings and the accompanying GEIS, which have been initiated as a direct result of the Commission's decisions in Staff Requirements – COMSECY-12-0016 – Approach For Addressing Policy Issues Resulting from Court Decision to Vacate Waste Confidence Decision and Rule (Sept. 6, 2012), ML12250A132 ("Staff Requirements-COMSECY-12-0016").

In addition, the Commission has set forth standards for when it would consider reviewing an order issued by an Atomic Safety and Licensing Board. The Staff Scoping Decision, although not issued in a licensing proceeding within the meaning of 10 C.F.R. Part 2 and not subject to the rights and obligations of that Part 2, nonetheless meets the standards established for interlocutory review by the Commission under the provisions of 10 C.F.R. § 2.341(f)(2). In addition, the proceedings in which the Staff Scoping Decision was issued should be considered adjudications within the meaning of 5 U.S.C. § 551(7), given that the result of these proceedings will be an Order by the Commission that directly affects ongoing licensing proceedings and future licensing

proceedings. *See Calvert Cliffs Nuclear Project, L.L.C.* (Calvert Cliffs Nuclear Power Plant, Unit 3), *et. al.*, CLI-12-16, __N.R.C.__, slip op. at 4 (Aug. 7, 2012) ("Waste confidence undergirds certain agency licensing decisions, in particular new reactor licensing and reactor license renewal [I]n recognition of our duties under the law, we will not issue licenses dependent upon the Waste Confidence Decision or the Temporary Storage Rule until the court's remand is appropriately addressed."). ¹

"The Commission may, in its discretion, grant interlocutory review at the request of a party." *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3), CLI-09-06, 69 N.R.C. 128, 132-33 (Mar. 5, 2009). Such petitions are granted under 10 C.F.R. § 2.341(f)(2) when the party demonstrates that the issue:

(i) Threatens the party adversely affected by it with immediate and serious

¹ Although the scoping process is not where the ultimate application of the waste confidence GEIS conclusions and the rulemaking outcomes will be determined, Petitioners believe it is important that modifications to the Commission's prior conclusions regarding the environmental impacts of spent fuel storage following plant shutdown, particularly previously unexamined impacts associated with long-term storage of spent fuel at reactor sites, and alternatives that can mitigate those impacts, should be applied at least to those facilities that received operating licenses or license extensions on or after December 23, 2010, when the Commission formally abandoned the position that it could establish a date by which a permanent nuclear waste repository would be available. 75 Fed. Reg. 81032 (Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation) (Dec. 23, 2010). While this right should exist regardless of whether such issues were sought to be raised at the time of the previous licensing action and should not be limited to contested licenses or previously admitted parties, it is notable that at least two of the Commenters in the waste confidence GEIS proceedings, the State of Vermont and the Commonwealth of Massachusetts, attempted to raise similar issues in license renewal proceedings for Vermont Yankee and Pilgrim, but were prevented from doing so by application of the limitations imposed by 10 C.F.R. §§ 51.23(b), 51.53(c)(2), and 51.95(c)(2). See Entergy Nuclear Vt. Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 N.R.C. 131, 170 (Sept. 22, 2006); Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-06-23, 64 N.R.C. 257, 280-81 (Oct. 16, 2006); Commonwealth of Massachusetts v. NRC, 522 F.3d 115, 124-26 (1st Cir. 2008) (Pilgrim and Vermont Yankee facilities).

irreparable impact which, as a practical matter, could not be alleviated through a petition for review of the presiding officer's final decision; or

(ii) Affects the basic structure of the proceeding in a pervasive or unusual manner.

Id. While the Commission grants such petitions only in "extraordinary circumstances," *id.*, the situation presented here involves extraordinary circumstances that "[a]ffect[] the basic structure of the proceeding in a pervasive or unusual manner." *Id.*

These proceedings and the accompanying GEIS have been identified by the Commission as warranting the highest priority for prompt resolution:

I believe that resolving this issue successfully is a Commission priority. As the Commission affirmed, waste confidence plays a core role in many high-visibility licensing actions such as new reactors and license renewals. Issuing licenses is central to the NRC's mission. We also stated that we would not issue final licenses until we appropriately addressed the court's remand. We must act promptly. The staff should begin at once, and should set a goal of publishing a final rule and EIS within 24 months from the date of the Commission's staff requirements memorandum.

Notation Vote, Chair Macfarlane, COMSECY-12-0016 – Approach For Addressing Policy Issues Resulting from Court Decision to Vacate Waste Confidence Decision and Rule (Aug. 10, 2012) ML12250A136; *see also id.* Notation Vote, Commission Ostendorff (Aug. 9, 2012) ("[R]esolution of the waste confidence remand is one of the most important issues currently before the agency.").

