

DOCKET NUMBER  
PETITION RULE PRM 73-11  
(66FR 55603)

DOCKETED  
USNRC

September 14, 2001 (3:00PM)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

9/12/2001

**SUBJECT: SUBMITTAL OF PETITION FOR RULEMAKING – GUARDING  
NUCLEAR POWER PLANT ENTRANCES**

Dear Ms. Vietti-Cook:

Pursuant to §2.802 of Title 10 of the *Code of Federal Regulations*, I hereby submit the enclosed petition for rulemaking. This petition for rulemaking seeks to require NRC's licensees to post an armed guard at each entrance to the "Owner Controlled Area" surrounding their nuclear power plant(s)." Three Mile Island Alert believes that armed guards are needed at each entrance to act as a physical and visual deterrent. The NRC has argued for decades that nuclear plants are "hardened targets." However, should terrorists perform reconnaissance missions at nuclear power plants as they have in recent foreign and US terrorists' attacks, the first thing they would observe at many plants is that the entrance is open and unguarded.

Without an NRC requirement for posting armed guards at these entrances, many licensees will not volunteer this protection because of generic cost-cutting measures taken over the past few years to remain competitive in a deregulated electrical market. Stopping an attack in its planning stages would be the ideal situation if terrorists conclude that nuclear plants are "hardened targets." Presently, at many plants, anyone can enter the site and drive dangerously close to the Vital Area(s) without guard interdiction.

There is currently no requirement for guarding entrances. Many licensees' security plans call for posting the Site Protection Officers (SPOs) within the "Protected Area." The new requirement we are seeking asks that this be accomplished by adding armed site protection officers to the force and not by simply moving SPOs from their Protected Area posts. Many licensees have reduced the size of their guard force in recent years. Three Mile Island's entrance is less protected now than at any time in its history.

Cordially,



Scott D. Portzline  
Security Committee Chairman  
Three Mile Island Alert  
315 Pepper St.  
Harrisburg, PA 17102

Template = SECY-051

SECY-02

According to the guidance posted on the NRC's website at [www.nrc.gov/NRC/RULES/petirule.html](http://www.nrc.gov/NRC/RULES/petirule.html) the petitioner must, as a minimum:

*Set forth a general solution to the problem or present the substance or text of any proposed regulation or amendment or specify the regulation that is to be revoked or amended;*

*Include a statement in support of the petition that sets forth the specific issues involved; your views or arguments with respect to those issues; relevant technical, scientific, or other data involved that is reasonably available to you; and any other pertinent information necessary to support the action sought; and*

*State clearly and concisely your grounds for and interest in the action request;*

Three Mile Island Alert will address these three criteria in the following sections.

A. *Set forth a general solution to the problem or present the substance or text of any proposed regulation or amendment or specify the regulation that is to be revoked or amended*

We are seeking a new Nuclear Regulatory Commission requirement for the mandatory posting of at least one armed guard at each entrance to the "Owner Controlled Area" surrounding all U.S. nuclear power plant(s)." Three Mile Island Alert believes that armed guards are needed at these plant entrances to act as a physical and visual deterrent against potential violent actions. This should be accomplished by adding armed site protection officers to each licensee's guard force and not by simply moving SPOs from their Protected Area posts. There is currently no such rule or requirement under 10 CFR 73.55.

Adding an armed guard at each entrance to the owner controlled area for a nuclear power plant would be consistent with the long-standing safety principle of defense-in-depth. The additional layer of security would complement the existing measures against radiological sabotage. If the NRC fails to require this relatively inexpensive protection, the agency would be unable to tell the American public and the US Congress following an actual sabotage event that it had taken every reasonable precaution against the attack.

***B. Include a statement in support of the petition that sets forth the specific issues involved; your views or arguments with respect to those issues; relevant technical, scientific, or other data involved that is reasonably available to you; and any other pertinent information necessary to support the action sought.***

The industry and the Commission have argued that security really starts at the second of three security zones, which is known as the Protected Area. In the instance of the 1993 TMI intrusion, General Public Utility President Philip Clark testified to Congress that security had not been breached despite a station wagon crashing into the Protected Area and into the turbine building.<sup>1</sup> Opinions obviously differ on just where security begins.

