

February 6, 2009

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY**

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Waste Confidence Decision Update	)	
10 C.F.R. Part 51	)	Docket ID – 2008-0482
73 Fed. Reg. 59,551 (Oct. 9, 2008)	)	
	)	
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Proposed Rule: Consideration of	)	RIN: 3150-A147
Environmental Impacts of Temporary	)	Docket ID – 2008-0404
Storage of Spent Fuel After Cessation	)	
Of Reactor Operation	)	
10 C.F.R. Part 51	)	
73 Fed. Reg. 59,547 (Oct. 9, 2008)	)	
	)	

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**COMMENTS BY TEXANS FOR A SOUND ENERGY POLICY,  
ALLIANCE FOR NUCLEAR RESPONSIBILITY, BEYOND NUCLEAR, BLUE  
RIDGE ENVIRONMENTAL DEFENSE LEAGUE, C-10 RESEARCH AND  
EDUCATION FOUNDATION, DON'T WASTE MICHIGAN,  
ENVIRONMENTAL COALITION ON NUCLEAR POWER, FRIENDS OF THE  
EARTH, FRIENDS OF THE COAST OPPOSING NUCLEAR POLLUTION,  
GRANDMOTHERS, MOTHERS AND MORE FOR ENERGY SAFETY, NEW  
ENGLAND COALITION, NUCLEAR INFORMATION AND RESOURCE  
SERVICE, NUCLEAR FREE VERMONT BY 2012, NUCLEAR WATCH SOUTH,  
PILGRIM WATCH, PUBLIC CITIZEN, SAN LUIS OBISPO MOTHERS FOR  
PEACE, THE SNAKE RIVER ALLIANCE, SOUTHERN ALLIANCE FOR  
CLEAN ENERGY, AND THE SUSTAINABLE ENERGY AND ECONOMIC  
DEVELOPMENT COALITION  
REGARDING NRC'S PROPOSED WASTE CONFIDENCE DECISION UPDATE  
AND PROPOSED RULE REGARDING CONSIDERATION FOF  
ENVIRONMENTAL IMPACTS OF TEMPORARY STORAGE OF SPENT FUEL  
AFTER CESSATION OF REACTOR OPERATIONS**

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## I. INTRODUCTION

Texans for a Sound Energy Policy, Alliance for Nuclear Responsibility, Beyond Nuclear, Blue Ridge Environmental Defense League, C-10 Research and Education Foundation, Environmental Coalition on Nuclear Power, Friends of the Earth, Friends of the Coast Opposing Nuclear Pollution, New England Coalition, Grandmothers, Mothers and More for Safe Energy, Nuclear Information and Resource Service, Nuclear Free Vermont by 2012, Nuclear Watch South, Pilgrim Watch, Public Citizen, San Luis Obispo Mothers for Peace, Southern Alliance for Clean Energy, Snake River Alliance, and the Sustainable Energy and Economic Development Coalition (collectively “Commenters”) hereby submit comments on the U.S. Nuclear Regulatory Commission’s (“NRC’s”) proposed Waste Confidence Decision Update, 73 Fed. Reg. 59,551 (October 9, 2008) (“Proposed Waste Confidence Decision”); and its proposed rule entitled: Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation, 73 Fed. Reg. 59,547 (October 9, 2008) (“Proposed Temporary Storage Rule”).<sup>1</sup>

These comments are supported by two expert declarations and technical reports:

- the expert declaration of Dr. Arjun Makhijani, President of the Institute for Energy and Environmental Research (“IEER”), to which is attached his curriculum vitae and expert report entitled “Comments of the Institute for Energy and Environmental Research on the U.S. Nuclear Regulatory Commission’s Proposed Waste Confidence Rule Update and Proposed Rule Regarding Environmental Impacts of Temporary Spent Fuel Storage” (February 6, 2009) (“IEER Comments”); and
- the expert declaration of Dr. Gordon R. Thompson, Executive Director of the Institute for Resource and Security Studies (“IRSS”), to which is attached his curriculum vitae and expert report entitled “Environmental Impacts of Storing Spent Fuel and High-Level Waste from Commercial Nuclear Reactors: A Critique of NRC’s Waste Confidence Decision and Environmental Impact Determination” (February 6, 2009) (“Thompson Report”).

As discussed below, Commenters believe that the Proposed Waste Confidence Decision and the Proposed Temporary Fuel Storage Rule fail to comply with the requirements of the Atomic Energy Act (“AEA”) and the National Environmental Policy Act (“NEPA”), and therefore should be withdrawn. The Commission should cease to license the operation of any new nuclear power plants or re-license any existing nuclear power plants unless and until it is able to make a supportable determination that spent fuel can be safely stored and disposed of, and unless and until that determination is made in compliance with NEPA.

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<sup>1</sup> Some of the organizations who are participating in these comments have also filed other comments, in addition to these comments.

## II. SUMMARY OF COMMENTS

Almost thirty years ago, the NRC issued its first proposed Waste Confidence Decision, concluding that spent reactor fuel could be safely disposed of and that in the meantime it could be safely stored at nuclear reactor sites. Notice of Proposed Rulemaking, Storage and Disposal of Nuclear Waste, 44 Fed. Reg. 61,372 (October 25, 1979). In a companion rulemaking, based on a previous Waste Confidence policy decision that spent fuel could be safely contained in a bedded salt repository, the NRC made a finding that the health impacts of the entire uranium fuel cycle – from uranium mining to spent fuel disposal – would have no significant adverse impacts on the human environment. Final Rule, Licensing and Regulatory Policy and Procedures for Environmental Protection; Uranium Fuel Cycle Impacts From Spent Fuel Reprocessing and Radioactive Waste Management, 44 Fed. Reg. 45,362 (August 12, 1979).

The NRC relied on these interdependent generic rules to license a whole generation of nuclear power reactors, and has re-licensed many of those reactors for additional twenty-year terms. These nuclear power plants have generated a total of 56,000 metric tons of spent fuel as of April 2008, and fueling them was responsible for the creation of 300,000 metric tons or more of depleted uranium tails, for which neither the NRC nor the U.S. Department of Energy (“DOE”) has yet found a safe means of disposal. The DOE expects that spent fuel from existing reactors will increase to 119,000 metric tons by 2035. Meanwhile, at the site of every operating reactor in the United States, spent fuel accumulates in high-density fuel storage pools, which the government has admitted are vulnerable to catastrophic fire caused by intentional attacks and accidents. In addition, thousands of cubic meters of greater than class C (“GTCC”) waste will be generated when reactors now in operation are decommissioned. The amount of GTCC waste will be much greater if spent fuel is reprocessed.

