AE81-1
PDR

January 14, 1991

Dr. Thomas E. Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

POTENTIAL SAFEGUARDS INFORMATION

Dear Dr. Murley:

By this letter the Ohio Citizens for Responsible Energy, Inc. ("OCRE") is informing you of a potentially significant weakness in nuclear power plant security and safeguards programs: the ease of aquatic attack or sabotage by adversaries using watercraft. While OCRE is unsure whether the contents of this letter constitute safeguards information, OCRE is treating it as such and will keep it confidential.

The terrorism warning issued last week due to the situation in the Middle East illustrates that facilities within the United States may be subject to terrorist attack. Nuclear power plants present potentially attractive targets to terrorists for purposes of radiological sabotage. While the Iraqi threats are the most recent and possibly the most credible and dangerous, they are not the first such threats. In June of 1987 Radio Tehran issued a vague threat to U.S. nuclear reactors. See Information Notice 87-27, "Iranian Official Implies Vague Threat to U.S. Resources." In addition, serious acts of terrorism against nuclear reactors have occured in Europe. The threat of nuclear terrorism has been a subject of study and speculation for over a decade; e.g., the RAND Corporation has done extensive studies on the potential for nuclear terrorism from a variety of perpetrators. In addition, reports surfaced late last year that Cuban President Fidel Castro had plans to attack the Turkey Point plants in 1983.

In prudent response to this threat, and to the increased use of vehicle bombs in the Middle East, the NRC issued Generic Letter 89-07, "Power Reactor Safeguards Contingency Planning for Surface Vehicle Bombs." However, it is not apparent that the NRC has considered the potential for terrorist attack by aquatic vessels.

Most nuclear power plants are located on navigable waterways, which they use for cooling water. Such siting makes them vulnerable to attack by water as well as by land. Unfortunately, it does not appear that nuclear power plants take actions to restrict access to waters near the plant, even

those within the Exclusion Area Boundary. For example, the USAR for the Perry Nuclear Power Plant specifically anticipates the use of the portion of Lake Erie within the EAB for recreational boating and fishing purposes. USAR, Section 2.1.2.2. This has been confirmed by my personal observation, as well as by the attached letter from the Cleveland Electric Illuminating Co. to the Ohio EPA, wherein it is stated that, at the time of a sulfuric acid incident, the U.S. Coast Guard was assisting a pleasure craft near the plant's discharge structure. Nor does it appear that other nuclear plants restrict such access. In the summer of 1989 it was reported by the Associated Press that a diver was sucked into the intake pipe of the St. Lucie plant.

There are at least three possible modes of attack by water: (1) the standoff attack, in which terrorists in a boat use high-powered weapons, such as shoulder-fired rocket launchers, to damage the nuclear plant; (2) the boat bomb, the aquatic version of the truck bomb, in which terrorists denotate a boat laden with explosives near the nuclear plant, or aim the boat at high speed at the plant so that it is detonated virtually onshore. The boat could be piloted by remote control or by persons on a suicide mission; and (3) the use of divers, possibly transported near the site by boat, to plant explosives in the intake and/or discharge structures, or close to plant structures onshore.

Attack by water could be attractive for several reasons: ease of undetected approach to the site by a boat posing as a pleasure craft; the ability to get closer to the plant than on land, where fences and plant security measures are in place, the ability to quickly escape the site, particularly in large bodies of water (e.g., oceans and the Great Lakes as opposed to rivers), with virtually unlimited escape routes, as opposed to land, where vehicle escape routes are limited by roads which can be blocked off; and ease of approach from and escape to foreign countries, particularly in the Great Lakes, due to the border with Canada, or areas near Mexico or Cuba. The last factor is especially significant in that terrorists may gain entrance to foreign countries more easily than to the United States, and by using boats they can enter United States territory without crossing a patrolled and secured border.

Terrorists have in fact used boats in their attacks. On August 15, 1975, terrorists approached the Mt. d'Arree nuclear plant in Brennilis, Brittany, France in a boat, planting explosives which caused minor damage (as reported in Preventing Nuclear Terrorism, The Report and Papers of the International Task Force on Prevention of Nuclear Terrorism, Paul Leventhal and Yonah Alexander, editors). On May 30, 1990, Palestinian terrorists attempted to attack the Tel Aviv coast in speedboats, but fortunately were thwarted. On June 23, 1990, the Israelis destroyed a power boat carrying Arab guerrillas

near Israel's northern border; the terrorists had fired rocket-propelled grenades and automatic weapons at a patrol vessel.

There are cost-effective measures which could be taken to decrease the risk of aquatic terrorist attacks at nuclear power plants. The most important measure is to restrict access to boat traffic near the plant. This can be done by cordoning off the restricted area using buoys and ropes or cables, along with signs warning boaters that the area is restricted. At a minimum, the EAB should be restricted; it would be preferable to extend the restricted area to the standoff distances determined in accordance with Generic Letter 89-07. The plant security force should conduct enhanced surveillance of activities on the body of water near the plant, to look out for suspicious activity, such as a boat loitering close to the restricted area, or a boat directly approaching the plant at high speed, or diver activity near the restricted area. The plants should develop contingency plans with the U.S. Coast Guard, or other law enforcement agencies having the ability to intercept boat traffic, for assistance in detering attacks or investigating suspicious activities. The licensees may need to develop their own capability to intercept boat traffic or divers by the use of power boats, although their jurisdiction would probably be limited to the EAB. It may also be possible that certain intrusion detection systems could be used to monitor the restricted area.