Further, the purpose of the Staff Scoping Decision was to define the parameters of the GEIS, essentially deciding for these proceedings what will be analyzed and what will not be analyzed. The Commission's regulations identify the determination of the scope of a proposed EIS as a central decision point in the EIS process which controls the future EIS analysis:

(a) Scope. The draft environmental impact statement will be prepared in

accordance with the scope decided upon in the scoping process required by §§ 51.26 and 51.29. As appropriate and *to the extent required by the scope*, the draft statement will address the topics in paragraphs (b), (c), (d) and (e) of this section and the matters specified in §§ 51.45, 51.50, 51.51, 51.52, 51.53, 51.54, 51.61 and 51.62.

10 C.F.R. § 51.71(a) (emphasis added). Thus, the Staff Scoping Decision is effectively the final word on that issue and will define the parameters of both the proceeding and draft and final GEIS.

If the Staff has erred in determining the proper scope, as is clearly the case here, the error will infect the entire GEIS process and the two proceedings which will be relying on the GEIS. That error will ultimately result in either review and reversal by the Commission or more federal court review and more delay in the completion of this important process. *See, e.g.*, Notation Vote, Chair Macfarlane (Aug. 10, 2012) (recognizing that serious errors in the initial NEPA process can cause substantial delays in the final resolution of the issues: "Experience has shown that on issues of particular controversy, an environmental assessment will not result in resource or time savings in the end, because of the likelihood of challenges to the finding of no significant impact.").

The Staff's overly narrow and erroneous conclusions in the Scoping Decision will, if allowed to stand, "[a]ffect[] the basic structure of the proceeding in a pervasive or unusual manner." 10 C.F.R. § 2.341(f)(2). The Staff limited the scope of the evaluation of alternatives in the GEIS and failed to identify in the Staff Scoping Decision the criteria to be applied in deciding what issues will be subject to resolution on a site-specific basis. The Staff also failed to propose amendments to 10 C.F.R. §§ 51.23(b), 51.53(c)(2), and 51.95(c)(2) to clarify that certain spent fuel issues not addressed in the GEIS may be addressed in individual licensing decisions.

This has placed the GEIS on a path which is substantially narrower than required by law. If these errors are not corrected now, they can only be corrected following completion of the GEIS process and will necessarily require the issuance of a supplemental draft GEIS. *See* 10 C.F.R. § 51.92(a)(2); *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 372 (1989) (agency shall supplement a final EIS if "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts"). That will add significant time to the resolution of these proceedings.

In *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 N.R.C. 3 (1999), the Commission articulated its test for when a supplemental environmental impact statement is required:

As a general matter, the agency must consider whether the new information is significant enough to require preparation of a supplement. The new information must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned.

Id. at 14 (footnote and quotation omitted). In the current proceedings, inclusion of major alternatives in the environmental analysis, such as alternatives that can substantially mitigate the potential adverse environmental impacts of long-term or indefinite spent fuel storage at the sites of formerly operating nuclear reactors, will present an entirely different picture of the environmental consequences of long-term or indefinite spent fuel storage at reactor sites. In the case of license renewal proceedings, a grant of the proposed extension would often increase the amount of spent fuel stored by approximately 50%, an increase that would be avoided if the alternative of prohibiting spent fuel generation until an adequate, safe, and permanent repository was in place, and the impacts of which could be substantially mitigated if the spent fuel were

stored in dry casks after 5 years. These alternatives could either eliminate any long-term or indefinite spent fuel stored at the site after plant shutdown by requiring that an available, safe, permanent, and adequate waste disposal facility be in existence before authorizing generation of new spent fuel, or substantially mitigate the environmental consequences of post operation onsite storage by requiring that all spent fuel that is more than 5 years old be placed in dry cask storage.

Thus, absent immediate review of the erroneous Staff Scoping Decision, if it is ultimately determined that exclusion of these alternatives from the GEIS was an error, that error will only be correctable by the issuance of a supplemental draft GEIS. However, by promptly accepting review of the issues raised by Petitioners, the Commission can take corrective steps in a timely manner that will allow the Staff to modify its analyses and incorporate these further analyses into its draft GEIS. Since the draft GEIS is not expected until September, there should be time for the Staff to make the necessary changes to the draft GEIS to meet that deadline.

