



Via Electronic Mail

July 26, 2011

Annette L. Vietti-Cook, Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
Attention: Rulemakings and Adjudications Staff

**Subject: NRDC's Petition For Rulemaking to require licensees to improve spent nuclear fuel pool safety.**

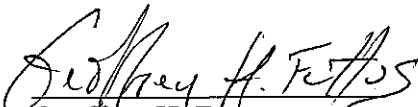
Dear Madam Secretary:

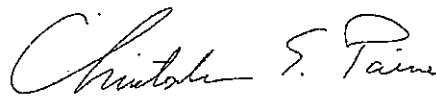
Pursuant to 10 C.F.R. § 2.802, the Natural Resources Defense Council, Inc. ("NRDC") hereby petitions the U.S. Nuclear Regulatory Commission ("NRC") to institute a rulemaking to amend the regulations applicable to nuclear facilities licensed under 10 C.F.R. § 50, § 52 and other applicable regulations.

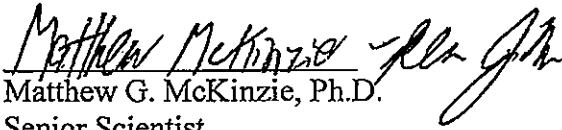
The rationale and the bases for this petition can be found in the NRC Staff report, Charles Miller, et al, "Recommendations for Enhancing Reactor Safety in the 21<sup>st</sup> Century: The Near Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," SECY-11-0093, July 12, 2011. We look forward to providing NRC with additional technical support for this petition after this petition has been accepted and docketed.

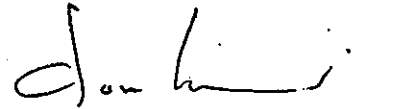
Please do not hesitate to contact us at (202) 289-6868 if you have any questions. NRDC appreciates your prompt consideration of this matter.

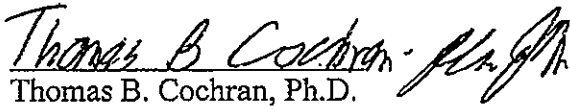
Sincerely,

  
Geoffrey H. Fettus  
Senior Project Attorney

  
Christopher E. Paine  
Director, Nuclear Program

  
Matthew G. McKinzie, Ph.D.  
Senior Scientist

  
C. Jordan Weaver, Ph.D.  
Science Fellow

  
Thomas B. Cochran, Ph.D.  
Senior Scientist Consultant  
Wade Greene Chair for Nuclear Policy

CC:

The Honorable Gregory B. Jaczko, Chairman  
The Honorable George Apostolakis  
The Honorable William D. Magwood, IV  
The Honorable William C. Ostendorff  
The Honorable Kristine L. Svinicki

### **Proposed Actions**

NRDC requests that the Nuclear Regulatory Commission ("NRC") institute a rulemaking proceeding applicable to nuclear facilities licensed under 10 C.F.R. § 50, § 52 and other applicable regulations to require licensees to (1) provide sufficient safety-related instrumentation, able to withstand design-basis natural phenomena, to monitor key spent fuel pool parameters (i.e., water level, temperature, and area radiation levels) from the control room, (2) provide safety-related AC electrical power for the spent fuel pool makeup system, (3) revise their technical specifications to address requirements to have one train of onsite emergency electrical power operable for spent fuel pool makeup and spent fuel pool instrumentation when there is irradiated fuel in the spent fuel pool, regardless of the operational mode of the reactor, and (4) have an installed seismically qualified means to spray water into the spent fuel pools, including and easily accessible connection to supply the water (e.g., using a portable pump or pumper truck) at grade outside the building.

### **Rationale for the Rulemaking Petition**

The rationale for this rulemaking petition is found in the NRC Staff report, Charles Miller, et al, "Recommendations for Enhancing Reactor Safety in the 21<sup>st</sup> Century: The Near Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," SECY-11-0093, July 12, 2011. See particularly, Section 4.2.4, pp. 43-46 regarding the enhancement of spent fuel pool makeup capability and instrumentation for the spent fuel pool.

### **Statement of Interest**

NRDC is a national non-profit membership environmental organization with offices in Washington, D.C., New York City, San Francisco, Chicago, Los Angeles and Beijing. NRDC has a nationwide membership of over one million combined members and activists. NRDC's activities include maintaining and enhancing environmental quality and monitoring federal agency actions to ensure that federal statutes enacted to protect human health and the environment are fully and properly implemented. Since its inception in 1970, NRDC has sought to improve the environmental, health, and safety conditions at the nuclear facilities licensed by NRC and its predecessor agency.