OCRE hopes the NRC will take prompt action to decrease the threat posed by water-based terrorist attacks on nuclear power plants, especially in light of the terrorism warning now in effect.

Sincerely,

Susan L. Hiatt

Susan L. Hiatt
OCRE Representative
8275 Munson Road
Mentor, OH 44060
(216) 255-3158

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Al Kaplan
VICE PRESIDENT
NUCLEAR GROUP

September 26, 1989
PY-CEI/OEPA-0087 L

Mr. Ermelindo Gomes
Environmental Engineer
Division of Water Pollution Control
Ohio EPA, Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087

Re: 9/21/89 Sulfuric Acid Incident at the Perry Nuclear Power Plant

Dear Mr. Gomes:

This letter provides a follow up to the telephone notification made to the EPA on September 21, 1989, concerning an incident at the Perry Nuclear Power Plant (OEPA Incident Report No. 09433722). The incident occurred when sulfuric acid was manually added to the plant's Circulating Water System (Cooling Tower) at an excessive rate. The acid was added directly from a tank truck to the cooling tower basin. The plant Acid Addition System which normally performs this function was out of service for maintenance.

The direct addition of acid is normally controlled at a flow rate of one (1) gallon per minute (gpm). As a result of this incident three thousand (3000) gallons of 93.4 percent sulfuric acid were added to the basin in approximately a half hour period (flow rate 100 gpm). It is also estimated that most of the sulfuric acid was discharged through the Service Water System to Lake Erie (via Circulating Water System blowdown). The quantity released exceeded the Reportable Quantity (RQ) listed in 40 CFR Part 302 of one thousand (1000) pounds. It should be noted that this release is considered an "excursion" of an unintentional and temporary nature, pursuant to 40 CFR Part 401.17(a)(2), and should not be considered a violation of the regulations.

Incident investigation determined that the sulfuric acid was added to the cooling tower basin by plant operators roughly between 6:30 and 7:00 A.M. on 9/21/89. From a continuous pH recorder, it was determined that the pH of the plant discharge water at Outfall No. 3IB00016004 fell below the NPDES Permit (OEPA Permit No. 3IB00016*CD) limit of 6 S.U. for approximately forty-five (45) minutes, between 7:45 and 8:30 A.M. that morning, reaching a minimum of 2.4 S.U. for about fifteen (15) minutes of that duration. Prior to its release, the sulfuric acid was diluted by water from the Circulating Water, Service Water, and Emergency Service Water Systems. The flow rate of the outfall during the release was approximately fifty thousand (50,000) gallons per minute (gpm). The excessive acid addition was later identified by other plant personnel and reported to the control room supervisor at 10:42 A.M..

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A comprehensive survey of the Lake Erie shoreline was conducted on 9/22/89 at the plant site, and at nearby beaches. No adverse visible effects were observed. In addition, the U.S. Coast Guard, which was assisting a pleasure craft near the plant's discharge structure, reported no abnormal observations in the area, after being contacted.

The cause of this incident was the lack of a procedure that clearly specified organizational interfaces and detailed operating instructions to ensure the activity was performed correctly. In addition, plant personnel performing this activity were not familiar with the flow rate limitations and abnormal system lineup.

As a result of this incident, maintenance on the plants permanently installed Acid Addition System was accelerated, and the system was returned to service. This ensures a proper flow rate of acid. In addition, applicable plant procedures will be reviewed and revised to ensure proper organizational interfaces and limitations are clearly specified for the manual addition of sulfuric acid to the Circulating Water System. Also, appropriate plant personnel will be counseled on the circumstances surrounding this incident, including the need to ensure that personnel are not assigned to perform activities without adequate training and procedural direction.

Please contact me if you have any questions.

Very truly yours,

Al Kaplan
Vice President
Nuclear Group

AK:pc

cc: Document Control Desk, USNRC

Lake County Emergency Planning Committee
Attention: Mr. E. Retzler
P.O. Box 480
Mentor, Ohio 44061

February 23, 1991

AE81-1 POR
023

COMMENTS OF OHIO CITIZENS FOR RESPONSIBLE ENERGY, INC. ("OCRE") ON PRM-73-9, PETITION FOR RULEMAKING FILED BY THE NUCLEAR CONTROL INSTITUTE AND THE COMMITTEE TO BRIDGE THE GAP, 56 FED. REG. 3228 (JANUARY 29, 1991)

OCRE supports this petition for rulemaking. The petitioners have presented a strong, and, in this time of war with the explicit threat of terrorism, most compelling case. The petition should be granted without delay.