I. THE STAFF SCOPING DECISION ILLEGALLY NARROWS THE SCOPE OF ALTERNATIVES

During the scoping process, Petitioners and others urged Staff to ensure that the NEPA alternatives analysis would include the alternative of requiring all spent nuclear fuel to be placed in dry cask storage rather than left in spent fuel pools and the alternative of suspending the further creation of spent fuel until such time as there is an available, safe, permanent, and adequate nuclear waste storage facility for the spent fuel to be generated. *See, e.g.*, Comments Submitted by the Office of the Attorney General of the State of Vermont with the State of Vermont Department of Public Service, and by the Office of the Attorney General of the State of New York Concerning Scope of Consideration of Environmental Impacts of Temporary Storage

of Spent Fuel After Cessation of Reactor Operation (Jan. 2, 2013) at 15-16 & Letter from Matthew Brock to Sarah Lopas on behalf of the Commonwealth of Massachusetts joining in the Vermont and New York Comments (Jan. 3, 2013) (collectively, "States' Written Scoping Comments").² In the Scoping Decision, Staff rejected both of these alternatives:

Interested parties submitted hundreds of comments that suggested the NRC should consider a cessation of all licensing activities or cessation of all nuclear power plant operations as an alternative. A variety of other scoping comments suggested that the NRC should require the implementation of HOSS [hardened onsite storage] as an alternative. The NRC considered but ultimately dismissed these suggested alternatives for the purposes of this GEIS. Cessation of licensing

² In this regard, Petitioners raise two concerns about the Staff Scoping Decision. First, the Staff Scoping Decision excludes recognition of even the existence of viable mitigation alternatives that the States have identified, such as the transfer of spent nuclear fuel from spent fuel pools to dry cask storage. Second, the Staff Scoping Decision does not explicitly recognize that—given the Staff's decision to exclude certain mitigation alternatives, such as the transfer of spent fuel from densely packed spent fuel pools to dry storage casks, and given the differences among plants and their siting profiles—those mitigation alternatives should be considered and evaluated as part of a site-specific environmental impact statement. During the initial public scoping meeting at NRC headquarters in Rockville, the State of New York raised this issue and requested that NRC undertake a site-specific severe accident mitigation alternatives analysis for the continued storage of spent nuclear fuel at the Indian Point nuclear site similar to the Severe Accident Mitigation Alternatives ("SAMA") analysis that NRC conducts for severe reactor accidents. See Oral Comments of State of New York Assistant Attorney General J. Sipos at Public Scoping Meeting for the Environmental Impact Statement to Support an Updated Waste Confidence Decision and Rule, November 14, 2012 1:00 P.M. EST, Transcript of Proceedings at 37-40 & State of New York November 14, 2012 Presentation Slides, ML12331A347. Such a spent nuclear fuel SAMA analysis would identify site-specific environmental impacts and sitespecific mitigation alternatives to minimize or eliminate those impacts. See States' Written Scoping Comments at 16-18. (New York raised this issue again during the recent March 2013 NRC Regulatory Information Conference. See 2013 RIC Session TH30, Insights to the Future of High Level Waste Management.) Thus, in addition to identifying the alternative of requiring all spent nuclear fuel to be placed in dry cask storage rather than left in spent fuel pools and the alternative of suspending the further creation of spent fuel until such time as there is an available, safe, permanent, and adequate nuclear waste storage facility for the spent fuel, the scope of the GEIS must be expanded to identify and specifically reserve for further site-specific analysis, all reasonable alternatives to long-term or indefinite spent fuel storage at reactor sites, including alternatives that will mitigate the environmental impacts of that storage such as by placing all spent fuel in dry storage casks at particular sites. See infra Part II.

activities and overall reactor operations does not satisfy the purpose and need for the GEIS. With regard to HOSS, the NRC is already considering implementing revised security requirements as part of the ongoing ISFSI security rulemaking effort. The rulemaking effort is described in the December 16, 2009, Federal Register notice (74 FR 66589), "Draft Technical Basis for Rulemaking Revising Security Requirements for Facilities Storing SNF and HLW; Notice of Availability and Solicitation of Public Comments."

Staff Scoping Decision at 12. The Staff's conclusions directly conflict with well-established legal precedents and, most importantly, ignore the mandate of the Court of Appeals in *New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012).

To begin, the Staff Scoping Decision cannot be reconciled with the history and legal status of the waste confidence issue. This issue was first presented in *Minnesota v. NRC*, 602 F.2d 412 (D.C. Cir. 1979), where the Court described the central issue: "The crux of the case is current uncertainty about the prospects for developing and implementing safe methods for the ultimate disposal or even long-term storage of the highly toxic radioactive wastes created in the process of nuclear power generation." *Id.* at 413. The Court concluded that the case must be remanded to the NRC for a serious consideration of those issues, noting the following:

Cf. NRDC v. NRC, 178 U.S.App.D.C. 336, 361, 547 F.2d 633, 658 (1976) (Tamm, J., concurring in result) ("NEPA requires the Commission fully to assure itself that safe and adequate storage methods are technologically and economically feasible. It forbids reckless decisions to mortgage the future for the present, glibly assuring critics that technological advancement can be counted upon to save us from the consequences of our decisions"). As appears below, the Supreme Court, in Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, (1978), reversed the ruling of the majority opinion requiring further procedures but remanded for the kind of inquiry called for in Judge Tamm's concurring opinion.

