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**Subject: NSF-Erwin Facility; Docket No. 70-143; License SMN-124  
NRDC Comments on the Draft Environmental Assessment**

Dear Sir or Madam:

The Natural Resources Defense Council (NRDC) herein offers its comments on the Draft Environmental Assessment ("Draft EA") for the proposed renewal of License No. SNM-124 for Nuclear Fuel Services, Inc. (hereinafter the "NFS Erwin Facility"). We have three objections related to this proposed license renewal; two objections are substantive and one is procedural:

- 1) An Environmental Impact Statement (EIS) is required for the review of this license application. Reliance on an EA and a Finding of No Significant Impact (FONSI) is unlawful under the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. §4321.
- 2) Under no circumstances should the Nuclear Regulatory Commission (NRC) issue a license for an unprecedented 40 year period to this facility.
- 3) NRC procedures for considering this proposed license renewal are unfair, discriminate against adequate public participation in the review process and should be amended.

**I. An EIS is Required for the Review of This License Application.**

NEPA requires that an agency prepare an EIS for any "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(C). The Ninth Circuit clarified the meaning of this standard: "An EIS must be prepared if substantial questions are raised as to whether a project may cause significant degradation

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of some human environmental factor. To trigger this requirement a plaintiff need not show that significant effects will in fact occur, but raising substantial questions whether a project may have significant effect is sufficient. Ocean Advocates v. U.S. Army Corps of Engineers, 402 F.3d 846, 864-65 (9th Cir. 2005) (internal quotations and modifications omitted; emphasis in original). Where, as here, the agency prepares an EA in the first instance, the agency must prepare an EIS “[i]f the EA establishes that the agency’s action may have a significant effect upon the environment.” NPCA v. Babbitt, 241 F.3d 722, 730 (9th Cir. 2001). Otherwise, “the agency must issue a Finding of No Significant Impact (FONSI), accompanied by a convincing statement of reasons to explain why a project’s impacts are insignificant.” Id. (internal quotations and modifications omitted).

The Draft EA and the underlying Applicant’s Environmental Report comprise an inadequate review of the environmental impacts and the NRC’s FONSI is unconvincing for the following reasons.

#### **A. Failure to Take a “Hard Look” and Consider Reasonable Alternatives**

NEPA directs that NRC take a “hard look” at the environmental impacts of its proposed action, or series of related actions comprising a “program” of action, and compare them to a full range of reasonable alternatives for meeting the agency’s purpose and need for agency action that may avoid or mitigate environmental harms or risks posed by its preferred alternative. “What constitutes a ‘hard look’ cannot be outlined with rule-like precision, but it at least encompasses a thorough investigation into the environmental impacts of an agency’s action and a candid acknowledgement of the risks that those impacts entail.” Nat’l Audubon Soc. v. Dept of the Navy, 422 F.3d 174, 185 (4th Cir. 2005).

The Draft EA does not consider all reasonable alternatives to the proposed action. The Draft EA considers only the “Proposed Action” and the “No Action” alternatives. Based on 1) the 2010 Nuclear Posture Review (NPR); 2) the President’s national security policy related to his comprehensive strategy to secure nuclear material and prevent nuclear smuggling and terrorism as outlined at his 2010 National Security Summit and elsewhere; 3) the National Nuclear Security Administration’s (NNSA’s) objective of consolidating weapon usable materials at fewer facilities and increase security at the remaining facilities, NRC in an EIS must examine the alternative of consolidating the highly enriched uranium (HEU) related functions performed at the NSF Erwin Facility, including naval fuel fabrication, down blending HEU and HEU scrap recovery, at the proposed new modern and highly secure Uranium Processing Facility (UPF) adjacent to the Department of Energy’s (DOE’s) Highly Enriched Uranium Material Facility (HEUMF) at the Y-12 National Security Complex at Oak Ridge, Tennessee. An EIS is required to develop and compare all reasonable alternatives to enable the government to select the alternative that provides the best material physical protection, control and accounting (MPC&A) of HEU. Locating the functions currently performed at the NSF Erwin Facility at the proposed UPF would eliminate the need for transporting HEU from Y-12 to Erwin, Tennessee.