OCRE has researched the threat of terrorism, and specifically nuclear terrorism. OCRE has reviewed reports on the subject prepared by RAND Corporation researchers, and the books "Nuclear Terrorism: Defining the Threat" (1986) and "Preventing Nuclear Terrorism: The Report and Papers of the International Task Force on Prevention of Nuclear Terrorism" (1987), both editied by Paul Leventhal and Yonah Alexander, and "Destruction of Nuclear Energy Facilities in War: The Problem and the Implications" by Dr. Bennett Ramberg (1980). The latter was republished in 1984 under the interesting title "Nuclear Power Plants as Weapons for the Enemy." Based on this research, OCRE agrees with the petitioners' bases set forth for the petition. These bases are supported by the facts and expert opinion in the available literature. Terrorism has indeed become bloodier, more sophisticated and better armed, and frequently State-supported. Due to the war in the Persian Gulf, the threat is explicit and immediate.

Terrorists are capable of obtaining sophisticated and high-powered weapons, particularly if they are State-supported. In 1982, terrorists fired five rockets into the French Creys-Malville nuclear facility (reported in "Nuclear Terrorism," p. 152). In a December 13, 1988 letter to former NRC Chairman Lando Zech from Congressman Sam Gejdenson, it was reported that three Lebanese men were apprehended while attempting to smuggle a bomb across the U.S.-Canada border. Experts on terrorism agree that terrorists are quite capable of obtaining "whatever arms and munitions were needed for their purposes, including automatic weapons, rocket-propelled grenades, and mortars." "Attributes of Potential Criminal Adversaries of U.S. Nuclear Programs," RAND Corp., R-2225-SL (1978), p. 17. This same source notes that "they have been able to recruit sufficient manpower to meet their tactical requirements." Id. The RAND report, "The Potential Criminal Adversaries of Nuclear Programs: A Portrait," P-6513 (1980), also states that "large numbers of automatic weapons and even some precision-guided missiles have been stolen from military stocks and are available on the illicit market."(p. 6). The

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RAND report, "The Appeal of Nuclear Crimes to the Spectrum of Potential Adversaries," R-2803-SL (1982), states that "sophisticated weapons, such as rocket-propelled grenades, are now available to terrorist groups everywhere" (p. 20).

The potential for a vehicle bomb attack is likewise serious and credible, as the NRC has acknowledged in issuing Generic Letter 89-07. Information presented in "Preventing Nuclear Terrorism," pp. 207-211, indicates that research by the Sandia National Laboratory had found that "unacceptable damage to vital reactor components" could result from an off-site detonation of a vehicle bomb. Nor should the concern be limited to land vehicles. Terrorists have used boats in attacks against a nuclear plant in Europe and against population targets in Israel.

Clearly nuclear power plants present attractive targets for radiological sabotage. Even if the terrorists are unsuccessful in causing the release of fission products, the mere fact of an attack on a nuclear facility would create widespread panic and give the terrorists intense publicity. The RAND report, "The Potential Criminal Adversaries of Nuclear Programs: A Portrait," P-6513 (1980) notes that even a well-formulated hoax could cause widespread alarm and even panic (p. 5). At the other end of the spectrum, a terrorist attack which results in severe core damage would result in the same potential for early fatalities, latent cancer fatalities, environmental contamination and property damage as exists for an accident of similar severity. In fact, an attack on a nuclear reactor with conventional weapons gives the adversary a "pseudo-nuclear" capability, in that the release of radioactivity will mimic the radiological effects of nuclear weapons. Great Britian's Royal Commission in Environmental Pollution found nuclear installations to be unique in that they provide prime targets in time of war, the destruction of which leads to such long-lasting radioactive contamination of the environment. Ramberg, p. xv.

The vulnerability of nuclear facilities to terrorist destruction is underscored by the testimony of Bruce L. Welch, a former military demolitions expert, before Congress (quoted by Ramberg, p. 67):

> I could pick three to five ex-Underwater Demolition Marine Reconnaissance or Green Beret men at random and sabotage virtually any nuclear reactor in the country. It would not be essential for more than one of these men to have had such experience.
>
> Access for purposes of taking over and placing charges could be gained by force under ruse. Alternatively, containment could be breached from the outside with

relatively small shaped charges and additional charges could be quickly set after gaining entry through the breech. The "engineered safeguards" would be minimally effective or wholly ineffective and the amount of radioactivity released could be of catastrophic proportions.

The RAND report, "Attributes of Potential Criminal Adversaries of U.S. Nuclear Programs," R-2225-SL (1978), likewise states that "serious damage to facilities might be caused by standoff attacks with mortars, bazookas, rocket-propelled grenades, precision-guided munitions, remotely piloted vehicles, or aerial bombardment," as well as sabotage after entry to the plant is gained (p. 4). The RAND report, "The Appeal of Nuclear Crimes to the Spectrum of Potential Adversaries," R-2803-SL (1982), finds standoff attacks by terrorists against U.S. nuclear facilities to be feasible (p. 21).

We are now at war with an adversary who has actually called upon terrorists to attack Americans and American interests. It was reported by the Associated Press on February 5 that Radio Baghdad issued a terrorist call to arms which included cryptic messages which might have been coded instructions to agents. In response to this threat, the federal government has taken unprecedented precautions, such as those for the President's State of the Union Address. Airports are likewise at their maximum state of alert. The Super Bowl was played under unprecedented security precautions. It appears that the NRC is the only agency that is not taking these threats seriously.