Id. at 417 n.6 (emphasis added to identify the portion of Judge Tamm's concurrence in *NRDC v*. *NRC* cited with approval by Commissioner Svinicki at the time of her vote on the now-voided

version of the waste confidence rule (Notation Vote, Response Sheet, Sept. 24, 2009 at 3)). In the *Minnesota* case, Judge Tamm also concurred, concluding that:

if the Commission determines it is not reasonably probable that an offsite waste disposal solution will be available when the licenses of the plants in question expire, it then must determine whether it is reasonably probable that the spent fuel can be stored safely onsite for an indefinite period. Answers to these inquiries are essential for adequate consideration of the safety and environmental standards of the relevant statutes. It is undisputed that questions involving storage and disposal of nuclear waste pose serious concerns for health and the environment. *See Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 538-39, 98 S. Ct. 1197, 1208-09, 55 L. Ed. 2d 460, 475-76 (1978).

Our opinion merely remands this case to the Commission for such proceedings as it deems appropriate to determine whether there is reasonable assurance that an offsite storage solution will be available when needed in this case, by the years 2007-2009.

Id. 602 F.2d at 419-20 (Tamm, J., concurring) (footnotes omitted). In short, the Commission was given a clear mandate to use the NEPA process to evaluate the question of when and whether nuclear wastes would be permanently disposed, including looking into all of the environmental implications of those issues. *Id.* at 417 (majority opinion).

Although the Commission kept moving the date by which it was confident there would be a permanent and operational nuclear waste disposal facility, the existence of such a date—and thus a finite date for storage of spent fuel at the site following plant shutdown—was the key component of the Commission's confidence that there would be minimal environmental impacts of spent fuel storage at plant sites following cessation of plant operations. By concluding that there was no reasonable possibility of long-term, much less indefinite, storage of spent fuel at reactor sites, NRC concluded it never needed to consider alternatives to its plan to continue to authorize generation of more nuclear waste. All this changed when the Commission came to the

realization that it was no longer possible to determine a date certain by which a permanent nuclear waste repository would be available.

Thus, over 30 years after Minnesota was decided, the Court in New York v. NRC once again directed the Commission to consider the environmental impacts associated with there never being a permanent, safe, and adequate waste disposal facility: "We further hold that the Commission's evaluation of the risks of spent nuclear fuel is deficient in two ways: First, in concluding that permanent storage will be available 'when necessary,' the Commission did not calculate the environmental effects of failing to secure permanent storage—a possibility that cannot be ignored." New York, 681 F.3d at 473 (emphasis added). This holding effectively adopted what Judge Tamm said over 30 years earlier: "[I]f the Commission determines it is not reasonably probable that an offsite waste disposal solution will be available when the licenses if the plants in question expire, it then must determine whether it is reasonably probable that the spent fuel can be stored safely onsite for an indefinite period." *Minnesota*, 602 F.2d at 419-20 (Tamm, J., concurring) (footnotes omitted). By restricting consideration of alternatives and explicitly excluding the alternative of postponing further spent fuel generation until a permanent, safe, and adequate waste disposal facility exists, and excluding use of dry cask storage in lieu of spent fuel pools after spent fuel is 5 years old, the Staff is failing to provide the full environmental review mandated by the federal court.

The Staff's failure to include all reasonable alternatives in its Scoping Decision stems initially from its failure to focus more precisely on the underlying reason for the GEIS.

According to the Staff Scoping Decision, the GEIS will be used to update the Waste Confidence rule (Staff Scoping Decision at 38), the purpose of which "is to develop and implement a

regulatory approach that efficiently evaluates the environmental impacts of spent nuclear fuel after the licensed life for operation of a commercial nuclear reactor and prior to ultimate disposal" (Staff Scoping Decision at 2). That description tends to obfuscate the true purpose of the GEIS, which is to provide a basis for NRC to determine whether to issue or renew licenses and, if it issues or renews a license, what conditions should be imposed in the license. As the D.C. Circuit recognized, NRC is required to analyze the environmental impacts of the temporary storage of spent fuel before it licenses or relicenses the operation of a nuclear reactor because that operation will generate spent fuel for which there as yet is no permanent repository. *New York*, 681 F.3d at 473 (holding that the fact that permanent storage may never be achieved is "a possibility that cannot be ignored"); *see also id.* at 477 ("It is not only reasonably foreseeable but eminently clear that the WCD will be used to enable licensing decisions based on its findings.").