In taking a hard look at the environmental impacts of its proposed action, NEPA requires that the agency scrutinize all impacts to the human environment, even if doing so is inconvenient or could potentially complicate what looks to be a preordained decision. The EA excludes areas that can impact the quality of the human environment and that are minimally necessary to be covered in order to form the basis for an adequate environmental review by the federal and state agencies and the public. These areas include:

1. Physical security;
2. Nuclear material control and accounting;
3. Criticality safety controls and risks;
4. Probability of equipment failures;
5. Plant building stability;
6. Seismic risk analysis;
7. Safety culture;
8. Terrorism;
9. The potential to construct improvised explosive devices on site;
10. The history of license violations;
11. NRC, other federal agency and state agency enforcement actions; and
12. Emergency plans, including response to fires and evacuation plans.

With regard to terrorism and security concerns about HEU, the DOE's National Nuclear Security Administration (NNSA) addresses sabotage and terrorism as legitimate potential environmental impacts to be discussed in an EIS.<sup>1</sup> By contrast, the NRC seems to be doing its best to avoid longtime precedent for incorporating these discussions and the clear direction of federal courts.<sup>2</sup> Proliferation and security issues have been a part of

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<sup>1</sup> See, for example, the NNSA's "*Supplemental Analysis, Disposition of Surplus Highly Enriched Uranium*," DOE/EIS-0240-SA1, October 2007, found online at [http://nepa.energy.gov/nepa\\_documents/sa/EIS-0240-SA-1.pdf](http://nepa.energy.gov/nepa_documents/sa/EIS-0240-SA-1.pdf), where NNSA even addresses in an EIS Supplement sabotage and terrorism related to HEU blend down at the NFS Erwin Facility.

<sup>2</sup> While we understand that some at the NRC are seeking ways to distinguish or marginalize the views of the U.S. Court of Appeals for the 9<sup>th</sup> Circuit, that Court made it clear that security and terrorism issues must be part of a meaningful NEPA review. Specifically, the 9<sup>th</sup> Circuit stated:

We find it difficult to reconcile the Commission's conclusion that, as a matter of law, the possibility of a terrorist attack on a nuclear facility is "remote and speculative," with its stated efforts to undertake a "top to bottom" security review against the same threat. Under the NRC's own formulation of the rule of reasonableness, it is required to make determinations that are consistent with its policy statements and procedures. Here, it appears as though the NRC is attempting, as a matter

National Environmental Policy Act (NEPA) decisions since the beginning of its application. See, Scientists' Institute for Public Information, Inc. v. Atomic Energy Commission, 481 F.2d 1079 (D.C. Cir. 1973). The United States Court of Appeals sustained the position of NRDC and required the AEC to prepare a programmatic environmental impact statement on the AEC's Liquid Metal Fast Breeder Reactor (LMFBR) Program. Nonproliferation and terrorism were addressed in the subsequent EIS for the program.

At the preliminary injunction hearing in the 1974 case, West Michigan Environmental Action Council v. AEC, the AEC offered to prepare a generic Programmatic EIS on plutonium recycle, which later came to be known as the Generic Environmental Statement on Mixed Oxide Fuel (GESMO), No. RM-50-1, (a document subsequently initiated by NRC as the successor to AEC for these matters). In 1976, the NRC began extensive administrative proceedings to compile a record on whether or not it was wise to reprocess spent nuclear fuel and recycle the recovered plutonium. In preparing a Draft EIS the NRC attempted to narrow the scope of the proceeding as it has done with the NFS Erwin Draft EA. This position was challenged and in 1976 the NRC was required to supplement its GESMO Statement to cover issues related to protecting plutonium from theft, diversion, or sabotage.<sup>3</sup> Shortly after President Jimmy Carter took office the GESMO proceedings were suspended pending an evaluation of the impact of President Carter's decision to indefinitely defer plutonium recycle. The proceedings were never resumed but the obligation to incorporate safeguards, security, and terrorism concerns into the NEPA analysis remain.