Events in the Persian Gulf war could make attacks against nuclear reactors more attractive to the enemy and its terrorist agents. U.S. air strikes against operating Iraqi reactors have created a precedent that operating nuclear reactors are now "fair game" as a target. The enemy may retaliate by attacking an American reactor. The reported strikes against Iraqi civilians may also prompt severe retaliatory efforts. Certainly no heinous act can be ruled out, given the brutal and ruthless nature of the enemy regime, as evidenced by the use of chemical weapons against the Kurds, Scud missile attacks against Israel, the deliberate oil spill in the Persian Gulf, and the deliberate burning of Kuwaiti oil wells. Such acts reveal a regime that has little or no regard for human life, the environment, international law, or basic standards of decency. Nor does the threat and reality of massive retaliation by the United States appear to be a deterrent to Iraqi actions.

At a minimum, the NRC should require licensees to immediately activate the contingency plans developed in response to Generic Letter 89-07. Licensees should implement the measures suggested in NUREG/CR-5246, "A Methodology to Assist in Contingency Planning for Protection of Nuclear Power Plants

Against Land Vehicle Bombs," including the measures to maximize decay heat removal capability, such as filling diesel fuel oil tanks to the maximum, increasing condensate storage tank levels to maximum, increasing BWR suppression pool levels to maximum and reducing pool temperatures to the minimum, and charging air accumulators to maximum.

The NRC justified its denial of the petitioners' request for immediate action by claiming that "there continues to be no credible threat and terrorist actions against any NRC-licensed facility that warrants implementation of contingency plans against truck bombs at this time." 56 FR 3229. When will the threat become credible, after it happens?

The NRC and industry should not assume the terrorist threat is over when the war with Iraq ends. Terrorists have long memories and will wait for the opportune time and target to exact their revenge. For example, the December 1988 bombing of Pan Am Flight 103 is thought to be retaliation for the July 1988 mistaken attack on an Iranian airbus by the U.S.S. Vincennes. The nature and timing of the attack, four days before Christmas, are thought to be significant in that the airbus incident occurred four days before an Islamic religious holiday. Another act of retaliation associated with that incident is the March 1989 bombing of a car driven by the wife of the captain of the Vincennes. Armenian terrorists have shown much longer memories, murdering Turks in retaliation for genocide 70 years earlier. The aftermath of the war with Iraq may be fierce anti-American sentiments persisting for years, if not decades, to come.

Licensees should be required to erect permanent vehicle bomb barriers, for both land and aquatic vehicles. Security enhancements necessary to deter terrorist attacks should remain a permanent part of the NRC's requirements.

The rule changes sought by the petitioners are certainly not extreme. Others have suggested more active defense of nuclear plants in wartime; Ramberg suggests the stationing of military units, with anti-aircraft and artillery weapons, around nuclear plants (Ramberg, p. 132). The changes sought by petitioners are consistent with the high-level composite profile of adversaries postulated in the RAND report, "Attributes of Potential Criminal Adversaries of U.S. Nuclear Programs," R-2225-SL (1978): up to 20 perpetrators, using any kind of weapons up to and including light, crew-served weapons, and high explosives, and any means of transportation needed to achieve their mission (p. 47). It is not unreasonable to establish the design basis threat consistent with what can be expected; rather, it is necessary. This RAND report discusses the importance of designing defensive systems that raise the required attributes for a successful terrorist attack to the

point where few adversaries will be able to attain the necessary capabilities: "a security system that compels a potential adversary to possess all of these critical human capabilities will deter or thwart a large portion of the actions that might be directed against nuclear programs." Id. at 58.

The present situation should lead the NRC to considering hardening of nuclear plants to better withstand terrorist attacks and even attack by enemy military forces during wartime. Ramberg (p. 163) concludes that the "vulnerability of nuclear energy facilities to military actions should be included in nuclear energy risk calculations." Unfortunately, 10 CFR 50.13 precludes any such consideration in the licensing process. This regulation should be rescinded. It is especially imperative to consider hardening against attacks and sabotage in the design stage for future nuclear plants, where effective measures can be implemented at modest costs, compared to retrofitting existing plants.

In conclusion, PRM-73-9 should be expeditiously granted. The petition is well-supported by evidence readily available in the literature on nuclear terrorism, and by recent events which have shown the potential for terrorism to be escalating and imminent due to the war with Iraq. The NRC should match the concern and precaution shown by other government agencies in this time of crisis. The NRC should take the threat of terrorism at least as seriously as the NFL did for the Super Bowl.

Respectfully submitted,

Susan L. Hiatt

Susan L. Hiatt
OCRE Representative
8275 Munson Road
Mentor, OH 44060
(216) 255-3158

AE81-1

COMMENT RECEIVED ON PDR 024

5/10/93 MEETING ON DBT

To: Ms. Joan Higdon
From: Dwain Sexton
Subject: Reassesment of Design Basis Threat (DBT)

Reguarding the reassesment of the (DBT) at Nuclear Power Facilities I would like to share my thoughts.