If, as the D.C. Circuit held in *New York v. NRC*, the major environmental impacts that must be assessed are the impacts of long-term and indefinite storage of spent fuel at reactor sites, then the focus of the study of alternatives in the GEIS must be the alternatives that will reduce those impacts. And the Commission must look at "*all* reasonable alternatives." 40 C.F.R. § 1502.14(a) (emphasis added).

A. The Staff Scoping Decision fails to address the alternative of requiring dry cask storage of spent fuel rather than continued use of spent fuel pools for spent fuel that is more than 5 years old.

One obvious and reasonable alternative that must be considered in the GEIS is dry cask storage as an option to storage in spent fuel pools. Although Staff may believe there is no environmental impact difference between spent fuel that is closely packed and stored in pools and spent fuel that is placed in dry cask storage once it is 5 years old, there is ample and

technically competent disagreement with that conclusion. *See, e.g.*, Robert Alvarez, Jan Beyea, Klaus Janberg, Jungmin Kang, Ed Lyman, Allison Macfarlane, Gordon Thompson, Frank N. von Hippel, *Reducing the Hazards from Stored Spent Power-Reactor Fuel in the United States* (Science and Global Security, 11:1–51, 2003)³; Robert Alvarez, *Spent Nuclear Fuel Pools in the U.S.: Reducing the Deadly Risks of Storage* (Institute for Policy Studies, May 24, 2011). Given the breadth and weight of scientific support for the proposition that there are significant environmental benefits from dry cask storage for all fuel that it is more than 5 years old, this reasonable alternative must be studied in the Commission's review of "*all* reasonable alternatives." 40 C.F.R. § 1502.14(a) (emphasis added).

Although the Staff does not directly reject the advantages of dry cask storage, it seeks to avoid consideration of that option by noting that:

NRC is already considering implementing revised security requirements as part of the ongoing ISFSI security rulemaking effort. The rulemaking effort is described in the December 16, 2009, Federal Register notice (74 FR 66589), "Draft Technical Basis for Rulemaking Revising Security Requirements for Facilities Storing SNF and HLW; Notice of Availability and Solicitation of Public Comments."

Staff Scoping Decision at 12. This attempt to avoid addressing the mitigation potential of the dry cask storage alternative fails for several reasons. First, it is inconsistent with the Commission's directive in it Staff Requirements-COMSECY-12-0016. Second, it violates NRC's regulations implementing NEPA. Third, it is contrary to well-established federal law

³ This article was cited in a filing in these proceedings. *See* Comments by Alliance for Nuclear Accountability, et. al. (Jan. 2, 2013), Declaration of 2 January 2013 by Gordon R. Thompson: Recommendations for the US Nuclear Regulatory Commission's Consideration of Environmental Impacts of Long-Term, Temporary Storage of Spent Nuclear Fuel or Related High-Level Waste, Appendix A.

which has been applied to the NRC in an analogous situation.

The Staff Scoping Decision is inconsistent with Commission directives. In Staff Requirements-COMSECY-12-0016, the Commission directed Staff to be guided by the "Council on Environmental Quality's Guidance on Improving the Process for Preparing Efficient and Timely Reviews Under NEPA" ("CEQ Guidance"). Staff Requirements-COMSECY-12-0016. In that Guidance, CEQ reminds federal agencies that "NEPA requires Federal agencies to consider the potential environmental consequences of their proposed action, and any reasonable alternatives, before deciding whether and in what form to take an action." CEQ Guidance, 77 Fed. Reg. 14473, 14475 (Mar. 12, 2012). While the Guidance encourages agencies to incorporate by reference completed analyses from other documents (see, e.g., 77 Fed. Reg. at 14475 ("NEPA reviews should coordinate and take appropriate advantage of existing documents and studies, including through adoption and incorporation by reference")), nowhere does it authorize Federal agencies to avoid consideration of impacts or alternatives and proceed to a final decision on a major federal action merely because another, yet to be completed, proceeding is evaluating some of those issues. To the contrary, the Guidance makes clear that the NEPA process must be fully completed *before* a decision is made on the major federal action:

Agencies must integrate the NEPA process into their planning at the earliest possible time to ensure that planning and decisions reflect environmental values, avoid delays later in the process, and anticipate and attempt to resolve potential issues. NEPA should not become an after-the-fact process that justifies decisions that have already been made.

[A]n agency shall prepare an EIS so that it can inform the decisionmaking process in a timely manner "and will not be used to rationalize or justify decisions already made."