We believe that there should be a clear and visible security demarcation line at the entrances. The NRC has essentially argued for years that nuclear plants are "hardened targets."<sup>2 3</sup> However, should terrorists perform reconnaissance missions at nuclear power plants as they have at other targets in recent foreign and US terrorists' attacks, the first thing they would observe at many sites is that the entrance is open and unguarded. (see video at [www.tmia.com/entrance.html](http://www.tmia.com/entrance.html)) The deterrent value of armed guards at the entrances must not be downplayed. Stopping an attack in its planning stages would be the ideal situation if terrorists conclude that nuclear plants are hardened targets.

The Commission has argued that the likelihood of a terrorist attack is low. However, security must not become merely a mathematical exercise. In fact, even after a single attack on a nuclear plant, one could still conclude that the likelihood remains low. We recognize that the Commission does not rely solely upon probability analysis for its security parameters. However we are bothered by two aspects of just how the NRC has determined what is "adequate" security and therefore, how it has specified the finer points of the "Design Basis Threat."

***1. Three Mile Island Alert believes that there is a reluctance by the Commission to recognize that terrorists might conclude that nuclear plants are attractive targets.***

---

<sup>1</sup> Hearing "Adequacy of Nuclear Powerplant Security," Philip Clark in testimony to the US Senate Subcommittee on Clean Air and Nuclear Regulation said, "I keep hearing or seeing in print things that say security was breached. I don't believe that's a correct characterization." 3/19/93 1993, p.22

<sup>2</sup> Hearing "Adequacy of Nuclear Powerplant Security," NRC Chairman Ivan Selin in testimony to the US Senate Subcommittee on Clean Air and Nuclear Regulation said, "The security at a power plant has two functions, generally speaking. One is to make the target hard enough or discouraging enough so that compared to other targets, its just not worth going after a nuclear power plant." p.25

<sup>3</sup> Commissioner McGaffigan "...why do they go after nuclear plants as opposed to all the other soft targets where they can do even more damage, and why do you not bring the same absolutism to the chemical industry or to various other various soft targets that are available in the United States?" NRC briefing on safeguards performance assessment, Wednesday, May 5, 1999

On many occasions, the Commission has argued that (paraphrasing) "why would anyone target a nuclear power plant when chemical plants and other targets go unguarded."<sup>4 5 6</sup> To us, this is reminiscent of the fundamental conclusion of the President's Commission regarding the 1979 TMI accident that "attitudes" were a large contributor to the conditions which allowed the partial meltdown to occur.<sup>7</sup> The Commission had behaved as if an accident was so unlikely that additional "defense in depth" measures were unnecessary.

We are troubled by the apparent repetition of this mindset where the Commission argues that a willful or deliberate act to create a radiological emergency at a nuclear plant is unlikely because somehow the Commission understands that the criminal mind will select another target. The NRC is seemingly resting on the history of a lack of terrorists activities at U.S. nuclear power plants. This may help to explain why the NRC is standing by while the industry is cutting back on the size of the guard forces despite recent terror attacks in the U.S., despite attempts to kill large numbers of people in the U.S., despite a marked increase in the size of terrorists' bombs, and despite the failure of nearly half of U.S. nuclear power plants to defend against force on force security tests.<sup>8</sup>

Therefore, we have concluded that although the NRC claims it does not rely solely upon probability, its appears to regulate from that position, and from the belief that terrorists will choose targets other than nuclear power plants.

As a result of events in the 1990's, terrorism experts have recognized a shift from terrorist actions which were designed to instill fear or gain attention for a particular ideology, to that of actions designed to kill large numbers of people. Another possible motive for targeting a nuclear plant is revenge for the destruction of nuclear plants in their home country (Iraq for example). Three Mile Island also recognizes that a successful terrorist attack could destroy land and property which would remain useless for decades and would become a stark monument to the terrorists. For all of these reasons, terrorists could conclude that nuclear power plants are attractive targets.

