

April 27, 1993

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Regulatory Commission
Washington, D.C. 20555

Subject: NRC Review of 10 CFR 73
Design Basis Threat

Ms. Higdon:

As a member of the contract security force at the Callaway Nuclear Power Plant, I am concerned with the recent events that have prompted a review of 10 CFR 73.1 (a) (1) and would like to take this opportunity to provide you with some information that I feel is relevant.

Overall, I feel that the present design basis threat policy is basically unrealistic and needs to be brought up-to-date to meet not only present day, but, future requirements to provide the public the protection it deserves. The present design basis threat is " a hypothetical threat based on technical studies and on information from crime and terrorism experts in the intelligence community..." As so often happens, theory and real life don't quite meet...this has been proven with the incident in Waco Texas, where intelligence and expert theory fell short of the mark in helping authorities control the situation.

Although there have only been a few actual or attempted terrorist acts against commercial nuclear facilities, in light of recent incidents such as the World Trade Center, Waco Texas, Three Mile Island and not-so-recent incidents such as terrorist acts against U.S. citizens being taken hostage and U.S. Military facilities i.e. Marine Corp Barracks in Beirut and Embassies...I feel these are PRIME examples where intelligence and terrorism experts have greatly underestimated the dedication, capabilities, training, knowledge, and motivation of many terrorist groups. Often, resulting in loss of life and costs into the millions of dollars from damages as a result of this underestimation.

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In researching the design basis threat (dbt) policy, it is clear that the NRC took the position it presently adheres to for reasons that at that time, were valid and based on information (or more accurately) lack of information available on terrorist group activities.

Presently, the current bdt ploicy is approximately 12 years old. But, more importantly-there is now more information available to be used to re-evaluate the dbt. I have listed some information on incidents at nuclear facilities, military, and civilian interests:

-1973 Latin America-15 terrorists attacked the Atucha Atomic Power Station in Argentina.

-1973 Spain-the ETA, a basque separatist terrorist group launched nearly 100 attacks against 2 nuclear power plants under construction-using powerful remote detonated bombs, plastic explosives, hand grenade launchers and anti-tank rockets...resulting in more than 7 million dollars in damage.

- 1986 Palo Verde Nuclear Power Station-power from 3 of the 4 transmission lines supplying off-site electricity were lost within minutes. It was discovered that overhead power cables which run to the station from 4 different directions had been sabotaged. This was a deliberate, coordinated sabotage by a group of people. Although this does not specifically fit the dbt, it is a very viable mode of attack, done by stealth and deceptive actions of several people. Per NUREG 0090, vol 9, no. 2-"until the saboteurs are apprehended, the potential remains for future challenges to the plant safety systems." Which, without the necessary safety systems, the result is a high probability for a Loss of Collant Accident.

-1983 Vehicle bomb attack on the Marine Corp barracks in Beirut Lebanon-resulting in 248 casualties.

-1970 truck bomb at the Math Lab, in Wisconsin.

1990 Vermont Yankee Nuclear Power Plant-threat against the plant indicating Iraqi troops would bomb the plant.

-1990 Maine Yankee Nuclear Plant-bomb threat.

-1990 Hatch 1/2 and Vogtle 1/2 Nuclear plants-unspecified threat.

-1991 Trojan Nuclear Plant-unspecified threat.

-1991 Consumers Power-bomb threat to destroy new power transmission lines.

-1991 Hatch Nuclear Plant-threat of vehicle bomb to get action.

-1991 Palo Verde Nuclear Plant-bomb threat.

-1991 Brunswick Nuclear Plant-bomb threat against nearby military facility.

-1991 Wolf Creek Nuclear Plant-threat of insider sabotage by Iraqi employee.

-1991 McGuire Nuclear Plant-threat rumor that plant was under Iraqi attack.

-1991 Brunswick Nuclear Plant-bomb threat.

-1991 Byron Nuclear Plant-bomb threat.

-1991 Browns Ferry Nuclear Plant-threat of vehicle bomb.