For almost thirty years after the Waste Confidence Rule was first proposed in 1979, the NRC did not receive any new applications to build or operate new nuclear power plants. As of today, however, the NRC now has a significant number of new reactor applications before it. In total, the NRC is considering applications for more than thirty new reactors, which together would produce about 30,000 metric tons more spent fuel, assuming the plants operate for 40 years, and 45,000 metric tons if they operate for 60 years. These plans would also generate correspondingly large amounts of depleted uranium tails, GTCC waste (due to decommissioning and reprocessing), and other radioactive waste. Yet, the NRC is no closer to a disposal solution than it was thirty years ago.

As discussed at length in IEER’s Comments, the NRC simply has no technical basis for a finding of reasonable confidence that spent fuel can and will be safely disposed of at some time in the future. Therefore, under the Commission’s own standard that “it would not continue to license reactors if it did not have reasonable confidence that the wastes can and will in due course be disposed of safely,” the Commission must refuse to issue new licenses or renew existing licenses for nuclear power plants. 73 Fed. Reg. at 59,552 (citing 42 Fed. Reg. 34,391, 34,393 (July 5, 1977); *Natural Resources Defense Council v. NRC*, 582 F.2d 166 (2d Cir. 1978)).

The NRC's lack of a basis for any finding of confidence in the technical feasibility of a repository also fatally undermines Table S-3 of the NRC's Uranium Fuel Cycle Rule, which depends on the assumption that radioactive releases from a repository will be zero. Final Rule, Licensing and Regulatory Policy and Procedures for Environmental Protection; Uranium Fuel Cycle Impacts From Spent Fuel Reprocessing and Radioactive Waste Management, 44 Fed. Reg. 45,362 (August 12, 1979). Based on its own statement in the 1990 Waste Confidence rulemaking proceeding, the NRC, having arrived at a stage where any basis that it may have had for confidence in the safe disposal of spent fuel has clearly evaporated, must revisit the basis for Table S-3. *See* Review and Final Revision of Waste Confidence Decision, 55 Fed. Reg. 38,474, 38,491 (September 18, 1990) ("Unless the Commission, in a future review of the Waste Confidence decision, finds that it no longer has confidence in the technical feasibility of disposal in a mined geologic repository, the Commission will not consider it necessary to review the S-3 rule when it reexamines its Waste Confidence findings in the future.") Certainly, the Commission no longer has any basis whatsoever for the principal assumption underlying Table S-3, which is that spent fuel can be safely disposed of in a repository, having repudiated that assumption in the proposed Waste Confidence Decision. 73 Fed. Reg. at 59,555. *See also* IEER Comments.

In both the proposed Waste Confidence Decision and the Proposed Temporary Fuel Storage Rule, the NRC continues to deny that temporary spent fuel storage poses significant environmental risks, ignoring a wealth of government reports showing that high-density fuel storage pools are vulnerable to catastrophic fires that may be caused by accidents or intentional attacks. Instead of confronting this information in a detailed EIS, the NRC calls it a security matter and shrouds it in an unjustifiably broad mantle of security-related secrecy. But the NRC is not entitled to use security concerns as an excuse for failing to comply with NEPA. *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1034-35 (9th Cir. 2006).

In making a finding of no significant impact ("FONSI") with respect to spent fuel storage, the NRC has not even attempted to comply with the NRC's procedural requirements for a FONSI, such as preparing an environmental assessment ("EA") that addresses the purpose of and need for the proposed action and evaluates alternatives to the proposed action. The NRC also violates NEPA by failing to identify the documents on which it relies for its decision, and by failing to disclose all portions of its decision-making documents that are non-exempt under the Freedom of Information Act ("FOIA"). *San Luis Obispo Mothers for Peace* (Diablo Canyon Independent Spent Fuel Storage Installation), CLI-08-01, 67 NRC 1, 15-17 (2008) (citing *Weinberger v. Catholic Action of Hawaii*, 454 U.S. 139, 143 (1981)).

Perhaps most importantly, the NRC fails to explain why it is justified in continuing to allow licensees to use dangerous high-density fuel storage pools to store spent fuel under protective measures whose adequacy is suspect but cannot be publicly verified, when it would be possible to virtually eliminate the danger by using low-density pool storage and hardened dry storage of spent fuel. The NRC's secrecy is unnecessary, corrosive to the

NRC's system of accountability through open decision-making, and potentially dangerous because the decision-making process was not only secret but was restricted to the NRC and a limited group of individuals with a vested interest in minimizing the cost of mitigative measures, *i.e.*, reactor licensees.

The Proposed Waste Confidence Rule and the Proposed Temporary Fuel Storage Rule are utterly inadequate to satisfy the requirements of the AEA and NEPA for a generic licensing decision for new nuclear power plants. Any generic decision to allow the creation of additional spent reactor fuel and other radioactive waste associated with the uranium fuel cycle must be accompanied by thorough, supported, and well-documented safety findings; and it must also be accompanied by an environmental impact statement ("EIS") that fully assesses the environmental impacts of the uranium cycle, including health and environmental impacts and costs, and that examines a reasonable array of alternatives, including the alternative of not producing any additional radioactive waste.

### **III. DESCRIPTION OF COMMENTERS**

The following is a description of the Commenter organizations. All of the organizations are neighbors of existing or proposed nuclear power plants, and most have either intervened or plan to intervene in NRC proceedings for the licensing or re-licensing of nuclear power plants.

Texans for a Sound Energy Policy ("TSEP") is a non-profit educational organization based in Victoria, Texas whose purpose is to identify and evaluate energy alternatives and their environmental, social and economic impacts, including but not limited to nuclear power, coal-fired power plants and other energy production facilities. Because Victoria is the proposed site of a new nuclear power plant, TSEP has an interest in ensuring that the environmental impacts and safety risks of spent fuel storage and disposal, taken together with the other safety and environmental risks posed by a new nuclear plant, will be adequately considered by the NRC.

