



THE EARTH'S BEST DEFENSE

Via Electronic Mail and First Class Mail

March 8, 2011

Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Attn: Rulemakings and Adjudications Staff

Subject: American Physical Society's Petition, Docket ID NRC-2010-0372

Dear Sir or Madam,

We write to express support of the American Physical Society's (APS) petition (Docket ID NRC-2010-0372) to change the explicit NRC rules with respect to proliferation analyses as part of the NRC licensing process. While we agree with APS that new nuclear technologies, such as the proposed GE-Hitachi laser enrichment facility in North Carolina, could pose unique and substantial proliferation risks, we think NRC is already obligated under law to analyze the proliferation implications of any of these new technologies within its licensing process and under its obligations to comply with the Atomic Energy Act (AEA) 42 U.S.C. § 2011 et seq., and the National Environmental Policy Act, (NEPA) 42 U.S.C. § 4321 et seq.

Specifically, under the AEA the Commission has a legal and non-discretionary duty to consider whether when granting a license – for laser enrichment technology or, as an example, small modular reactors – such an action could be inimical to the common defense and security of the United States or the health and safety of the public. See, e.g., 42 U.S.C. § 2077(c)(2) or § 2099. Further, the Commission's NEPA analysis must consider the full range of risks to the common defense and security potentially arising from its licensing decision, and must consider all reasonable alternatives that could eliminate or mitigate those risks. See, San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016 (9th Cir. 2006)

We expressed our views on this subject in more detail in our August 18, 2010 comments on the Draft Environmental Impact Statement (EIS) for the Proposed GE-Hitachi Global Laser Enrichment Facility and attach those comments for the purposes of incorporation in this

Administrative Record. And as we explained in that letter, if a national security case can be made for licensing the facility the NRC Staff will discuss the security issues in the EIS. Whereas it is also clear that if a national security concern argues against licensing the Staff claims it is beyond the scope of the EIS. This blatant double standard is arbitrary and capricious and will not withstand judicial scrutiny. Further requiring an explicit proliferation analysis as APS suggests, while unnecessary because the agency is already required to conduct such an analysis for the reasons cited above, would at least do away with any confusion on the topic.

In short, we are dismayed that it's even come to this – a place where the NRC clearly has the responsibility to regulate the security of nuclear materials and facilities and at the same time the agency claims that the damage to the human and natural environment from a potential terrorist attack or security breach is beyond the scope of a NEPA-required environmental review. As we noted in August 2010, studying the runoff from a parking lot but not performing a thorough analysis of the nonproliferation implications of a first-of-a-kind commercial laser enrichment facility is not only unlawful but shows an appalling lack of judgment. Please include the explicit requirement for a proliferation review in your rules if that's what it takes for the NRC to take the matter seriously.

Thank you for your consideration and do not hesitate to contact us below if you have any questions.

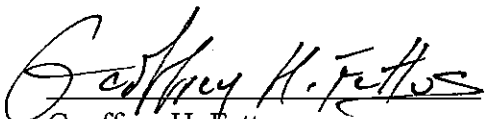
Sincerely,



Thomas B. Cochran, Ph.D.
Senior Scientist
Wade Greene Chair for Nuclear Policy
Natural Resources Defense Council
tcochran@nrdc.org



Christopher E. Paine
Director, Nuclear Program
Natural Resources Defense Council
cpaine@nrdc.org



Geoffrey H. Fettus
Senior Project Attorney, Nuclear Program
Natural Resources Defense Council
gfettus@nrdc.org



Attachment

August 18, 2010

Chief, Rulemaking and Directives Branch
Division of Administrative Services
U.S. Nuclear Regulatory Commission
Mail Stop TWB-05-B01M
Washington, DC 20555-0001

Via Electronic Mail and First Class Mail: GLE.EIS@nrc.gov

Subject: Comments on the “Draft Environmental Impact Statement for the Proposed GE-Hitachi Global Laser Enrichment LLC Facility in Wilmington, North Carolina,” NUREG-1938, June 2010 [henceforth, “Laser Enrichment Draft EIS”]

Dear Sir or Madam,

Please accept these late filed comments on the Laser Enrichment Draft Environmental Impact Statement (EIS).

We find the Laser Enrichment Draft EIS grossly deficient because the Nuclear Regulatory Commission (NRC) Staff has chosen to exclude from the scope of the EIS (a) national defense and security issues related to nonproliferation and (b) the environmental, public health and safety impacts arising from damage potentially inflicted by terrorists on this type of nuclear facility. We address these two exclusions below:

a) Nonproliferation

The Laser Enrichment Draft EIS makes the claim, “Regarding the nonproliferation issue, these activities are not within NRC jurisdiction and as such are beyond what the NRC can regulate.” See Appendix A, p. A-15. This is false. The NRC may not grant a license application “if, in the opinion of the Commission, the issuance of a license to such person for such purpose would be *inimical to the common defense and security* or the health and safety of the public.” (Emphasis added) Cf., 42 U.S.C. § 2099.

In other words, the Commission has a legal and non-discretionary duty to consider whether a decision to grant a first-of-a kind commercial license for laser enrichment could abet the proliferation of this technology to other nations, and hence be inimical to the common defense and security of the United States or the health and safety of the public. The Commission's NEPA analysis must consider the full range of risks to the common defense and security potentially arising from its licensing decision, and must consider all reasonable alternatives that could eliminate or mitigate those risks.

Proliferation and security issues have been a part of 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 the Natural Resources Defense Council (NRC) 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 LMGBR EIS.