The inadequate presentation of the site's Baseline Data is also particularly egregious in light of the serious security concerns presented by a proposed license extension of this magnitude. For example, the following information should be presented in clear, concise fashion—some in a classified appendix—that allows the involved agencies and affected public the opportunity to comment in a meaningful fashion:

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of policy, to insist on its preparedness and the seriousness with which it is responding to the post-September 11th terrorist threat, while concluding, as a matter of law, that all terrorist threats are "remote and highly speculative" for NEPA purposes.

San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016, 1031 (9th Cir. 2006) (footnote omitted). See also 449 F.3d 1028, where the Court held that the NRC's "categorical refusal to consider the environmental effects of a terrorist attack" in a licensing proceeding was unreasonable under NEPA.

<sup>3</sup> See, NRDC v. NRC, 539 F.2d 824 (2<sup>nd</sup> Cir. 1976) for full discussion.

<sup>4</sup> See also, NRC's Final Generic Environmental Impact Statement on Handling and Storage of Spent Light Water Power Reactor Fuel, NUREG-0575, Vol. 2 (Appendix J), August 1979.

1. The amount of HEU used annually;
2. The amount of HEU stored on site routinely;
3. The chemical and physical form of the HEU stores and used on site;
4. A site map indicating the location and identity of the building on site;
5. Detailed meteorological data, e.g., wind rose data giving the frequency of wind speed and direction at appropriate elevations;
6. The location of effluent stacks on site, and the annual quantities of effluent from each stack [the data in the ER are limited to annual summaries for each of four years (Table 24) and 2007 data for emission points, which are not located on any accompanying map (Tables 25A and 25B)];
7. The location of liquid discharge pipes and the annual releases from each [The maps in the ER are not difficult to decipher];
8. The number and location of HEU material balance areas [the number of locations can be inferred from the Table 1A in the ER];
9. The frequency of inventories;
10. The history of HEU inventory differences for each material balance area;
11. The license requirements for nuclear material accounting and control;
12. The history of license violations;
13. The extent of on-site contamination beyond the areas currently being decommissioned;
14. The history of efforts to relax MC&A requirements because of failure to meet MC&A requirements; and
15. A discussion of the implications of the high rate of alcohol abuse by agents responsible for transporting nuclear weapons and weapon-usable materials.

Moreover, the Safety Review and the Draft EA are inadequate in their analysis of off-site releases of uranium into the air and into groundwater. While there is acknowledgement that some cleanup is ongoing and that areas of the site are currently being decommissioned, there is no discussion of NRC's failure to adequately regulate these releases in the past or any meaningful discussion of why things might be different in future years. The EA contains no contours that set forth the on and off site ground contamination levels of U-238 and U-235. There is no discussion of whether the historical stack measurements are consistent or inconsistent with ground contamination measurements. To be precise, what, for example, are the total off-site releases of U-235 and U-238? Do the NRC, EPA or TDEC make adequate environmental measurements to distinguish HEU released when NSF was processing >98% enriched HEU from more recent releases when NSF was processing ~93.5% enriched HEU? There appears to be no attempt to correlate stack emission data with ground contamination data. There is no rational justification for not including on-site ground contamination data so that it can be correlated with off-site data. These, and many other questions, should be investigated in a Draft EIS rather than the cursory document at issue in these comments.

<sup>5</sup> See, 17 Nov 2010 Memo by Sandra D. Bruce, DOE, IG-40.

### **B. Failure to Consult with Relevant and Affected Agencies**

The NRC should be prepared to work with other responsible federal agencies in formulating the “hard look analysis” described in detail above. See 40 CFR § 1502 (14)(c) (“An agency may not reject a reasonable alternative because it is not within the jurisdiction of the lead agency.”). See also, *NRDC v. Morton*, 458 F.2d 827, 836 (DC Cir. 1972) (The mere fact that an alternative requires legislative implementation does not automatically establish it as beyond the domain of what is required for discussion, particularly since NEPA was intended to provide a basis for consideration and choice by the decisionmakers in the legislative as well as the executive branch.”). See also *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 814 (9<sup>th</sup> Cir. 1999) (An agency’s refusal to consider an alternative that would require some action beyond that of its congressional authorization is counter to NEPA’s intent to provide options for both agencies Congress.).