Beyond Nuclear is a national watchdog organization on the nuclear power and radioactive waste industries, as well as on the federal government agencies which are supposed to protect the public and the environment from the risks of radiation and radioactive waste to human health and ecosystems. Beyond Nuclear aims to educate and activate the public about the connections between nuclear power and nuclear weapons and the need to abandon both to safeguard our future, including on the risks associated with the inevitable generation of radioactive waste by the nuclear industry. Beyond Nuclear advocates for an energy future that is sustainable, benign and democratic. It is headquartered in Takoma Park, Maryland, a Nuclear-Free Zone.

The Blue Ridge Environmental Defense League ("BREDL") is a 25-year-old regional, community-based non-profit environmental organization in the southeastern United States, whose founding principles are earth stewardship, environmental democracy, social justice, and community empowerment. BREDL encourages government agencies and citizens to take responsibility for conserving and protecting our natural resources.

BREDL advocates grassroots involvement to empower whole communities in environmental issues. BREDL also functions as a “watchdog” of the environment, monitoring issues and holding government officials accountable for their actions.

Established in 1991, C-10 Research and Education Foundation’s mission is to monitor radiological emissions from the Seabrook nuclear reactor for use in assessing the plant’s impact on human health and the environment. C-10 participated in the licensing proceeding for the Seabrook nuclear power plant.

Don’t Waste Michigan is a state-based organization formed to stop Michigan from becoming a nuclear waste dumpsite.

Located in western Pennsylvania, the Environmental Coalition on Nuclear Power represents individuals and groups concerned about nuclear power and energy policy. Through educational, legal and political activities, the Coalition promotes a safe, non-nuclear U.S. energy policy.

Friends of the Earth is a leader in climate and energy solutions and in protecting human communities from environmental harm. It is the U.S. voice of an influential international network that operates in 70 countries. In South Carolina, Friends of the Earth has intervened in the NRC’s licensing proceeding and the state regulatory proceeding for the V.C. Summer nuclear power plant.

Friends of the Coast-Opposing Nuclear Pollution is a Maine-based organization advocating for nuclear safety, safe storage of nuclear waste, and protection of the human environment from nuclear pollution. Friends of the Coast was the only environmental advocacy organization actively engaged in the decommissioning of Maine Yankee Atomic Power Station (1997-2005) and the only non-governmental organization involved in oversight of the Maine Yankee Independent Spent Fuel Storage Installation.

Since 1971, the New England Coalition (“NEC”) has advocated for safe energy in New England and has provided education and resources for alternatives to nuclear power. NEC has also intervened in numerous NRC licensing proceedings involving the safety and environmental impacts of spent fuel storage at New England nuclear power plants.

Based in Atlanta, Georgia, Nuclear Watch South (formerly Georgians Against Nuclear Energy) is a regional, volunteer-based non-profit environmental group dedicated to phasing out nuclear power plants; abolishing nuclear weapons, safeguarding nuclear materials; and establishing ethical social policies for nuclear waste management.

Located in southeastern Massachusetts, Pilgrim Watch is a grassroots organization that serves the public interest in issues regarding the Pilgrim Nuclear Power Station in Plymouth, Massachusetts.

Public Citizen is a national, nonprofit consumer advocacy organization with over 70,000 members nationwide. Public Citizen’s mission is to protect openness and democratic

accountability in government and the health, safety, and financial interests of consumers. Public Citizen advocates for policies that will lead to safe, affordable and environmentally sustainable energy.

Grandmothers, Mothers and More for Energy Safety is an action-oriented networking organization working for a safe, responsible, renewable energy future and against the re-licensing of Oyster Creek Nuclear Generating Station in Ocean County, New Jersey.

Nuclear Free Vermont by 2012 is a member organization of people living near the Entergy Nuclear Vermont Yankee reactor and waste dump in Vernon, Vermont, whose mission is to educate people about how nuclear power affects the health and safety of the public.

Nuclear Information and Resource Service (“NIRS”) is a non-profit corporation with over 12,000 members across the United States. NIRS has a mission to promote a non-nuclear energy policy, and a concern for the health and safety of the people and ecosphere.

San Luis Obispo Mothers for Peace (“SLOMFP”) is a non-profit organization concerned with the risks and hazards connected with the Diablo Canyon Nuclear Power Plant, and with the dangers of nuclear power, weapons and waste on national and global levels. An all-volunteer non-profit group, SLOMFP has challenged NRC licensing decisions within the NRC and in Federal Courts since 1973.

The Southern Alliance for Clean Energy (“SACE”) is a coalition of environmental and citizen organizations promoting green energy in the southeastern United States. SACE has intervened in several NRC proceedings for the licensing of new nuclear power plants.

The Snake River Alliance is an Idaho-based grassroots group working through research, education, and community advocacy for peace and justice, the end to nuclear weapons, responsible solutions to nuclear waste and contamination, and sustainable alternatives to nuclear power.

The Sustainable Energy and Economic Development (“SEED”) Coalition is a project of Texas Fund for Energy and Environmental Education, Inc., a statewide nonprofit organization with 5,000 members working for clean air and clean energy in Texas. The organization advocates for sustainable energy, including energy efficiency, renewable energy and conservation.

## **IV. LEGAL AND FACTUAL BACKGROUND**

### **A. Requirements of the Atomic Energy Act and the National Environmental Policy Act With Respect to NRC Decisions Regarding Spent Fuel Storage and Disposal**

#### **1. Safety determination under the AEA**

The AEA precludes the NRC from licensing any new nuclear power plant or re-licensing any existing nuclear power plant if it would be “inimical . . . to the health and safety of the public.” 42 U.S.C. § 2133(d). In conformance with this requirement, the Commission has stated that it will only license a new nuclear power plant “so long as the Commission can be reasonably confident that permanent disposal (as distinguished from continued storage under surveillance) can be accomplished safely when it is likely to become necessary.” *Natural Resources Defense Council v. NRC*, 582 F.2d 166 (2d Cir. 1978). In the Proposed Waste Confidence Decision, the Commission has repeated its commitment not to license new nuclear power plants unless it can make this finding (“[The Commission] would not continue to license reactors if it did not have reasonable confidence that the wastes can and will in due course be disposed of safely.”) 73 Fed. Reg. at 59,552. Finding # 1 of the Proposed Waste Confidence Decision addresses this requirement and effectively constitutes a licensing determination that spent fuel disposal risks are not inimical to public health and safety.