I do believe that more control of vehicle approches to Protected Area Barriers would be benificial and any hardening up in this area would serve as a deterrant, But certainly not the solution. Any Dedicated well trained adversary or group of sabatuers can gain access to the Protected Area at any Nuclear Power Facility. Access by Air (via guided parachute) could easily be achieved with up to 100 lbs. of weaponery and/or Ordinance per intruder. Ground assault by a 3 to 5 man team could very easily cut or scale the P/A fence and place charges on Vital Area Equipment in minites.

The point is the human element, (Terrorist) can beat structural Barriers. The (DBT) must always consist of armed intruders (3 or more) inside the P/A reguardless of how they gained access. A planned Nuclear sabotage operation if launched on any Nuclear site would be Catastrophic within minutes of the initial intrusion. Only a dedicated armed and well trained tactical response team (Security) can and will stop the consequense of the intrusion. If something is to be learned from the TMI incident, it should be if terrorist, instead of a mental patient, spent 4 hours in the Protected Area of a Nuclear Plant, The entire Eastern Seaboard would be another Cherynoble disaster. The inability to locate, isolate, and evacuate the intruder in less than 4 hours should be a sign that tactical training and response team numders should be increased instead of decreased.

The (DBT) determins both of these "Crutial" defensive public safety elements.

Thank You for your time,

Dwain Sexton

Dwain Sexton
Nuclear security Officer
Callaway Nuclear Power Plant
Fulton Mo.

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Dwain Sexton
Rt-1 Box 201
Steedman Mo.
65077

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USA 29

Ms. Joan Higdon, Mail Shop. 4E4/WFN,
U.S. Nuclear Regulatory Commission,
Washington, DC 20555

AE81-1

PDR 0-5

COMMENT RECEIVED ON 5/10/93

MEETING ON DBT (3)

April 27, 1993

Joan Higdon
'nited States Nuclear
.egulatory 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. 3a

Although there have only been a few actual or attempted terrorist acts against commerical nuclear facilities, inlight 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 Beruit 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. b

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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: 01

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

-1973 Spain-the ETA, a basque separatis 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 barraks in Beruit Lebanon-resulting in 248 causalities.

-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 Nucleat 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 exsistance of a determined and violent organization that openly fought U.S. ATF agents and were not afraid to die for their choosen 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/finanically, the terrorists achieved their objective. Including not being detected by authorities.
-1993 Three Mile Island Nulcear 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 Trubine Bldg., exit his vehicle and move futher 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 attackerd 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 radactivity comparable to a severe nuclear accident and result in significant health and safety consequences and property damage. The passed incidents that I referenced should be considered alarms to be heeded if the safety of the public is to be guarnteed. 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. 9

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. 9

Sincerely,

Steven P Leroux

416 St. Eunice Rd
Fulton Mo. 65251

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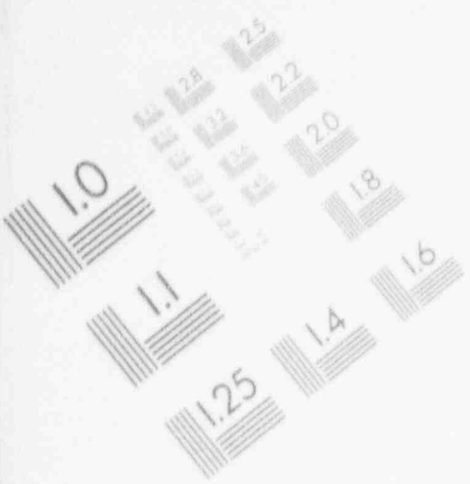
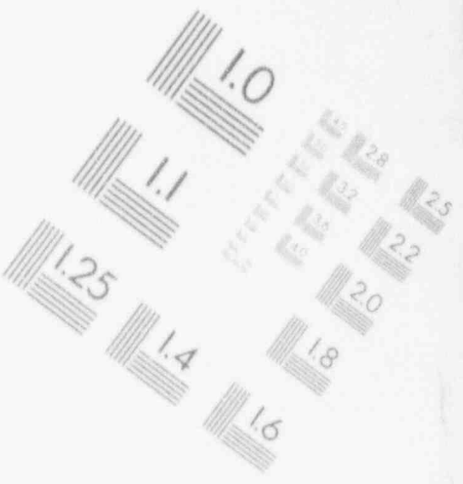
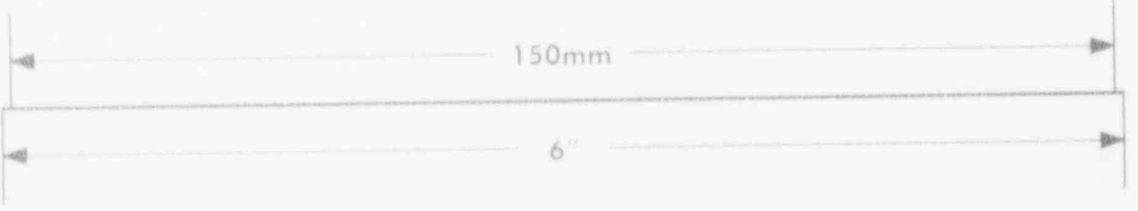
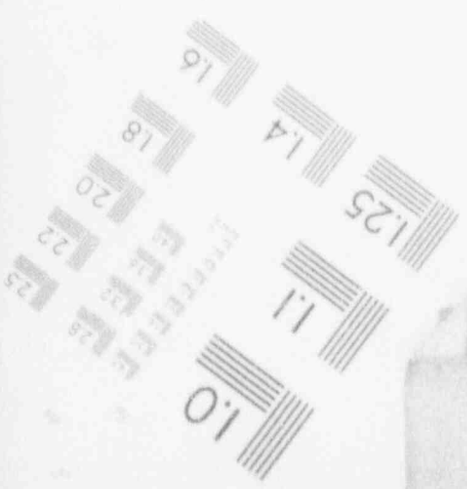
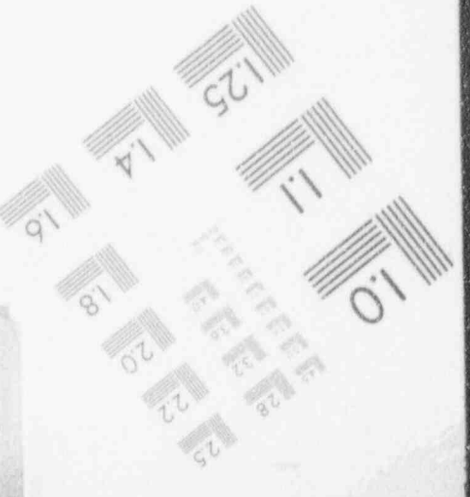
IMAGE EVALUATION
TEST TARGET (MT-3)











