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**DOCKET NUMBER**  
**PROPOSED RULE PR 73**  
**(70FR 67380)**



Via Facsimile: (301) 415-1101 & US Mail

February 22, 2006

DOCKETED  
USNRC

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

February 23, 2006 (7:38am)

Attention: Rulemakings and Adjudications Staff

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

Re: Docket Number RIN 3150-AH60

Dear Secretary:

In 2002, on behalf of the State of California, we requested information from the U.S. Nuclear Regulatory Commission (NRC) regarding findings from studies to assess the potential risk (vulnerabilities and consequences) from sabotage or terrorist attacks against nuclear reactors, spent fuel storage facilities, and spent fuel shipments. Such information is needed to help develop appropriate emergency response capabilities in California and to prioritize state and local efforts to protect public health and safety following the 9/11 attacks.

To date, NRC has not complied with this request for information. In the mean time, other independent investigators, including the National Academy of Sciences, have conducted studies and presented findings on security risks at nuclear reactors, in particular spent fuel stored in reactor pools. The NAS study (2005)<sup>1</sup> found that under some conditions a terrorist attack leading to a spent fuel pool fire could release large quantities of radioactive materials to the environment and that there are measures to reduce the likelihood of such a fire involving a loss-of-pool-coolant event using "readily implemented measures." I urge the NRC to take into consideration the NAS' recommendations as well as upgrade the Design Basis Threat to require nuclear plant owners to protect against terrorist attacks equivalent to the 9/11 attacks. Public health and safety depend upon the adequacy of federal security requirements and enforcement programs at nuclear plants.

The National Academy of Sciences and other investigators have demonstrated that a successful assault against a plant can result in significant radiological releases. At a minimum, federal security requirements for nuclear power plants should require plant owners to defend against a 9/11-sized attack (19 motivated suicidal terrorists) and defend against a coordinated attack by air, land and/or sea. Plants also should be required to defend against malevolent plant operators acting from inside the plant and against a variety of attack scenarios including both conventional and non-conventional

<sup>1</sup> Safety and Security of Commercial Spent Nuclear Fuel Storage (April 2005), National Academies.

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weapons that are available (e.g., explosives, chemical attacks).

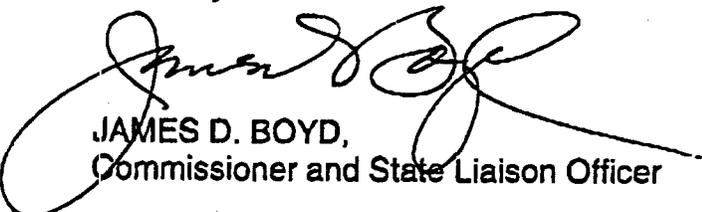
The upgraded Design Basis Threat should take into account the vulnerabilities and recommendations for improving safety and security at nuclear power plants that were identified in the NAS 2005 study. For example, the NAS study concluded that "additional study of security at the nation's nuclear plants is needed urgently" and recommended:

- (1) an investigation of the effectiveness and adequacy of current surveillance and security measures for protecting stored spent fuel; this investigation should be performed by an independent organization, i.e., independent of the NRC and the nuclear industry;
- (2) an independent, plant-specific review of the vulnerabilities and consequences of a loss-of-pool-coolant event leading to a zirconium cladding fire;

The NAS study further recommended that while these studies are underway, the NRC should ensure that power plant operators take prompt and effective measures to reduce the consequences of loss-of-pool-coolant events in spent fuel pools that could result in a fuel cladding fire. They recommended that two such measures should be implemented promptly: (a) reconfiguring fuel in pools so high decay-heat fuel assemblies are surrounded by low decay-heat assemblies to more evenly distribute decay-heat loads, and (b) provide water-spray systems that would be able to cool the fuel even if the pool or overlying building were severely damaged.

We look forward to the NRC developing in the final regulations a more realistic and appropriate Design Basis Threat to protect the public against a 9/11 equivalent terrorist threat against these facilities.

Sincerely,



JAMES D. BOYD,  
Commissioner and State Liaison Officer

JDB/lb

cc: William Maier, NRC

Matthew Bettenhausen, Director  
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**To: Nuclear Regulatory Commission  
Docket No. RIN 3150-AH60**

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**Pages: 3 including this cover**

**Re: Comments on the Proposed Rule for the Draft Design Basis Threat**

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