In licensing nuclear power plants, the Commission must also make a predictive finding that spent fuel can be stored safely pending ultimate disposal. *State of Minnesota v. NRC*, 602 F.2d 412, 418-19 (D.C. Cir. 1979). Proposed Findings 3, 4 and 5 of the Proposed Waste Confidence Decision address this requirement and effectively constitute a licensing determination that spent fuel storage risks are not inimical to public health and safety.

#### **2. Environmental analysis under NEPA**

Separate from the AEA, NEPA requires that before licensing or re-licensing nuclear power plants, the NRC must evaluate, in an EIS, the environmental impacts of licensing decisions that have a significant environmental impact. 42 U.S.C. § 4332(C). NRC regulations include the licensing of nuclear power plants among actions that require the preparation of an EIS. 10 C.F.R. § 51.20(b)(2).

Even where an agency believes the environmental impacts of a proposed action are insignificant, an EIS may be required, depending up “[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.” *Foundation on Economic Trends v. Heckler*, 756 F.2d 143, 155 (D.C. Cir. 1985) (quoting 40 C.F.R. § 1508.27(b)(5)). See also *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1213 (9th Cir. 1998) (noting that a project may have significant environmental impacts where its effects are “highly uncertain or involve unique or unknown risks.”); *Morgan v. Walter*, 728 F.Supp. 1483, 1489 (D. Id. 1989).

An EIS must address the environmental impacts of the proposed action and connected actions and weigh the costs and benefits of a reasonable array of alternatives for avoiding or mitigating the consequences of the proposed action. 10 C.F.R. § 51.71(d). It must also address the cumulative impacts of the proposed action, *i.e.*, “the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions . . .” 40 C.F.R. § 1508.7. *See also Hydro Resources, Inc.*, CLI-01-4, 53 NRC 31, 60 (2001).

To the extent possible, environmental impacts must be quantified; and where they cannot be quantified, they must be discussed in qualitative terms. 10 C.F.R. § 51.71(d).

### **3. Procedural requirements for compliance with AEA and NEPA**

While the NRC may make a licensing determination through a notice-and-comment rulemaking, it must provide adequate support for its determination to satisfy the requirements of the Administrative Procedures Act (“APA”). *State of Minnesota*, 602 F.2d at 419. And while the NRC may make environmental determinations generically, those determinations must be made in compliance with the procedural requirements of NEPA, including preparation of an EIS for actions having a significant adverse impact on the human environment. *Baltimore Gas and Electric Co. v. Natural Resources Defense Council*, 462 U.S. 87, 99 (1983). In conducting supporting environmental analyses under NEPA, the NRC must comply with NEPA’s procedural requirements for providing adequate notice to the public regarding the bases for its evaluation and decision, including the identification and disclosure of all reference documents that are not exempt from disclosure under the FOIA. *San Luis Obispo Mothers for Peace*, CLI-08-01, 67 NRC at, 15-17.

#### **B. History of Waste Confidence Rulemaking**

As recounted in the Proposed Waste Confidence Decision, as a result of a rulemaking petition proceeding and in response to the U.S. Court of Appeals for the D.C. Circuit’s opinion on appeal of that rulemaking decision in *State of Minnesota*, 602 F.2d 412, the NRC has committed to periodically reassess “its finding of reasonable assurance that methods of safe permanent disposal of high-level radioactive waste (HLW) would be available when they were needed.” 73 Fed. Reg. at 59,552. The Commission also committed that it would not continue to license reactors “if it did not have reasonable confidence that the wastes can and will in due course be disposed of safely.” *Id.*

The Proposed Waste Confidence Decision marks the third time since 1979 that the Commission has proposed to make positive findings regarding the prospects for safe disposal and storage of spent fuel. *See* proposed 1979 finding (44 Fed. Reg. 61,372 (October 25, 1979)); final 1984 finding (49 Fed. Reg. 34,658 (August 31, 1984)); proposed 1989 finding (54 Fed. Reg. 39,767 (September 28, 1989)); final 1990 finding

(55 Fed. Reg. 38,474 (September 18, 1990)). Each time, the NRC has re-iterated a finding that safe spent fuel disposal is technically feasible, and each time it has extended the period of time that it expects will be necessary to site a repository.

As discussed below in subsection IV.E, the NRC has relied on the Waste Confidence Decision to license and re-license many nuclear power plants, and therefore it constitutes a major federal action significantly affecting the environment. Yet, not one of the Waste Confidence Decision proposals was accompanied by an EIS that addressed the environmental impacts of spent fuel disposal.

### **C. Relationship Between Waste Confidence Rule and Table S-3 (Uranium Fuel Cycle Rule)**

In 1979, the NRC promulgated a regulation concluding that the environmental impacts of the uranium fuel cycle were negligible. Final Rule, Licensing and Regulatory Policy and Procedures for Environmental Protection; Uranium Fuel Cycle Impacts From Spent Fuel Reprocessing and Radioactive Waste Management, 44 Fed. Reg. 45,362 (August 12, 1979). Estimates of radioactive releases from various stages of the uranium fuel cycle were presented in a table called “Table S-3.” All of the estimated radiological releases were small. In the case of spent fuel disposal, the NRC estimated that radiological releases after the sealing of a repository would be zero. *See* Table S-3. The zero release estimate was based on two assumptions: first, that the repository would be located in a bedded salt deposit; and second, that no radioactivity would escape from the repository. 44 Fed. Reg. at 45,368.

Table S-3 was incorporated into NRC regulations at 10 C.F.R. § 51.51(b). 10 C.F.R. § 51.51(a) instructs that:

Under § 51.50, every environmental report prepared for the construction permit stage or early site permit stage or combined license stage of a light-water-cooled nuclear power reactor, and submitted on or after September 4, 1979, shall take Table S-3, Table of Uranium Fuel Cycle Environmental Data, as the basis for evaluating the contribution of the environmental effects of uranium mining and milling, the production of uranium hexafluoride, isotopic enrichment, fuel fabrication, reprocessing of irradiated fuel, transportation of radioactive materials and high-level wastes related to uranium fuel cycle activities to the environmental costs of licensing the nuclear power reactor. Table S-3 shall be included in the environmental report and may be supplemented by a discussion of the environmental significance of the data set forth in this table as weighed in the analysis for the proposed facility.