CEQ Guidance, 77 Fed. Reg. at 14476-77 (footnotes and citations omitted). Thus, if the Staff

wishes to use any environmental analyses conducted in the "Rulemaking Revising Security Requirements for Facilities Storing SNF and HLW" as part of the GEIS process in these proceedings, it will have to wait for that rulemaking to complete its environmental impact statement analysis, a delay that will substantially interfere with the Commission's clear goal of completing the GEIS within 24 months of its initiation.

In addition, it appears from the Federal Register Notice for the Rulemaking Revising Security Requirements for Facilities Storing SNF and HLW (74 Fed. Reg. 66589 (Dec. 16, 2009)) that the scope of that analysis is far narrower than the scope of a proper consideration of dry cask storage as an alternative to the long-term or indefinite use of spent fuel pools. The rulemaking on security revisions is focused only on security issues at Independent Spent Fuel Storage Installations (ISFSI) and Monitored Retrievable Storage Installation (MRS):

The Nuclear Regulatory Commission (Commission or NRC) is seeking input from the public, licensees, certificate holders, and other stakeholders on a draft technical basis for a proposed rulemaking that would revise the NRC's security requirements for the storage of spent nuclear fuel (SNF) at an Independent Spent Fuel Storage Installation (ISFSI) and the storage of SNF and/or high-level radioactive waste (HLW) at a Monitored Retrievable Storage Installation (MRS).

74 Fed. Reg. at 66589. The scope of that proceeding thus appears to ignore the many environmental impacts at over 100 reactor sites that may occur as a result of accidental releases from spent fuel pools, or fires at spent fuel pools, and it also appears to ignore the environmental and economic impacts of the continued use of a reactor site for waste storage for a long-term or indefinite period after the reactor has shutdown. Whether that rulemaking will even consider requiring dry cask storage at reactor sites remains unresolved:

Petition for rulemaking (PRM-72-6), item number 11, requests that the NRC . . . "require Hardened On-site Storage (HOSS) at all nuclear power plants as well as

away-from-reactor dry cask storage; that all nuclear industry interim on-site or off-site dry cask storage installations or ISFSIs be fortified against attack." Consequently, item 11's technical content appears to be relevant to the scope of the proposed rulemaking and it is mentioned in the draft technical basis. Therefore, the NRC may consider this petition in the course of developing the proposed rule. However, the NRC has not yet reached a decision on acceptance of this petition and this notice does not prejudge the agency's final action on whether to accept the requests in PRM-72-6.

74 Fed. Reg. at 66591. There is also no indication that the rulemaking, if it proceeds, will include an environmental analysis of the impacts of the proposed action and alternatives to mitigate those consequences. In short, the pending potential rulemaking is not a viable substitute for the obligations imposed on NRC to conduct a thorough environmental review, including consideration of all reasonable alternatives, of the proposed action of allowing the generation of spent fuel to continue when there is not in place a permanent, safe, and adequate waste disposal facility.

Proceeding with the GEIS without considering all viable alternatives to mitigate the adverse consequences of the proposed action, also violates long-standing NRC regulations. NRC requires that all reasonable alternatives be explored as part of the NEPA process:

State whether the Commission has taken all practicable measures within its jurisdiction to avoid or minimize environmental harm from the alternative selected, and if not, to explain why those measures were not adopted. Summarize any license conditions and monitoring programs adopted in connection with mitigation measures.

10 C.F.R. § 51.103(a)(4). By never addressing alternatives that could mitigate the adverse impacts of long-term or indefinite spent fuel storage at reactor sites after plant shutdown, the GEIS would not have considered, and NRC would not have taken, "all practicable measures within its jurisdiction to avoid or minimize environmental harm."

The Staff's limited analysis of reasonable mitigation alternatives also violates federal case law. In *NRDC v. NRC*, 539 F.2d 824 (2d Cir. 1976), *vacated on grounds of subsequent mootness sub. nom. Allied-General Nuclear Services v. NRDC*, 434 U.S. 1030 (1978), NRC sought to rely on a draft generic impact statement on the use of mixed oxide fuels ("GESMO") to grant interim licenses even though the "draft GESMO did not fully address alternatives." 539 F. 2d at 842. NRC argued, as the Staff does here, that the rest of the analysis would be completed as part of an additional analysis at a later time. The Court rejected NRC's reliance on the draft GESMO as a basis for interim licenses, ruling that the draft GESMO was "a legally insufficient environmental impact statement" because "the consideration of alternatives and of special hazards to the public health, safety and welfare are vital to *any* impact statement." *Id.* (emphasis in original). Here, as well, the GEIS will be legally insufficient unless it fully considers all alternatives to the long-term use of spent fuel pools, rather than leaving the analysis of dry cask storage for a later date.