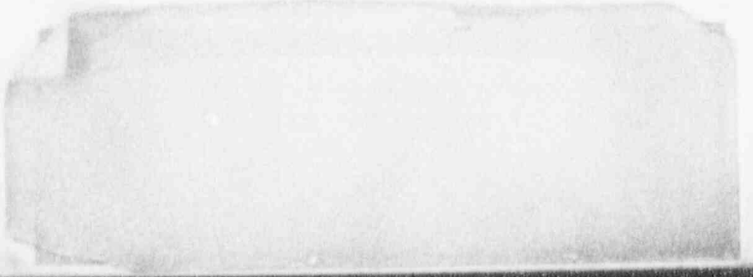


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IMAGE EVALUATION TEST TARGET (MT-3)

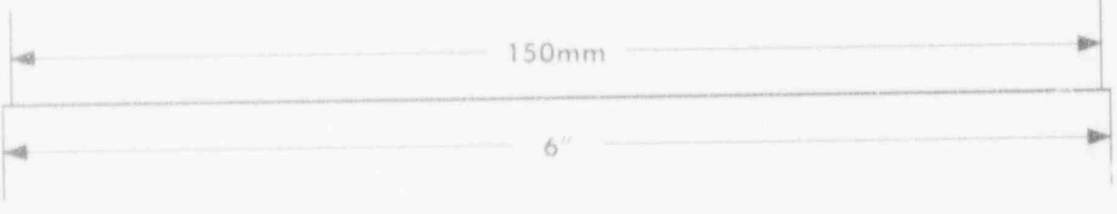

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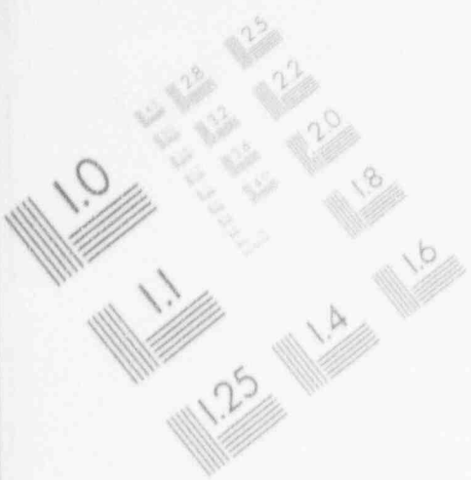
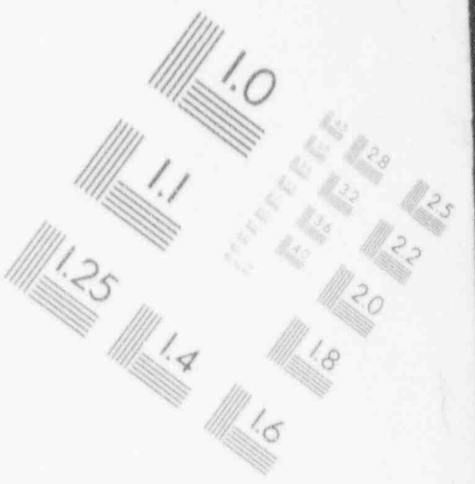
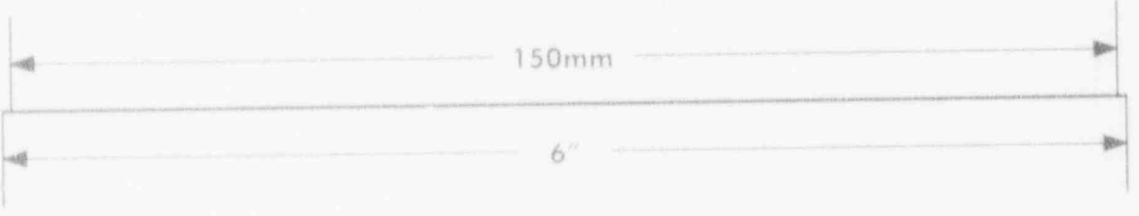
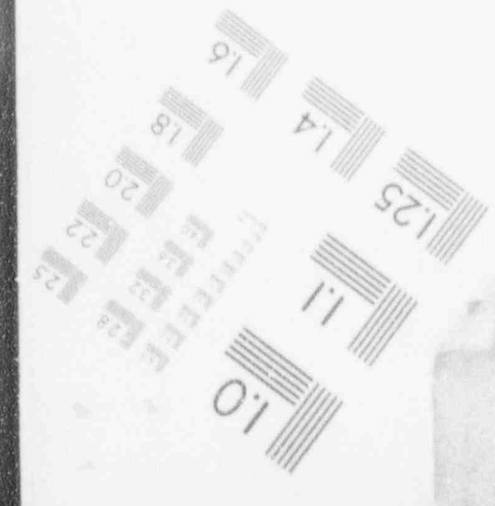
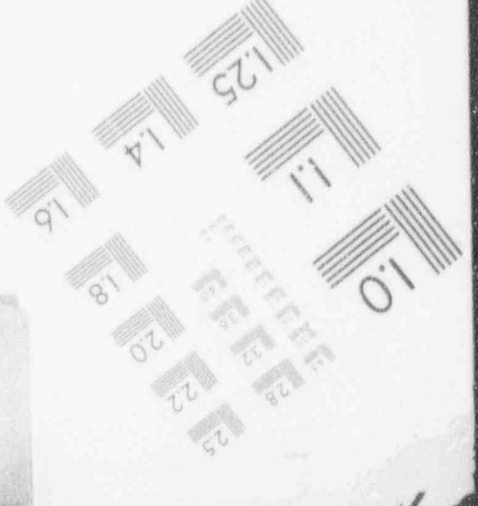
IMAGE EVALUATION
TEST TARGET (MT-3)











AE81-1
(4) PDR 026

COMMENT RECEIVED ON ~~10/5~~ 5/10/93 MEETING ON DBT

5845 County Raod 260
Auxvasse, MO 65231

April 29, 1993

Ms. Joan Higdon
Mail Stop 4E4/WFN
US Nuclear Regulatory Commission
Washington, DC 20555

Dear Ms. Higdon:

Having been in the Nuclear Security feild for ten years I feel that I can offer insight on Designed Basis Threat (DBT) that very few others can. Individuals on the front lines against Nuclear sabotage understand the simplicity of starting the chain of events that could lead to disaster and the limited amount of time that is available to prevent such a disaster from occuring.

Utilities have wisely installed redundant safety systems in Nuclear Power Plants throughout the United States of America. Yet in libraries nationwide are the plans and drawings to Nuclear Power Plants. With these plans terrorists have access to information necessary to gain control of a Nuclear Power Plant and hold the entire nation hostage to their demands. If this were to happen, consider the world-wide crisis if a suicide plan was engaged and the terrorists would willingly forfeit their lives and blow up a Nuclear Power Plant if their demands were not met. Refer to the Waco standoff and the Ohio prison incident!!