The Uranium Fuel Cycle Rule’s finding of no significant health impacts is related to the Waste Confidence Decision because its estimate of zero radioactive releases from a repository is based on the Commission’s then-current Waste Confidence finding that “a suitable bedded-salt repository site or its equivalent will be found.” 44 Fed. Reg. at

45,332. As the Commission explained in a subsequent policy statement, it based that finding on its “confidence” in the integrity of a repository:

As the Commission noted in promulgating the [final uranium cycle rule], events which might lead to major releases from the bedded-salt repository used as the model for the S-3 rule appear remote in probability while any releases which might reasonably be expected eventually to occur appear very small. Accordingly, the Commission found that the staff’s assumption that the integrity of the repository would be maintained after sealing was a reasonable description of the performance of a properly sealed repository and, when taken together with the staff’s highly conservative assumption that all volatile fission products in reactor spent fuel would be released to the atmosphere prior to repository sealing, left Table S-3 overall a conservative description of fuel cycle impacts. *See* 44 FR 45369, col. 2. Considering the rule’s limited purpose and taking into account the Commission’s “waste confidence” proceeding, the Commission continues to believe that the record of the final S-3 rulemaking contains adequate information on waste disposal uncertainties to support continued use of the fuel cycle rule.

Policy Statement, Licensing and Regulatory Policy and Procedures for Environmental Protection; Uranium Fuel Cycle Impacts, 47 Fed. Reg. 50,591, 50,593 (Nov. 11, 1982).

In the 1990 update to the Waste Confidence Rule, the Commission also acknowledged that if it were to change its waste confidence decision, it would have to revisit the adequacy of Table S-3. 55 Fed. Reg. at 38,490.

The NRC has not updated Table S-3 since the 1970s. As the Commission recently explained, a planned update:

was delayed because, by the mid-1980s, there were no new applications for construction of nuclear power plants, nor, at that time, were any future ones predicted. Consequently, there was no regulatory need to update Table S-3 and competing priorities for rulemaking resources eventually resulted in the cessation of activities on the table. Since the mid-1980s, the NRC has revisited the issue of revising the value for radon-222 in Table S-3 on more than one occasion, but in each case higher priority rulemakings led to a halt in these efforts.

New England Coalition on Nuclear Pollution; Denial of Petition for Rulemaking, 73 Fed. Reg. 14,946, 14,947 (March 20, 2008).

#### **D. Relationship Between Waste Confidence Rule and FONSI With Respect to Environmental Impacts of Spent Fuel Storage**

NRC regulation 10 C.F.R. § 51.23(a) reports that the Commission “has made a generic determination that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that

reactor at its spent fuel storage basin or at either onsite or offsite independent spent fuel storage installations.” This finding, in turn, is based on the Waste Confidence Decision and the environmental studies reported on in the Waste Confidence Decision. *See* Proposed Rule Regarding Temporary Fuel Storage, 73 Fed. Reg. at 59,549, 59,550.

**E. NRC Reliance on Waste Confidence Rule and Table S-3 to License And Re-License Nuclear Power Plants**

Since 1979, the NRC has used the Waste Confidence Decision as a generic licensing determination with respect to the safety and environmental impacts of storing and disposing of spent fuel. Therefore, in individual licensing proceedings, the NRC has rejected any contentions that question the safety or environmental impacts of spent fuel storage or disposal. For instance, in the following initial nuclear power plant licensing cases, the pendency of the Waste Confidence rulemaking was found to preclude the admission of contentions challenging the safety of onsite spent fuel storage and/or the prospects for safely disposing of spent fuel: *Carolina Power & Light Co. and North Carolina Eastern Municipal Power Agency* (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 NRC 2069, 2081, 2102 (1982); *Virginia Electric and Power Co.* (North Anna Nuclear Power Station, Units 1 and 2), ALAB-584, 11 NRC 451, 465 (1980); *Public Service Electric and Gas Co., et al.* (Salem Nuclear Generating Station, Unit 1), ALAB-650, 14 NRC 43, 69 (1981).

The NRC has also relied on the generic findings of the Waste Confidence Decision and the related License Renewal Generic EIS (NUREG-1437, 1996) to preclude challenges to individual license renewal decisions. *See, e.g., Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 344-45 (1999); *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 21-23 (2001); *Nuclear Management Company, L.L.C.* (Palisades Nuclear Plant), CLI-06-17, 63 NRC 727, 734 n.29 (2006); *Entergy Nuclear Vermont Yankee, L.L.C. and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), and *Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-07-03, 65 NRC 13, 17-18 (2007); *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Station), LBP-08-13, \_\_ NRC \_\_ (July 31, 2008).

And in recent early site permit cases for new nuclear power plants, the NRC reached the same conclusion. *See, e.g., Dominion Nuclear North Anna, L.L.C.* (Early Site Permit for North Anna ESP Site), LBP-04-18, 60 NRC 253, 268-69 (2004); *Exelon Generating Company* (Early Site Permit for Clinton ESP Site), LBP-04-17, 60 NRC 229, 246-47 (2004); *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), LBP-04-19, 60 NRC 277, 296 (2004).

Thus, since the first Waste Confidence rulemaking began, the Waste Confidence Decision has served as a surrogate for individual licensing determinations that storage and disposal of spent fuel can be conducted safely and without significant adverse environmental impacts.

The NRC also relies on Table S-3 and the Uranium Fuel Cycle Rule as a licensing determination that the environmental impacts of the uranium fuel cycle are benign and therefore do not warrant the denial or restriction of licenses. The NRC will deem a license application to be sufficient if it incorporates the very small (or in the case of spent fuel, zero) estimates of radiological releases from the uranium fuel cycle that are presented in the 30-year-old Table S-3, and then extrapolates them into correspondingly insignificant health and economic effects. The NRC has ruled that the quantitative figures in Table S-3 may not be challenged in individual licensing proceedings. *See, e.g., Tennessee Valley Authority* (Bellefonte Nuclear Power Plant, Units 3 and 4), LBP-08-16, \_\_\_ NRC \_\_\_, slip op. at 70-72 (September 12, 2008); *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), LBP-83-6, 17 NRC 153, 154-56 (1983).