B. The Staff Scoping Decision fails to address the alternative of not allowing further production of spent fuel until NRC determines that there is a safe and environmentally acceptable permanent waste repository to receive the additional spent fuel.

Another obvious and reasonable alternative that must be addressed in the GEIS is the option of not allowing additional spent fuel to be generated until a permanent, safe, and adequate nuclear waste disposal facility exists.⁴ Indeed, the D.C. Circuit has already identified this

⁴ As noted in footnote 1 above, this alternative should be analyzed for all plants that are not yet licensed, that are up for relicensing, or that received operating licenses or license extensions on or after December 23, 2010, when the Commission formally abandoned the position that it could establish a date by which a permanent nuclear waste repository would be available. *See* 75 Fed. Reg. 81032.

alternative as a reasonable one by noting that it may be *unreasonable* to do anything else: "The lack of progress on a permanent repository has caused considerable uncertainty regarding the environmental effects of temporary SNF storage and *the reasonableness of continuing to license* and relicense nuclear reactors." New York, 681 F.3d at 474 (emphasis added).

The alternative of ceasing generation of additional spent nuclear fuel until a permanent, safe, and adequate nuclear waste disposal facility exists is not only a "reasonable alternative" that must be analyzed to meet the requirements of 40 C.F.R. § 1502.14(a), but is also required by 40 C.F.R. § 1502.14(d), which states that agencies such as NRC must include in their environmental analysis "the alternative of no action." The "no action" alternative must be analyzed before NRC can license the generation of additional spent nuclear fuel (and the resulting environmental impacts of such additional generation) at any nuclear facility. Because the GEIS is intended to support the environmental review of licensing actions and license renewal actions regarding environmental impacts of storing spent nuclear fuel, NEPA mandates that NRC examine the cessation of further generation of spent fuel until a permanent, safe, and adequate nuclear waste disposal facility exists.

The sole basis offered in the Staff Scoping Decision for rejecting, as an alternative, cessation of further generation of spent fuel until a permanent, safe, and adequate nuclear waste disposal facility exists, is that "[c]essation of licensing activities and overall reactor operations does not satisfy the purpose and need for the GEIS." Staff Scoping Decision at 12. However, as already noted, this narrow view of the purpose and need for the GEIS stems from the misperception that it will become the basis for a "regulatory approach" to the temporary storage of spent fuel, rather than a prerequisite to licensing decisions that will result in the continued

generation of spent fuel in the absence of any permanent repository for that fuel. *New York*, 681 F.3d at 473.

II. THE STAFF SCOPING DECISION IGNORES THE LIMITATIONS IN 10 C.F.R. §§ 51.23(b), 51.53(c)(2), AND 51.95(c)(2) AND FAILS TO PROVIDE PROPOSED CRITERIA FOR WHEN ISSUES MAY BE RAISED IN INDIVIDUAL LICENSING PROCEEDINGS

The Staff Scoping Decision fails to include any consideration of any amendments to 10 C.F.R. §§ 51.23(b), 51.53(c)(2), or 51.95(c)(2). This is problematic because those provisions currently preclude parties from raising important site-specific issues in licensing proceedings:

Accordingly, as provided in §§ 51.30(b), 51.53, 51.61, 51.80(b), 51.95, and 51.97(a), and within the scope of the generic determination in paragraph (a) of this section, no discussion of any environmental impact of spent fuel storage in reactor facility storage pools or independent spent fuel storage installations (ISFSI) for the period following the term of the reactor operating license or amendment, reactor combined license or amendment, or initial ISFSI license or amendment for which application is made, is required in any environmental report, environmental impact statement, environmental assessment, or other analysis prepared in connection with the issuance or amendment of an operating license for a nuclear power reactor under parts 50 and 54 of this chapter, or issuance or amendment of a combined license for a nuclear power reactor under parts 52 and 54 of this chapter, or the issuance of an initial license for storage of spent fuel at an ISFSI, or any amendment thereto.

10 C.F.R. § 51.23(b); *see also id.* § 51.53(c)(2) (license applicant's "environmental report need not discuss any aspect of the storage of spent fuel for the facility within the scope of the generic determination in § 51.23(a) and in accordance with § 51.23(b)"); *id.* § 51.95(c)(2) ("[T]he supplemental environmental impact statement prepared at the license renewal stage need not discuss . . . any aspect of the storage of spent fuel for the facility within the scope of the generic determination in § 51.23(a) and in accordance with § 51.23(b).").