It is unclear if the Draft EA afforded relevant federal and State agencies (e.g., Department of Energy (DOE), the National Nuclear Security Administration, the Department of Homeland Security, the State Department, the Department of Defense, the U.S. Department of the Navy, the Environmental Protection Agency, the U.S. Army Corps of Engineers, the U.S. Geological Survey, the U.S. Fish and Wildlife Service, and the Tennessee Department of Environmental Conservation) meaningful opportunity to comment on the security issues and environmental analyses. Most egregiously, with what amounts to the acceptance of this proposed license application, the NRC has failed to consult (1) the Navy on nuclear fuel fabrication requirements for the next 40 years; (2) the State Department on likely developments with nuclear security/nonproliferation objectives over the same forty year time-frame; and (3) the DOE and NNSA on the Administration’s policy to consolidate nuclear weapon-usable materials.

Indeed, pre-decisional inter-agency communication is a fundamental tenet of the law. Leading NEPA scholars describe the reason for this necessary communication and analysis:

NEPA requires that agencies evaluate proposed actions affecting environmental quality. This “look-before-you-leap” mandate allows better actions to be developed that will promote “productive harmony” between people and nature in the short and long-term and will avoid or otherwise mitigate environmental damage or “other undesirable or unintended consequences.” By requiring public and intergovernmental review before making final decisions, the NEPA process also promotes the NEPA objective to “improve and coordinate Federal plans, functions, programs, and resources.”

<sup>6</sup> See *Environmental Policy and NEPA, Past Present and Future*, Ray Clark and Larry Canter, 1997 St. Lucie Press, and Chapter 5, *Basic Purposes and Policies of the NEPA Regulations*, K.S. Wiener, at 69 (citation in text to NEPA Section 101 omitted).

The NRC's limited view of its consulting obligations with other federal agencies that have a significant interest in our HEU and nonproliferation policy plainly runs counter to NEPA's admonition to "look-before-you-leap."

### **C. Failure to Properly State Purpose and Need for Facility**

It is well settled law that an agency may not cripple NEPA analysis of the reasonable programmatic alternatives available to policy-makers by arbitrarily reducing the options subjected to detailed analysis to a stark choice between implementing the agency's preferred action – in this instance relicensing the NFS Erwin Facility for the next 40 years – and "No Action." Yet this is exactly what the NRC proposes to do. We strongly urge the agency to adopt a different course.

Should NRC proceed with this relicensing action, we strongly urge that the agency withdraw the current Draft EA and commence work on a Draft EIS with a broad, logical, and coherent statement of the national purposes to be served by simply relicensing the NFS Erwin Facility with no meaningful questions asked. Indeed, the NRC, along with its federal brethren, must develop a range of reasonable programmatic alternatives for achieving the underlying national objectives set forth in a statement of purpose and need, something entirely lacking in the current document.

This is necessary as the current Draft EA does not provide complete discussion or adequate data that are necessary to form the basis for an adequate environmental review by the federal and state agencies and the public. Specifically, this discussion (and associated data) should include the need for the facility, whether the US Navy should be planning to phase out the use of HEU to fuel naval propulsion reactors, and whether the facility activities should be moved given that some 4,500 people reside within one mile of the site as well as agricultural and other industrial activities within one mile.

## **II. NRC Should Not Grant a 40 Year License Extension**

The proposal to grant a 40 year license extension is unprecedented, unnecessary and unwarranted. As far as we are aware, no nuclear fuel cycle facility has been granted a 40 year extension previously. With respect to the management of HEU, we find it not credible that the NRC can adequately foresee some of the potential environmental impacts associated with this facility beyond a nominal 10 years license extension period. The NRC has demonstrated its inability to do so in the past, otherwise the facility would not be as extensively contaminated as it is today. Indeed, with the availability of apparent alternatives such as the proposed UPF Facility at Oak Ridge, Tennessee, NRC cannot foresee whether the NFS Erwin Facility will be required for current purposes for the next ten years, much less forty years into the future. Finally, the NRC does not maintain complete regulatory oversight over all activities at the site and cannot predict the adequacy of such oversight 40 years into the future.