**V. THE NRC’S GENERIC LICENSING DECISION THAT STORAGE AND DISPOSAL OF SPENT FUEL CAN BE ACCOMPLISHED SAFELY AND WITHOUT SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS DOES NOT COMPLY WITH THE REQUIREMENTS OF THE AEA, NEPA, OR THE APA.**

As discussed above in Section IV.E, the Waste Confidence Decision effectively constitutes a generic licensing decision that it is safe to license and re-license nuclear power plants because disposal and storage of the radioactive waste that they generate will not be inimical to public health and safety. As a licensing decision, the Waste Confidence Decision is subject to the requirements of both the AEA and NEPA.

**A. The NRC’s Generic Licensing Decision That Spent Fuel Can Be Safely Disposed of Does Not Comply with the AEA or NEPA.**

**1. NRC’s safe disposal decision fails to comply with the AEA because its safety finding is unsupported.**

As discussed in detail in the attached IEER Comments, the NRC lacks a basis for a reasonable level of confidence that disposal of spent fuel in a repository is technically feasible. A geologic repository is a mined system that is highly perturbed thermally, chemically, and mechanically from its original geological setting. In this system, three elements must be shown to work together: the waste and the waste encapsulation system, the backfill and sealant system, and the near- and far-field perturbed geologic environment. The NRC has not made such a demonstration. The research done so far on potential repositories has been completely inadequate to show any reasonable prospect for containment of radioactivity by a repository, in other words that a sealed geological repository with a large amount of spent fuel can contain radioactivity sufficiently to comply with safety, health and environmental standards.

**2. NRC’s safe disposal decision fails to comply with NEPA because it is not supported by an EIS that fully and accurately evaluates the environmental impacts of the uranium fuel cycle, including the impacts of spent fuel disposal.**

NEPA requires that NRC licensing decisions with significant adverse environmental impacts must be supported by an EIS. Clearly, the generation of large quantities of highly radioactive spent fuel poses extremely grave risks to public health and safety, and therefore demands preparation of an EIS. In addition, the significant uncertainties that attend predictions of whether the radioactive waste will remain isolated for thousands of years warrant the preparation of an EIS. *See* 40 C.F.R. § 1508.27(b)(5), *Blue Mountains Biodiversity Project*, 161 F.3d at 1213.

If the NRC wishes to continue to rely on the Waste Confidence Decision to allow the licensing of new nuclear power plants and the re-licensing of existing nuclear power plants, it must comply with NEPA to the “fullest” extent allowed by the law. *Calvert Cliffs Coordinating Comm. v. United States Atomic Energy Comm.*, 449 F.2d 1109, 1115 (D.C. Cir. 1971). The NRC therefore must support its generic decisions to license the future production of spent fuel and other radioactive waste by preparing a generic EIS that evaluates the environmental impacts of that decision. In compliance with 40 C.F.R. § 1502.22(b), the generic EIS must address all reasonably foreseeable environmental impacts, including the impacts of the entire stream of radioactive waste that will be generated by those plants, from mining to ultimate disposal, and including all intermediate stages.

The generic EIS must examine the cumulative impacts and costs of the entire amount of waste that will be generated, including the environmental impacts and costs of siting, building, and operating each additional repository. 40 C.F.R. § 1508.7. The EIS must also weigh the relative costs and benefits of licensing individual nuclear power plants – including the costs and benefits of generating and disposing of a significant quantity of radioactive waste – against the costs and benefits of other alternatives that would not involve the creation of that waste. 10 C.F.R. § 51.71(d). And because the evaluation of the environmental impacts of radioactive waste disposal involves predictions far into the future, the generic EIS must address the uncertainty that attends those predictions. 40 C.F.R. § 1508.27(b)(5). *See also* IEER Comments.

**3. No existing EIS is sufficient to support the Waste Confidence Decision**

No pre-existing EIS, already prepared by the NRC or the U.S. Department of Energy (“DOE”), is sufficient to support the Waste Confidence Decision. For instance, as discussed in IEER’s Comments, the EIS prepared by the DOE in 1980 is insufficient in scope and grossly out of date.

Similarly, the documentation for the Uranium Fuel Cycle Rule, developed in the mid-1970s, only estimates radiation releases and does not evaluate human health impacts of

those releases. It is also addressed to the impacts of an individual nuclear power plant, and fails to address the cumulative impacts of significantly adding to the nation's inventory of radioactive waste. The Uranium Fuel Cycle Rule is also extremely outdated with respect to its assumptions about the radioactive emissions from various forms of radioactive waste, including spent fuel, depleted uranium tails, greater than class C (GTCC) waste, and uranium mining tails. Table S-3 also erroneously concludes that it is conservative to assume gaseous releases of certain radionuclides, notably I-129, from reprocessing prior to sealing of a repository rather than to assume their release into water after disposal of spent fuel. And the Uranium Fuel Cycle Rule also significantly underestimates human vulnerability to radiation. *See* IEER Comments.

Finally, there is no EIS or other environmental analysis document that addresses one of the key environmental questions raised by the proposed licensing and re-licensing of nuclear plants: what does it cost to manage and dispose of the radioactive waste generated in the process of operating nuclear plants, and is the cost justifiable in comparison to renewable energy alternatives such as wind and solar power? The lack of a credible cost analysis for waste means that alternatives to nuclear power cannot be fairly evaluated as required by NEPA. *See* IEER Comments.

Thus, no other EIS exists on which the NRC could rely to support the generic Waste Confidence licensing decision. Before licensing or re-licensing even one more nuclear power plant, the NRC must prepare an EIS that fully addresses the environmental impacts of the radioactive waste that will be generated as a result of that licensing decision, both with respect to the impacts of the individual plant and the cumulative impacts of that plant in combination with all other plants that are currently licensed or can reasonably be expected to be licensed.

