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February 28, 1991

Secretary, U.S. Nuclear Regulatory Commission
Attention: Docketing and Service Branch

Re: Docket No. PRM-73-9

This letter is to express support for the Petition for Rulemaking and Request for Emergency Action submitted on January 11, 1991, by the Nuclear Control Institute and the Committee to Bridge the Gap. The petition proposes amendments to 10 C.F.R. Part 73 to upgrade the "design basis threat" for the radiological sabotage of nuclear power plants to include the potential for a boat or truck bomb as well as a coordinated attack by large, well-armed teams of terrorists. Emergency implementation of protective measures is sought.

As a citizen who has been studying the risks and benefits of nuclear power for over sixteen years, I have long been concerned about the vulnerability of nuclear power plants and their radioactive waste inventories to acts of terrorism and sabotage. This concern became all the more compelling, of course, when the United States entered into the Persian Gulf war with a terrorist nation. Although we can all rejoice in the cease-fire announced yesterday evening, I urge the Commission to mandate that its power plant licensees install -- and maintain into the foreseeable future -- physical barriers against individuals or State-sponsored terrorists who may seek to retaliate. This protection is needed against all future terrorism.

Virtually no area of our nation provides a safe sanctuary against the potential for radiological sabotage. Scattered coast-to-coast at 72 nuclear power plant sites are 111 operating reactors. At least one nuclear power plant is located near almost every major population center in the United States. (Please see note below.) Each operating thousand-megawatt nuclear reactor vessel contains the equivalent long-lived radioactivity of approximately a thousand Hiroshima bombs.

In addition, nearby each reactor vessel, though in a less-fortified building, is a water-filled, open-topped, reinforced-concrete pool in which the spent, irradiated fuel rods are stored which accumulate during the operating life of the reactor. Each of these spent-fuel pools contains immeasurable millions of curies of lethal materials and a supply of enough plutonium for potential weapons use to entice terrorists or saboteurs. An individual or a tear could readily destroy the integrity of a fuel pool by damaging the stored fuel rods or the cooling-water piping and pumping system, potentially causing a criticality accident, a meltdown and the

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widespread dispersal of the pool's radioactive solids, liquids and gases.

Each facility also houses a stockpile of so-called low-level radioactive wastes awaiting shipment for burial. The fifty-five gallon drums of filters, resins and sludges are saturated with the same range of radioactive contaminants that are present in reactor fuel and in nuclear weapons. These drums are vulnerable to theft. The intentional dispersal of their contents into the environment could be disastrous.

The petitioners prudently warn that the potential threat to a nuclear power plant is not limited to several persons with hand-held automatic weapons or hand-carried explosives and incapacitating agents. At present terrorists could easily gain access to a nuclear power plant by penetrating the typical plant boundary fence. To quote from the NRC document, "Barrier Penetration Database, Revision 1," Brookhaven National Laboratory, November 1978, page 8:

Almost all common types of fences are penetratable in seconds, or, at best, in less than a minute, either by assisted climbers or by raising the bottom of the sheet of wire mesh and crawling under. Little or no tools are required. Fences, gates and barbed wire are, therefore, deterrents only to the 'casual' or less-than-highly-motivated intruder. Otherwise, they provide essentially only alarm information, not a significant delay time.

Note that any of the three barriers listed here [chain link fences or a security gate] can be driven through in a light (pick-up) truck in 2 ± 1 seconds with no significant damage to the truck.

Once inside, terrorists could deploy explosives in vital areas of the plant; their vehicle itself could be a bomb. As a minimum, the Commission staff should reassess such increasingly popular protection measures as reinforced walls and fences and hydraulically-retractable vehicle barriers.

Many frightening terrorist scenarios are possible. In the interest of public health and safety, I urge you to revise your regulations expeditiously in accordance with this petition for rulemaking.

Sincerely,

Kay Drey

Note: Seven of America's largest population centers -- New York, Chicago, Philadelphia, Detroit, Boston, Washington, and Dallas -- are located within 50 miles of a nuclear power plant. Other major population centers located within a 50-mile radius of a plant include: Phoenix, San Diego, Miami, New Orleans, Minneapolis/St. Paul, Omaha, Raleigh/Durham, Cleveland, Pittsburgh, and Seattle.