---

<sup>4</sup> NRC Chairman Ivan Selin in testimony to the US Senate Subcommittee on Clean Air and Nuclear Regulation said, "There are a lot of place to kill people. Why pick out a power plant which already has a lot of security?" 3/19/93 1993, p.31

<sup>5</sup> NRC Chairman Ivan Selin press conference Rockville MD, "There's a whole lot of things that people could do, but the question is how hard is it to do it, how much expertise does it take to do it, what's the risk versus what is the benefit.... There are a lot of other places that are a lot easier to attack..." 7/7/1993

<sup>6</sup> NRC Commissioner McGaffigan "...why do they go after nuclear plants as opposed to all the other soft targets where they can do even more damage, and why do you not bring the same absolutism to the chemical industry or to various other various soft targets that are available in the United States?" NRC briefing on safeguards performance assessment, Wednesday, May 5, 1999, p.118

<sup>7</sup> "To prevent accidents as serious as Three Mile Island, fundamental changes will be necessary in the organization, procedures, and practices -- above all -- in the attitudes of the Nuclear Regulatory Commission and, to the extent that institutions we investigated are typical, of the nuclear industry. "Report of the President's Commission on The Accident at Three Mile Island" Overall Conclusion, p.7

<sup>8</sup> US News & World Report 9/17/2001

Adding a rule to require guards at the entrances of nuclear power plants will create a physical and visual deterrent against violent actions. Allowing open and unguarded entrances is like an "open door" policy to the would be attacker(s).

2. Three Mile Island believes that the Commission is not protecting against a large "Design Basis Bomb" which could cause a disaster, but rather is protecting against a smaller hypothetical bomb, being of a size in which terrorists can and have exceeded its explosive power in actual attacks.

Although the "Design Basis Threat Bomb" attributes is safeguarded information, we believe that there is a logical line of reasoning which allows us to conclude that the hypothetical bomb is smaller than bombs already used by terrorists in recent years.

Following the June 25, 1996 Khobar Towers bombing in Dhahran, Saudi Arabia, the military commanders wanted a 400 feet setback distance for vehicle control.<sup>9</sup> The Dhahran bomb was equal to 20,000lbs of TNT and detonated 80 feet away from the building.<sup>10</sup> We recognize that some, but not all of the Vital Area buildings at nuclear power plants are more robust than normal construction. It is these "softer" buildings and Vital Areas that concern us.

The Protected Area and vehicle barriers at many plants are much closer to Vital Areas than 400 feet. Since there are not bomb blast deflection shields in place, we have concluded that Design Basis Bomb is much smaller than 20,000lbs of TNT explosive power.

**"Unacceptable damage to vital reactor systems could occur from a relatively small charge at close setback distances, and from larger but still reasonable-sized charges at large setback distances, greater than the protected area for most plants."**<sup>11</sup>

Take note that the this report uses the phrase "reasonable-sized charges." That is to say that it would be practical, possible and within reason that a large bomb can be constructed and delivered by a truck to a nuclear power plant with the intention of

<sup>9</sup> Transcript: State Dept. Noon Briefing, Tuesday, July 2, 1996

<sup>10</sup> Report of Investigation Concerning The Khobar Towers Bombing, 25 June 1996 Prepared By The Inspector General and The Judge Advocate General <http://www.af.mil/current/Khobar/part2f.htm>

<sup>11</sup> "An Analysis of Truck Bombs Threats at Nuclear Facilities", Sandia National Laboratories 1984

causing a radioactive release or even a meltdown. The FBI has stated that a large conventional bomb is still a choice weapon used by terrorists.<sup>12</sup>

The Commission must not ignore this data any longer. The ideal solution is that vehicles are controlled at the entrances and not allowed to approach the Protected Area without proper security checks. Guards must have the ability to control vehicles and check credentials before being permitted to approach the Protected Area. This would have prevented the 1993 TMI intrusion. The Commission would be hard pressed to state that it has kept current with the changing scope of terrorists activities and capabilities when nuclear plant entrances are soft, and moreover, unguarded entrances create the impression that nuclear plants themselves are soft targets.