**B. Because the NRC Lacks a Basis for a Finding of Confidence in The Safety of Spent Fuel Disposal, It Must Re-Assess the Health Impacts of the Uranium Fuel Cycle as Set Forth in Table S-3 and the Uranium Fuel Cycle Rule.**

As discussed above in Section IV.D, in licensing or re-licensing any nuclear power plant, the NRC relies on a generic determination, codified in Table S-3, that the human health impacts of disposing of the radioactive waste generated by that plant are insignificant. Further, as discussed above in Section V.A.2, the findings of Table S-3 are severely outdated, and the table significantly underestimates the human health impacts of the uranium fuel cycle, including the impacts of disposing of spent fuel. In addition, the assumptions on which Table S-3 depends include the assumption that spent fuel will be disposed of in a bedded salt repository. But in its Proposed Waste Confidence Decision, the NRC itself states that salt repositories are now considered suitable only for reprocessed high-level waste and not for spent fuel disposal. 73 Fed. Reg. at 59,555. As discussed in IEER's Comments, all other repository types are now considered likely to have radioactive releases after the repository has been sealed. The hypothesis that releases from spent fuel disposal could be zero has therefore been discredited. Indeed, there are plausible circumstances in which releases could exceed the requirements of safe

disposal as defined by radiation protection standards. In order to ensure that its licensing decisions for nuclear power plants comply with NEPA by fully addressing the environmental impacts of the radioactive waste they will generate, the NRC must completely overhaul Table S-3 and integrate it with a more comprehensive analysis of all of the environmental impacts and costs of the licensing of nuclear power plants, including the impacts and costs of the plants themselves and the wastes they will generate. *See* IEER Comments.

**C. The NRC's Proposed Generic Finding That Spent Fuel Can Be Safely Stored Pending Ultimate Disposal Does Not Comply With the AEA or NEPA.**

In past Waste Confidence Decisions, the NRC refused to acknowledge one of the most significant risks posed by operating nuclear power plants: the risk of a catastrophic fire caused by an attack or accident that leads to partial or complete drainage of a high-density spent fuel storage pool. Thompson Report, Section 5.1. The NRC has finally admitted the existence of this risk in the Proposed Waste Confidence Decision and Proposed Temporary Fuel Storage Rule. 73 Fed. Reg. at 59,564-68; 59,548. It also admits that since 2002 it has treated the risk as a site-specific issue, imposing new safety, security and environmental protection measures on a case-by-case basis, under secret licensing orders. Proposed Waste Confidence Decision, 73 Fed. Reg. at 59,567. *See also* Denial of Commonwealth of Massachusetts' Petition for Rulemaking, 73 Fed. Reg. at 46,209. As discussed below, the NRC's actions fail to comply with either the AEA or NEPA.

The NRC's violations of the law are significant, both with respect to existing nuclear power plants and future nuclear power plants. Currently, all nuclear power plant licensees in the United States store spent fuel in high-density storage pools. As discussed in Section 2 of Dr. Thompson's Report, likely trends in the operation of existing reactors show a substantial part of the fleet operating into the 2040s, with the last reactor shutting down in 2055. If, as appears likely, licensees of new reactors continue to use high-density pool storage for spent fuel, nuclear power plant operation will continue to pose a substantial risk of radiological harm.

**1. NRC's safe storage finding does not qualify as a generic licensing determination under the AEA or NEPA.**

In the Proposed Decision, the Commission demonstrates that it considers the risk of a pool fire to be specific to each nuclear plant, and asserts that it has taken site-specific measures to reduce those risks to an acceptable level, separately for each nuclear power plant. The Commission also states that it began to take these site-specific actions as long ago as 2002. 73 Fed. Reg. at 59,567.

Yet in the years that have passed since 2002, the Commission has repeatedly relied on the generic determination of the Waste Confidence Decision and 10 C.F.R. § 51.23 to deny hearing requests regarding the safety and environmental impacts of spent fuel storage in

individual licensing cases. *See, e.g., Entergy Nuclear Vermont Yankee, L.L.C. and Entergy Nuclear Operations, Inc.* CLI-07-03, 65 NRC 13 (Pilgrim and Vermont Yankee, 2007); *Entergy Nuclear Operations, Inc.*, LBP-08-13 (Indian Point, 2008); *Nuclear Management Company, L.L.C.*, CLI-06-17 (Palisades, 2006).

Having acknowledged that its findings regarding safe spent fuel storage are site-specific and not generic in nature, the NRC should withdraw its proposed generic finding. The Commission must also re-open the individual licensing cases in which it relied on the Waste Confidence Rule and 10 C.F.R. § 51.23 in failing to address the environmental impacts of spent fuel storage in the EIS for that licensing decision. The EIS should identify all documents on which the NRC relied, and the NRC must offer the public an opportunity for a hearing on the adequacy of the EIS.

Any EIS that is prepared for a new nuclear power plant, for which the applicant proposes to rely on high-density pool storage of spent fuel, must also address the environmental impacts of spent fuel storage at that individual site.

**2. The NRC has failed to justify its refusal to prepare an EIS for spent fuel storage.**

After years of denying the credibility of catastrophic spent fuel pool fires, the NRC now concedes that, as a general matter, high-density fuel pools are vulnerable to fire caused by accidents and attacks. Proposed Waste Confidence Decision, 73 Fed. Reg. at 59,565. Having effectively conceded that pool storage of spent fuel poses significant environmental risks, the NRC should prepare an EIS to address those risks, as required by 42 U.S.C. § 4332(C).

The NRC apparently believes it can avoid the preparation of an EIS by taking credit for mitigation measures that allegedly reduce the level of risk posed by spent fuel pool accidents to an acceptable level. 73 Fed. Reg. at 59,565. But the NRC has not, in fact, made such a showing. Neither the Proposed Waste Confidence Decision nor the Proposed Temporary Fuel Storage Rule gives any indication of the standard by which the NRC decided that spent fuel pool storage risks were insignificant or acceptable and it gives no indication of what measures were taken, even to the extent of identifying the decision documents. The NRC has therefore completely failed to justify its refusal to prepare an EIS.

The NRC has also failed to provide the public with an adequate opportunity to be heard with respect to the adequacy of the NRC's basis for its proposed FONSI. Under Section 189a of the Atomic Energy Act, 42 U.S.C. § 2239(a), the NRC must provide the public with an opportunity for a hearing on the adequacy of its NEPA determination. While the NRC may offer this hearing in the form of a notice-and-comment rulemaking, the rulemaking must comply with the APA, NEPA, and the NRC's own regulations for the implementation of NEPA. *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 U.S. 519, 543, 548 (1978). Here, the NRC has failed to provide the public with a fair opportunity to comment on its proposed FONSI, as required by the

APA, because it has not complied with its own minimal procedural requirements for disclosing the basis for the FONSI.

