June 6, 2012

The Honorable John Kerry
Chairman, Senate Foreign Relations Committee

The Honorable Richard G. Lugar
Ranking Member, Senate Foreign Relations Committee

The Honorable Ileana Ros-Lehtinen
Chairman, House Foreign Affairs Committee

The Honorable Howard L. Berman
Ranking Member, House Foreign Affairs Committee

Dear Chairman Kerry, Ranking Member Lugar, Chairman Ros-Lehtinen, and Ranking Member Berman,

We are writing to express our deep concern over the continuing refusal of the Nuclear Regulatory Commission, in connection with the proposed licensing of a new laser uranium enrichment facility, even to consider the potential risks of nuclear proliferation which the facility might present. We urge that Congress act to rectify this situation.

The proposed facility, to be constructed at Wilmington, NC by a GE-Hitachi consortium, would employ an innovative process intended to cover a much smaller area and require much less energy than existing technologies. However, prominent physicists and arms control experts have warned that “given the great difficulty in detecting laser isotope enrichment facilities, their spread could undermine U.S. nonproliferation efforts and the ability of the International Atomic Energy Agency to confirm the absence of undeclared nuclear activities in Nuclear Nonproliferation Treaty (NPT) non-nuclear weapon states.” In 2010 the leading organization of U.S. physicists, the American Physical Society (APS) cautioned that “some of the new enrichment and reprocessing technologies could represent proliferation ‘game changers’ since they would lead to smaller, more efficient, and possibly less expensive methods for the production and use of nuclear materials that would be more difficult to detect.” Indeed, the NRC itself previously recognized, in a training manual prepared in 2008, that laser isotope separation for uranium enrichment “poses a nuclear proliferation concern.”
Despite these warnings, the NRC has stated that an analysis of potential proliferation risks is not part of its responsibilities in reviewing a license application, although the Atomic Energy Act expressly states that the NRC should consider whether a proposed license would be “inimical to the common defense and security.”

The APS and others have filed a petition asking the NRC to amend its rules, to require expressly that the licensing process for a new facility include “an assessment of the proliferation risks that construction and operation of the new proposed facility might pose.” That petition has attracted support from a wide range of sources, including two of the addressees of this letter, the Chairman and the Ranking Member of the House Foreign Affairs Committee. However, it has now been reported that submission of a staff recommendation on the proposed rules change has been delayed at least until October. It thus seems likely that the NRC will not act on the proposed rules change in time to affect the licensing of the new enrichment facility.

It should also be noted that last year the NRC staff issued some sort of violation notice in connection with the GE-Hitachi facility. The specific nature of the violation has not been made public, and only a heavily redacted version has been produced in response to Freedom of Information Act requests. From that redacted version, however, it appears that the violation was security-related, that it was characterized as “Severity Level II”, and that the staff believed it to involve “willful actions” and “deliberate misconduct.”

A refusal even to consider the potential for nuclear proliferation seems indefensible at a time when the United States is seeking to rally international support to deal with enrichment-related proliferation risks in Iran and elsewhere. We would urge Congress to ensure, by legislation or otherwise, that an independent analysis of such risks be part of the license application process. If the NRC is unable or unwilling to conduct such an analysis, an interagency review may be appropriate, perhaps involving experts from the Department of Energy and the Department of State, or a study by an independent body such as the National Academy of Sciences. We have suggested directly to the State Department that it undertake a study, most recently in the attached November 3, 2011 letter, but received no reply.

It is noteworthy that in 1999 the Clinton administration submitted to Congress a proliferation risk analysis conducted by the State Department with respect to an earlier version of laser uranium enrichment technology. While the contents of that analysis have never been made public, we understand it concluded (a) that widespread adoption of the proposed technology could pose a significant proliferation risk but (b) that this was unlikely to occur because the process was not commercially viable. If this newer laser separation technology is commercially practical, as the GE-Hitachi consortium obviously believes it is, that conclusion would clearly be inapplicable. The fact that GE-Hitachi itself has had a not publicly available study produced on proliferation risks only serves to underline the need for the government to assume its responsibility in this sphere.
Thank you very much for your attention to this matter.

Very truly yours,

Peter Weiss
President

Guy Quinlan
Board of Directors

Dr. John Burroughs
Executive Director

cc: Gregory Jaczko, Chairman, Nuclear Regulatory Commission
    Rose Gottemoeller, Acting Under Secretary of State for Arms Control and
    International Security
    Richard Stratford, Director, State Department Office of Nuclear Energy,
    Safety and Security
    Denis McDonough, Deputy National Security Advisor
    Gary Samore, WMD Coordinator, National Security Council
    John Holdren, Science Advisor to the President
November 3, 2011

The Honorable Ellen Tauscher
Under Secretary of State for Arms Control and International Security
United States Department of State
2201 C Street NW
Washington, D.C. 20520

Dear Under Secretary Tauscher:

On August 30, 2011 and August 30, 2010 we wrote to the Department of State concerning pending licensing proceedings before the Nuclear Regulatory Commission as to a proposed laser uranium enrichment facility to be constructed by a GE-Hitachi consortium at Wilmington, N.C. Copies of those letters are enclosed. In light of the NRC’s refusal even to consider potential proliferation risks as a factor in its licensing decision, and the concerns expressed by numerous scientists and arms control experts that the proposed technology could result in undermining U.S. nonproliferation efforts, we urged the State Department to conduct its own expert analysis of the nonproliferation issues presented. The recent developments discussed below serve to underscore the necessity for such an independent analysis.

In our letter of August 30, 2011 we noted news reports that the NRC had issued some sort of violation notice to the consortium with respect to the proposed Wilmington facility, and we asked the State Department to obtain a copy of that letter and determine its possible relevance to nonproliferation issues. An October 20, 2011 report in the Global Security Newswire (copy enclosed) reports that a heavily redacted copy of the violation letter has now been produced under the Freedom of Information Act and, while the specific description of the violation has been redacted, the violations were apparently security-related. The unredacted portions of the letter state that at least one violation involved “willful actions” and “deliberate misconduct,” resulting in a “Severity Level II” violation, i.e. one “of very significant regulatory concern.” We would again urge that the Department of State obtain an unredacted copy of the NRC letter and make its own evaluation of potential proliferation issues.

In our letter of August 30, 2011 we also noted that the consortium had commissioned an independent analysis of potential proliferation issues, while asserting publicly that the study confirmed the absence of proliferation risks, the consortium declined to produce the study itself, citing the need to protect proprietary information. However, the expert who directed that study has been
quoted in the New York Times as stating more cautiously that the planned technology could not be “easily hidden.” Another scientist is quoted in the enclosed October 20, 2011 news report as stating that “it is unclear whether the analysis also considered the possibility that a foreign entity’s illicit laser enrichment facility might be scaled down and successfully hidden.” We submit that the department of State should obtain a copy of the study in question, as an input to its own independent analysis of potential proliferation concerns.

Thank you very much for your attention to this matter.

Very truly yours,

Peter Weiss, President

John Burroughs, Executive Director

Guy C. Quinlan

Guy C. Quinlan, Board of Directors

cc: Gregory Jaczko, Chairman, Nuclear Regulatory Commission
Ambassador Susan F. Burk, Special Representative of the President for Nuclear Nonproliferation
Richard Stratford, Director, State Department Office of Nuclear Energy, Safety and Security
Denis McDonough, Deputy National Security Advisor
Gary Samore, WMD Coordinator, National Security Council
John Holdren, Science Advisor to the President