The United States Commission on National Security has recommended that the time for reexamination of security is now, "before the American people find themselves shocked by events they never anticipated."<sup>13</sup> The Commission on National Security also stated that "Americans are less secure than they believe themselves to be."<sup>14</sup>

There are many lessons which can be learned from the Khobar Towers bombings. Prior to the bombing, there were some attempts by the U.S. Air Force to expand the security perimeter out further from the building. But, repeated assurances by Saudi security officers led the wing leadership to delay further efforts to expand the perimeter. The wing support group commander believed the jersey barrier placement provided "reasonable protection given the threat that we had."<sup>15</sup>

Three Mile Island Alert recommends that any concerned NRC staff or Commissioner read the Report of Investigation Concerning The Khobar Towers Bombing section "Defense Against Stand-Off Attack" to avoid security pitfalls and delays experienced by the U.S. Air Force.<sup>16</sup>

---

<sup>12</sup> Statement of FBI agent and counter terrorism expert Dale Watson to U.S. Governors Conference May 2001, "A large conventional bomb is still a choice of terrorists. They still like to rent rental trucks, and ammonia nitrate is not very expensive." see <http://www.tmia.com/truck.wmv>

<sup>13</sup> "A Concert For Preserving Security And Promoting Freedom," The Phase II Report on a U.S. National Security Strategy for the 21st Century, The United States Commission on National Security/21st Century, April 15, 2000, p.5

<sup>14</sup> Ibid

<sup>15</sup> Report of Investigation Concerning The Khobar Towers Bombing, 25 June 1996 Prepared By The Inspector General and The Judge Advocate General <http://www.af.mil/current/Khobar/part2f.htm>

<sup>16</sup> Ibid

C. *State clearly and concisely your grounds for and interest in the action request*

Three Mile Island Alert has attempted to address security issues and the question of truck bomb protection since 1992 when I (Scott Portzline) warned an NRC citizens advisory panel that security at TMI was less than adequate. I have acted as its security committee chairman since 1993 and have testified on security matters to the U.S. Nuclear Regulatory Commission, the Advisory Committee on Reactor Safeguards, The U.S. Senate and the PA House of Representatives following a February 7, 1993 vehicle intrusion at TMI. Three Mile Island Alert has been actively involved in nuclear power plant issues as since 1977.

Three Mile Island has experienced about one fourth of all vehicle intrusions at U.S. nuclear plants. Three Mile Island has the second smallest Protected Area of all U.S. nuclear power plants. It is a world renowned plant which could be targeted for terrorist attack. There have been previous threats against the plant.

Most troubling, was the 1993 World Trade Center terrorists', threat to attack "nuclear targets"<sup>17</sup> with "150 suicide solders."<sup>18</sup> These terrorists, who were later connected to Osama bin Laden, performed a nighttime mock assault on an electrical substation near their training camp<sup>19</sup> which was located only 30 miles from the TMI plant.<sup>20</sup> There was no specific threat against TMI (at least in the public's knowledge), however the fact that they performed the mock assault on an electrical substation on the same weekend as the 1993 vehicle intrusion at TMI causes us to believe that they had drawn inspiration from the security breach.<sup>21</sup>

We expect the NRC to protect the health and public safety by soon ending the "open door" policy to the Owner Controlled Area, and by specifically requiring armed guards at the entrances to the Owner Controlled Area at all nuclear power plants.

Note: This petition was written in the week before the 9/11/2001 terrorist attacks in the U.S.. At around 9:15AM, I telephoned Three Mile Island (and subsequently the NRC) to request that TMI close its vehicle barrier at the North Entrance (which has been open virtually all of the time), to post armed guards at the entrances, and to go on the highest level of vigilance possible because of the 1993 events. However, (according to a news reporter's initial report to me) TMI could not close its vehicle barrier for about 3 hours because it had no electrical supply to power it closed.

---

<sup>17</sup> New York Times, 3/26/93

<sup>18</sup> Ibid, 3/31/93

<sup>19</sup> UPI news report, 2/28/94

<sup>20</sup> Patriot News, Harrisburg PA, 6/27/93

<sup>21</sup> NUREG-1485 "Unauthorized Forced Entry into the Protected Area at Three Mile Island Unit 1 on February 7, 1993"