For instance, under 10 C.F.R. § 51.32(a)(1), a FONSI must “identify the proposed action.” While the Proposed Temporary Fuel Storage Rule does state that the purpose of the proposal is to reach a conclusion that spent fuel can be safely stored at or away from nuclear power plant sites, that statement is only a conclusion about one of the impacts of the agency action. The agency action is the licensing of nuclear power plants, which will in turn lead to the production of spent fuel. The NRC violates NEPA by *assuming* that it will take the licensing action that permits the production of spent fuel and then defining the scope of the proposed action as what must be done to cope with the environmental impacts that flow from the licensing action.

The NRC also violates its own NEPA regulations by failing to support the FONSI with an EQ, as required by 10 C.F.R. § 51.32(a)(4). No document is identified as an EA, nor can the required contents of an EA be found in either the Proposed Waste Confidence Decision or the Proposed Temporary Fuel Storage Rule.

The required contents of an EA are set forth in 10 C.F.R. § 51.31(a):

- (1) A brief discussion of:
  - (i) The need for the proposed action;
  - (ii) Alternatives as required by section 102(2)(E) of NEPA;
  - (iii) The environmental impacts of the proposed action and alternatives as appropriate; and
- (2) A list of agencies and persons consulted, and identification of sources used.

With respect to the “need for the proposed action,” the NRC discusses the need for long-term spent fuel storage, but this is more of the same circular reasoning the NRC engages in with respect to its characterization of the proposed action. The NRC completely fails to address the question of whether it is necessary to allow the generation of spent fuel for which it has no effective means of disposal, and which it must therefore store at nuclear power plant sites for a potentially indefinite period of time.

In addition, the NRC provides no discussion of why it believes it needs to continue to allow licensees and new applicants to use the most dangerous method of fuel storage that exists: high-density pool storage of spent fuel. And no discussion at all can be found of alternatives to the use of high-density pool storage of spent fuel. This is an egregious omission, since the severe environmental impacts of a pool fire could be almost completely avoided by the abandonment of high-density pool storage and substitution of low-density pool storage and hardened dry storage. Thompson Report, Section 8. The benefits of low-density pool storage and hardened dry storage, which must be addressed in an EA, would include not only the virtual elimination of the risk of a catastrophic fire, but the elimination of the need for secrecy about the measures that the NRC allegedly has taken to reduce the risk of a pool fire to an acceptable level. *Id.*, Section 9. While licensees are privy to the contents of these measures, the public has no means of holding

the NRC to account for their effectiveness in protecting public health and the environment. The adverse effect of this unnecessary secrecy on the integrity of the NRC's regulatory process is a significant concern that should be addressed in the EA.

Contrary to the requirement of 10 C.F.R. § 51.30(a)(1)(iii), the Proposed Decision also completely fails to address the reasonably foreseeable and potentially catastrophic environmental impacts of a pool fire. To illustrate those impacts, the offsite costs arising from a pool fire at the Indian Point site have been estimated at \$460 billion. That estimate was non-conservative, and consideration of additional factors could lead to a substantially higher estimate of costs. Thompson Report, Section 5.4.

In addition, neither the Proposed Decision nor the Proposed Temporary Fuel Storage Rule contains a list of the reference documents on which it relies for its finding of no significant impact. Thus, there is no means by which a member of the public could discern the technical basis for the NRC's decision or request the documents under the FOIA. While some documents are discussed in the text of the Proposed Waste Confidence Decision and the Proposed Temporary Spent Fuel Storage Rule, it is clear that the NRC relied on numerous other documents for its determination that spent fuel storage poses no significant environmental impacts, including technical studies and licensing actions taken by the NRC.

The Proposed Temporary Spent Fuel Storage Rule is also defective because it relies on the NRC's decision denying the Commonwealth of Massachusetts' rulemaking petition regarding spent fuel storage risks, 73 Fed. Reg. 46,204 (August 8, 2008), which also fails to identify the reference documents on which it relies. As the Commission has ruled, failure to identify or produce non-exempt portions of reference documents relied on for an EA constitutes a violation of NEPA. *San Luis Obispo Mothers for Peace*, CLI-08-01, 67 NRC at 15-17. The fact that some of the documents contain security-related information does not excuse the NRC from complying with NEPA. *San Luis Obispo Mothers for Peace v. NRC*, 449 F.2d at 1034-35. The NRC's proposed FONSI with respect to spent fuel storage therefore is fatally defective and should be withdrawn.

Having failed to address its own fundamental requirements for the justification of a decision not to prepare an EIS, the NRC cannot claim to have complied with NEPA or to have offered the public a meaningful opportunity to comment on its decision.

## **VI. CONCLUSION**

For thirty years, the NRC has relied on the Waste Confidence Decision to generically license activities resulting in the generation of significant quantities of high-level radioactive waste and other forms of radioactive waste that are difficult, expensive and dangerous to store or dispose of. After 30 years of studying the prospects for safe disposal of spent fuel, the NRC is still far from having any basis for a reasonable assurance the spent fuel can be disposed of safely. The NRC's Proposed Waste Confidence Decision therefore fails to meet the requirements for an adequately supported licensing decision under the AEA.

The NRC's Proposed Waste Confidence Decision also fails to comply with NEPA because it is not supported by a generic EIS that thoroughly evaluates the individual and cumulative environmental impacts of NRC licensing decisions with respect to the generation of spent fuel and other forms of radioactive waste. The limited environmental studies that were prepared in the 1970s are now grossly out of date and completely insufficient to support the licensing of an entire new generation of nuclear power plants.

Finally, the NRC's generic determination that it is safe to store spent fuel at reactor sites or away-from-reactor sites pending its disposal fails to comply with the AEA, the APA, or NEPA.

Therefore NRC should withdraw the Proposed Waste Confidence Decision and the Proposed Temporary Spent Fuel Storage Rule. It should also suspend all future action on applications for new nuclear power plant licenses or the renewal of existing licenses, unless and until it has complied with the AEA, the APA, and NEPA.

Respectfully submitted on behalf of the foregoing Commenters,

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