-1991 San Onofre-threat of vehicle bomb.

-1991 Zion Nuclear Plant-bomb threat.

-1991 Turkey Point Nuclear Plant-threat of airplane bombing the plant.

-1991 Turkey Point Nuclear Plant-bomb threat.

-1991 Oregon State University-bomb threat against research reactor.

-1991 Davis-Besse Nuclear Plant-sabotage/murder threat.

-1991 Limerick Nuclear Plant-bomb threat.

-1991 Manhattan College-bomb threat against research reactor.

-1991 Arkansas Nuclear One-unspecified threat.

-1991 San Onofre Nuclear Plant-bomb threat.

- 1991 Cooper Nuclear Plant-bomb threat.
- 1991 U.S. Nuclear Plants-threat of kamikaze air craft attacks by Iraq.
- 1991 University of Utah-bomb threat against research reactor.
- 1993 Waco Texas-non-nuclear related, this is hard evidence of existence of a determined and violent organization that openly fought U.S. ATF agents and were not afraid to die for their chosen cause.
- 1993 World Trade Center-evidence of a determined and violent organization operating within the U.S. This was a well executed and planned terrorist act on a high profile target-politically/financially, the terrorists achieved their objective. Including not being detected by authorities.
- 1993 Three Mile Island Nuclear Plant-forced entry into the protected area. Although intruder was unarmed, the dbt does not specifically address this type of incident. According to information published in NUREG 1485, there were correct and questionable personnel actions on the part of the security force and operations personnel in dealing with the incident. Plus, a number of equipment and procedural inadequacies that contributed to the incident. NUREG 1485 also indicates that from the time the intruder breached the P.A. barrier, it took approximately 60 seconds for him enter the Turbine Bldg., exit his vehicle and move further into the bldg-where he was later located and apprehended approximately 4 hours later. This incident also brought to light that there were not enough security personnel available to adequately deal with a SINGLE intruder-which allowed the incident to last hours longer than necessary and thus, increasing the potential for a part 100 release. Also, the Incident Investigation Team concluded that "NRC requirements for establishing and maintaining a physical protection system and as used during the security program licensing process do not consider the use of a vehicle to breach a P.A. barrier. In this event, the use of a vehicle reduced the amount of time the security force had to assess and respond to the event."

In 1991, Nuclear Control Institute and Committee to Bridge the Gap filed petition for rulemaking with the NRC (docketed PRM-73-9). The NCI group requested revision of the dbt to reflect explosives-laden vehicle bombs and possibility of attack by a larger number of attacker using more sophisticated weapons. This petition was ultimately denied by the NRC which stated that "there has been no change in the domestic threat since the dbt was adopted that would justify a change in the dbt." However, this petition brought forth some interesting information.

In summary, to reiterate the question asked by the NRC in review of the NCI petition Of 1991, "Has the threat of radiological sabotage of domestic nuclear reactors changed to an extent that justifies a need to upgrade the current design basis threat ?" Overall, I feel the answer is YES, the facts speak for themselves, in terms of actual or threatened acts of sabotage. A successful terrorist attack could cause a release of rad-activity comparable to a severe nuclear accident and result in significant health and safety consequences and property damage. The pasted incidents that I referenced should be considered alarms to be heeded if the safety of the public is to be guaranteed. I feel the past attitude of the NRC has been REACTIVE and not PROACTIVE as it should be. The NRC has been given the responsibility to protect the health and welfare of the citizens of the U.S. and a more proactive stance is now more in order than ever. Per review of the NCI petition, "the commission has estimated, in the case of one reactor, that a severe accident could result in up to 130,000 acute fatalities, 300.00 latent cancers, and 800,000 gentic effects, while necessitating offsite mitigation to cast \$35 billion.

I feel that the ends clearly justify the means, to at the very least keep the dbt at the present status or increase the strictness of security requirements to properly protect the public.

I am not advocating the allocation of millions of dollars for additional security, I am just asking that careful consideration be given to ANY changes to the design basis threat.

Sincerely,

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