**III. NRC Procedures for Considering this Licensing Application are Unfair, Discriminate Against Adequate Public Participation in the Review Process and Should be Amended**

There is an artificial and, in our view, unlawful separation of the NRC's NEPA review from the agency's licensing process. Put simply, it is unfair and prejudicial to ask the public to intervene within ten, twenty, or at most thirty days of the application for a NRC license extension, and if a member of the public fails to do so functionally deny that person the option of intervening in the process in a meaningful fashion. Late filed contentions could be pursued, but the procedural hurdles set up by the agency are very high and the resources necessary for such a strategy are prohibitive for most every member of the public.

Quite simply, the public should be provided the opportunity to intervene in a licensing proceeding after the NRC has prepared a Draft EA or EIS on any proposed major licensing action and after other federal agencies have commented in its adequacy of the initial draft environmental review. The NRC process as it currently exists – near total reliance on an applicant's Environmental Report, followed by an agency NEPA process that is arbitrarily severed from what amounts to any meaningful licensing decisions – fails to satisfy the public participation and informed decision-making mandates of NEPA. The procedural requirements of NEPA are designed to benefit those who participate in agency decision-making processes and to require that the agency take a "hard look" at the impacts, alternatives, mitigation measures, and other aspects of a federal action at the earliest stages of the decision process, in recognition that when a "decision is made without the information that NEPA seeks to put before the decision-maker, the harm that NEPA seeks to prevent occurs." See, *Sierra Club v. Marsh*, 872 F.2d 497, 500 (1st Cir. 1989) quoting *Commonwealth of Massachusetts v. Watt*, 716 F.2d 946 at 953 (1st Cir. 1983).

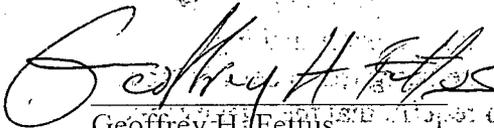
This is not what happens. Some members of the public may not be aware of the application for a license extension at the time it is made. Even if they were, they should not be required to intervene in the basis of the licensee's claims prior to review by appropriate federal agencies. Also, some relevant environmental and safety related data is not even released to the public at the time the ER is submitted to the NRC, but is withheld as so-called "Sensitive Unclassified Non-Safeguards Information," another onerous and costly procedure for the public to manage.

By contrast to well-established NEPA law, the NRC's procedure denies all parties (including the NRC, other federal agencies, the State, and the public) early review of the information that a detailed NEPA analysis would provide. The input from these sources should necessarily be part of the agency decision-making process. But the NRC's severing of the NEPA review from the licensing process ensures that comments on a Draft EA that call into question the Staff's decisions can be summarily dismissed unless they are accompanied by late-filed contentions, which will in all likelihood be denied under the NRC's draconian standards in 10 C.F.R. Part 2.

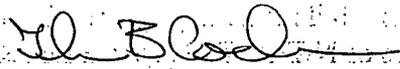
Again, this is not how the NRC should proceed. Conducting NEPA analysis at the earliest possible point is necessary to meet the requirement that NEPA analysis must precede the decision-making process, lest the agency unleash a "bureaucratic steam roller" aimed at approval, but without the public participation and informed decisionmaking requirements of NEPA." See, Davis v. Mineta, 302 F.3d 1104, 1115 (10th Cir. 2002). In short, the procedures the NRC used for the present relicensing application fail to satisfy NEPA's purpose, which is to influence the decision making process "by focusing the [federal] agency's attention on the environmental consequences of a proposed project," so as to "ensure [] that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989).

If you have any questions, please do not hesitate to contact us at (202) 289-6868. Thank you very much for your consideration of these matters.

Sincerely,



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