Indeed, the Staff has consistently taken the position in the past that so long as § 51.23(b)

exists, no effort to discuss any aspect of spent fuel storage after operations have ceased is permitted, regardless of whether the matter was specifically addressed in § 51.23(a). *See, e.g.*, *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3), NRC Staff's Response to Intervenors (1) Joint Motion For Leave to File a New Contention Concerning the Onsite Storage of Nuclear Waste at Indian Point And (2) Joint Contention NYS-39/RK-EC-9/CW-EC-10, at 8 (Aug. 2, 2012), ML12215A565. In light of the broad language of 10 C.F.R. §§ 51.23(b), 51.53(c)(2), and 51.95(c)(2), and in light of the Staff's past interpretation of these provisions, the Staff Scoping Decision errs by failing to identify the need to amend these provisions to ensure that matters that are clearly site-specific and not appropriate for generic treatment can be raised in individual licensing proceedings.

Numerous participants in the GEIS and rulemaking proceedings publicly expressed their concern about the need for site-specific treatment of certain issues. *See, e.g.*, Staff Scoping Decision at 8-9, 14; States' Written Scoping Comments at 4-5, 16-18; *see also* discussion of New York's comments cited in footnote 2 *supra*. The Staff Scoping Decision recognizes that such issues may exist and states that "[t]he GEIS and Waste Confidence rule will identify those impacts that cannot be analyzed generically and therefore must be analyzed on a site-specific basis." Staff Scoping Decision at 50. But the Staff Scoping Decision says nothing about the need to amend §§ 51.23(b), 51.53(c)(2), and 51.95(c)(2). As noted, without amendments to those provisions, the opportunity to raise site-specific issues will be meaningless and will compel a party to go through the laborious and uncertain process of seeking a waiver of §§ 51.23(b), 51.53(c)(2), and 51.95(c)(2).

Further, the Staff Scoping Decision offers no guidance on what criteria will be used to

determine which issues are for site-specific consideration. Rather it merely states:

The NRC received a comment requesting that the Commission establish a new procedure by which the public would have an opportunity to raise site-specific impacts of continued storage before the ASLB. The GEIS will generically analyze the environmental impacts of continued storage. The GEIS and Waste Confidence rule will identify those impacts that cannot be analyzed generically and therefore must be analyzed on a site-specific basis.

Staff Scoping Decision at 50. Because the Staff Scoping Decision does not include any criteria that are to be applied in determining which issues will receive site-specific consideration, public participation is severely limited by the lack of an opportunity to develop evidence and arguments on issues that should be considered site-specific or should be considered generic. The Staff Scoping Decision should have disclosed NRC's intentions regarding the criteria to be used for deciding whether an issue will be considered site-specific or generic.

Assuming that some impacts will be identified in the GEIS as appropriate for review in site-specific proceedings, the Staff Scoping Decision must be altered to ensure that the scope of the current proceedings and the GEIS will be expanded to include guidance on which issues will be allowed to be considered on a site-specific basis following issuance of the GEIS, and to consider amendments to 10 C.F.R. §§ 51.23(b), 51.53(c)(2), and 51.95(c)(2).

CONCLUSION AND PROPOSED PROCEDURES FOR REVIEW

It is essential that these scoping issues be resolved as quickly as possible. The current GEIS process and rulemaking are part of a saga spanning 35 years. During that time, the Commission has struggled with whether it is environmentally prudent to allow nuclear wastes to be generated before there exists a facility of sufficient size to safely and permanently dispose of that waste. Because such a facility does not yet exist, the Commission has also struggled with

whether there is reasonable assurance that nuclear wastes can be safely stored at reactor sites with acceptable environmental risks that have been mitigated to the fullest extent possible forever. The Commission has already made several important first steps in its efforts to achieve the legally required analysis by: (1) choosing to conduct its review by using the full power of NEPA to develop a comprehensive GEIS; and (2) choosing to suspend the issuance of any new authority to generate nuclear wastes until this review process has been finally completed. But to resolve these matters fully, fairly, and efficiently by the end of 2014, the Commission must act now to review the Staff Scoping Decision before the problems that are inherent in that decision adversely affect the rest of the GEIS process. To that end, Petitioners respectfully request that the Commission establish the following schedule for immediate action on this Petition:

- 1. May 31, 2013 Any entity that participated in the scoping process can file a brief supporting or opposing the request for the Commission to hear the Petition on the merits;
- 2. June 7, 2013 Commission decides whether it will address the merits of the Petition;
- 3. June 14, 2013 Any entity that participated in the scoping process can file a brief on the merits of the Petition;
- 4. June 21, 2013 Any entity that filed a pleading on June 14 files any reply;
- 5. July 2013 Commission decides the merits of the Petition.

Time is of the essence, and the Commission should act quickly to ensure that the scope of the GEIS complies with NEPA and with the D.C. Circuit's decision in *New York v. NRC*.

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