It is therefore my belief that you should increase the DBT to include a direct arms attack by a group(s) of six to ten heavily armed terrorists willing to die for their cause; be they Serbs or any Middle East group. These groups may hit one or more Nuclear Power Plants on the same day striking fear throughout the United States and the entire world. 2

By striking more than one Nuclear Power Plant at the same time the resources of the FBI, ATF, Nrc and other governmental agencies would be spread thin and made less effective. 9a

Sincerely tours,

Webster E. Davis

Webster E. Davis

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8007
1/0

Webster E. Davis
5845 County 260
Auxvasse, MO 65231

Ms. Joan Higdon
Mail Stop 4E4/WFN
US Nuclear Regulatory Commission
Washington, DC 20555

AE81-1
PDR 028

COMMENT RECEIVED ON
5/10/93 MEETING ON DBT

(5)

Leroy Walling
396 Van Horn Blvd
Holts Summit, MO 65043

April 30, 1993

MS. Joan Higdon
Office of Nuclear Material and Safeguards
US Nuclear Regulatory Commission
Washington, DC 20555

Dear Ms Higdon,

Nuclear power reactors should be protected against an attack by vehicular bombs. a

Size of the vehicle should be up to a 10,000 lb. GVW dual wheel commercial truck capable of carrying at least 1000 lbs. of dynamite.

Rationale: delivery vans and U-haul type moving vans are readily available.