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 is doing now with the Laser Enrichment Draft EIS. 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. 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.

More recently, the U.S. Department of Energy (DOE) was required to address nonproliferation issues in its preparation of the Draft Global Nuclear Energy Partnership Programmatic Environmental Impact Statement (GNEP PEIS; DOE/EIS-0396). It attempted to do so by relying on a separate "Nonproliferation Impact Assessment: Companion to the Global Nuclear Energy Partnership Programmatic Environmental Impact Statement." prepared by the Office of Nonproliferation and International Security of the National Nuclear Security Administration (NNSA). Along with several other NEPA matters, this artificial separation was challenged by NRDC. Subsequent to those critical comments DOE ceased all work on the GNEP PEIS.

Defying logic, the NRC Staff seemingly considers national security concerns to be within the scope of the EIS (See Laser Enrichment Draft EIS Sections 1.3.2 Need for Domestic Supplies of Enriched Uranium for National Energy Security and 7.3.3.2 National Energy Security) when energy security is the issue, but when national security concerns derive from the proliferation

implications of laser enrichment, they are excluded from the scope of the EIS. In other words, if a national security case can be made for licensing the facility the NRC Staff will discuss the issue in the EIS, but if a national security concern argues against licensing the Staff will claim it is beyond the scope of the EIS. This blatant double standard is arbitrary and capricious and will not withstand judicial scrutiny. In passing we note that with three new gas centrifuge enrichment facilities about to be built in the United States, the assertion that there is "a reliability risk in U.S. domestic enrichment capacity" (Laser Enrichment Draft EIS p. 1-8) requiring mitigation by the proposed laser facility is simply not credible, while the use of lasers for clandestine enrichment research is already an accomplished fact in several countries.

In our view the EIS must contain a thorough analysis and discussion of the proliferation implications of commercializing the SILEX technology. This discussion must address and answer the question whether commercialization will lead to wide-spread use, as occurred with commercialization of gas centrifuge technology. As gas centrifuge technology turned out to be a greater proliferation risk than gaseous diffusion technology, will SILEX in turn pose an even greater potential for clandestine enrichment? Can the facility blueprints be readily stolen and replicated? Can the facility be more easily hidden? Can the process be readily converted to produce highly-enriched uranium? Is widespread use of this technology inimical to the common defense and security of the United States?

Since none of these matters were discussed in the draft EIS, either the draft must be revised and reissued for public comment or it must be supplemented.

b) Terrorism

We find it incomprehensible that the NRC would regulate the security of nuclear materials and facilities, and at the same time claim that the potential damage to the human and natural environment from a potential terrorist attack is beyond the scope of a NEPA-required environmental review. The Commission considers the environmental consequences of accidents, including those caused by human error, as within the scope of an EIS. But the Staff claims here that if the very same consequences—indeed the very same accident scenario—is initiated by intent rather than by error, then the consequences and the security requirements are beyond the scope of the EIS. Along with ignoring statutory obligations, such a position defies common sense. Our longstanding interest in this issue is evidenced by the Petition of NRDC, *Emergency Safeguards For Nuclear Facilities*, Nos. 70-8, et al. (filed with NRC in 1976).

Closing remarks

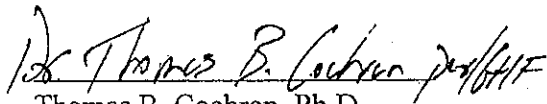
The NRDC is one of the largest environmental organizations in the United States. NRDC's objective is to safeguard the earth—its people, its plants and animals and the natural systems on which all life depends. For forty years, NRDC has worked on nuclear issues and nonproliferation and terrorism have been core environmental concerns of NRDC. The explosion of a nuclear

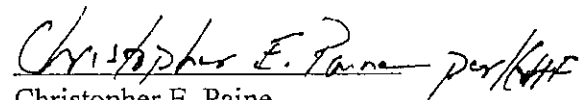
device can have untold environmental consequences. Consideration of nonproliferation, terrorism, insider threats, and external assaults on facilities—these are all within the purview of environmentalists' efforts to prevent nuclear destruction. We doubt that there is any major environmental organization that would see these issues differently. If the NRC has trouble understanding the scope of environmental concerns, risks and protective efforts, perhaps the Commission should also seek advice from the environmental and nuclear security communities rather than relying exclusively on its own staff. Put simply, studying the runoff from a parking lot but not performing a thorough analysis of the nonproliferation implications of a first-of-a-kind commercial laser enrichment facility is not only unlawful but shows an appalling lack of judgment.

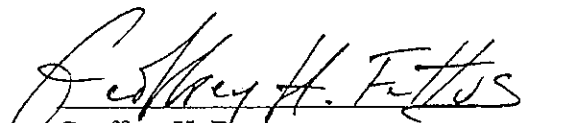
Frankly, we see this as yet another attempt by the NRC Staff to avoid the concerns of the environmental and nuclear security communities and thwart their meaningful participation in the licensing process.

If the NRC chooses not to accept this late filing, please let us know at your earliest convenience at (202) 289-6868 or via email below.

Sincerely,


 Thomas B. Cochran, Ph.D.
 Senior Scientist
 Wade Greene Chair for Nuclear Policy
 Natural Resources Defense Council
 tcochran@nrdc.org


 Christopher E. Paine
 Director, Nuclear Program
 Natural Resources Defense Council
 cpaine@nrdc.org


 Geoffrey H. Fettus
 Senior Project Attorney, Nuclear Program
 Natural Resources Defense Council
 gfettus@nrdc.org