The plant guard force would be capable top providing:

Warning that a vehicle attack may be occurring (at least one minute). b

Armed security force posted or patrolling inside the inner fence so that any intruding vehicle is met by two armed guards by the time it rams any part of the reactor or other important buildings. b

Plant security people should have guns that are equivalent firepower to the bad guys.

I think that we should be able to defend against at least 5 well trained and motivated bad guys that attack from at least two points. c d

Also, please consider a threat by helicopter. I think a helicopter is a viable threat.

Thank you for letting me have a voice in this meeting. I was appalled when I saw how long it took to find the man who crashed Three Mile Island.

Leroy W. Walling

S007
1/0

Leroy Walling
396 Van Horn Blvd.
Holts Summit, MO 65043

HOLTS SUMMIT, MO
PM
MAY 4
1993

Ms Joan Higdon
Office of Nuclear Material & Safeguards
US Nuclear Regulatory Commission
Washington DC 20555

AE81-1
PDR

COMMENT RECEIVED ON 5/10/93 MEETING ON DBT (6)

Ms. Judy Higdon
Mail stop 4E4-WFN
United States Regulatory Commision
Washington,D.C 20555

Judy,

Being an armed nuclear officer for the past nine years, I am concerned with the N.R.C's proposal to re-evaluate the Design Basis Threat.(D.B.T.)

Since I have been in the nuclear field for nine years I would like to use those years for comparative purposes.
Justlike anything that life deals out, things are on the rise; public violence, Domestic violence, Armed criminal actions, etc.
These include several differant types of violence, Rape, Roberies, Car-jacking, and murders just to name a few.
If a person stops to think for a minute just how bad things are getting, think of this, a woman shot her child in her home just because he changed the channel on the television.

With violence on the rise at such an alarming rate, I am concerned with the N.R.C's definition of the D.B.T. and the threat that the D.B.T. would be decreased because the utilities want to save operating expenses. a
If the D.B.T. were to be decreased I am afraid that the liklihood of a terrorist attack would be much greater because everyone knows that the easier a target looks, the more tempting it is to take advantage of the vulnerability.

With the utilities cutting back on security force members, I fear that they are setting themselves, the american population, and myself (especially since I am a defender) for a very big fall; for what? MONEY. b

I feel that there are several places that cutbacks can be utilized- waste is a big one, but lowering the D.B.T. which means reducing the number of defenders at Nuclear facilities and the responsibilities of those defenders is NOT a valid option.

Our job is to protect the Nuclear facilities from Radiological sabotage- preventing a part 100 release, therefore protecting the population; which is not just numbers on someone's tally sheet. They are Americans- my wife, my children, and everyone else's families that would be affected. People who do not even know what Design Basis Threat means or stands for.

S007
1/0

(Cont)

Please do not let a tragedy of this magnitude take place, if anything INCREASE the D.B.T. to a more realistic higher number and take into consideration that just three terrorists would not attack a nuclear facility with 38 special revolvers roaming around not knowing what their target or mission is going to be. C

I feel that the only defense against a well planned armed attack from a highly trained terrorist group is to have a highly trained tactical response team in place. I think that it is better to be ready when an attack happens than to wait untill an undermanned Nuclear facility is hit with everything a terrorist group has and loses a majority of the security force in the first two minutes and then loses all of the safety equipment at the facility causing a part 100 release. d,

Your consideration to my thoughts and comments herein would be greatly appreciated.

Very Sincerely Yours,

Randy G Sides

Nuclear Security Officer
Callaway Nuclear Plant

Randy Sides
Rt 2 Box 85
Montgomery City MO
63361

WASH., D.C. 20555 05/05/97 12:49

29 USA

MS. Judy Higdon
Mail Stop 4E4-WFN
United States Nuclear regulatory Commision
Washington D.C. 20555

COMMENT RECEIVED ON 5/10/93
MEETING ON DBT

Harris AE81-4
9 8 PDR 0-9

Ms. Joan Higdon,

I live within 5 miles of a Nuclear Plant in central Missouri. I raise my family Here, our church is Here. I, and all my neighbors trust the N.R.C. to keep "all" Nuclear Plants safe from attacks that can cause a release of radiation. Thru strict guidelines of self security, the Nuclear Plants must be made so they cannot be damaged by terrorist's. We are not a big city, we are a small community. "Readsville", "Portland" area, but if security is lessoned, I don't want my friends + family to be exposed to radiation and die of cancer. I know the Callaway Nuclear Plant in Mo. is cutting back

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→ on Security Personnel and I feel that the Company wants to be save money and will try to get away with whatever the NRC will allow.

I don't want any problem's with the Nuclear Plant, but with the Vehicle Bomb at the World Trade Center, and the man ramming the Gates at Three mile Island, I think, for the public safety, we should step up Security, not cut back on it.

please send me the results if You can on Lessening or adding to Security at Nuclear facilities.

Thank You,

8050 State Rd. D
Portland, Mo. 65067

David + Mary Harris
Name
8050 State Road "D"
P.O. Box or Street Address
Apt. Number
Portland Mo. 65067
City State Zip Code

COLUMBIA MO
PM
5 MAY
1993

29

Ms. Joan Higdon
Mail Stop, 4E4/iNFN
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555