



231 W Michigan, PO Box 2046, Milwaukee, WI 53201-2046

73
(58 FR 58104)

14

'94 JAN -3

(414)221 2345

VPNPD-93-226
NRC-93-141

December 30, 1993

Mr. Samuel J. Chilk, Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Docketing and Service Branch

Dear Mr. Chilk:

NOTICE OF PROPOSED RULEMAKING - AMENDMENTS TO 10 CFR PART 73
PROTECTION AGAINST MALEVOLENT USE OF VEHICLES AT NUCLEAR POWER
PLANTS, 58 FED. REG. 58804 - NOVEMBER 4, 1993

Wisconsin Electric Power Company is submitting the following comments in response to the Nuclear Regulatory Commission's (NRC) proposed rule for "Protection Against Malevolent Use of Vehicles at Nuclear Power Plants," (58 Fed. Reg. 58804 - November 4, 1993). This proposed rule would require nuclear power plant licensees to install vehicle barrier systems to prevent land vehicle intrusion into the protected area and to provide reasonable assurance that a land vehicle bomb would not cause severe enough damage to plant equipment to prevent the safe shutdown of the nuclear reactor.

SUMMARY OF PROPOSED RULE

The NRC is proposing to amend the design basis threat (DBT) for radiological sabotage defined in 10 CFR 73.1 to include: "A four-wheel drive land vehicle used for the transport of personnel, hand-carried equipment, and/or explosives..." The proposed physical requirements to protect nuclear power reactors against this DBT are to be added to 10 CFR 73.55(c): "Vehicle control measures, including vehicle barrier systems, must be established to protect against use of a land vehicle, as specified by the Commission, as a means of transportation to gain unauthorized proximity to vital areas."

The characteristics of the proposed design basis vehicle and explosive device were provided to Wisconsin Electric in a package of safeguards information dated November 19, 1993.

9401070045 931230
PDR PR
73 58FR58804 PDR

10510

IMPETUS FOR THE PROPOSED RULE

The impetus for this proposed rule is the linking of two unrelated events that occurred in February 1993. The first event is the vehicular intrusion incident at the Three Mile Island Nuclear Power Plant (TMI) near Harrisburg, Pennsylvania. The other event is the bombing of the parking structure at the World Trade Center (WTC) in New York City. This tragic event occurred within days of, but independently from, the intrusion event at TMI. The timing of these two events is coincidental and there are no connections between the two events. However, the NRC's proposed rule has coupled these two events together resulting in a combined protection requirement.

OVERVIEW OF PROPOSED RULE

The malevolent use of vehicles at nuclear power plants is not a new concern. The potential for malevolent use of vehicles/bombs at nuclear sites was reviewed after the Beirut bombing in 1983. NRC Information Notice 84-07 advised licensees to examine their contingency plans and the tactical measures to be employed by members of the security organization to impede penetration of protected areas by unauthorized vehicles. In 1989, further review resulted in Generic Letter 89-07, which required licensees to have short-range surface vehicle bomb threat contingencies. The NRC rejected the need for permanent measures, such as those now being proposed, in favor of those contingency plans. These contingency plans continue to be available for implementation at each site. In 1991, the NRC denied a petition to expand the design basis threat. The NRC concluded that the likelihood of nuclear terrorism involving the use of a large truck bomb against power reactors in the United States is extremely low.

Today, there remains a general agreement that the actual threat of a commercial nuclear plant being a terrorist target is low. The NRC staff stated this in their June 24, 1993, briefing of the Commissioners. This conclusion is also reflected in the November 4, 1993, Federal Register notice of the proposed rule. There is also general agreement that nuclear power facilities are considered "hardened" targets. Plant security is but one part of a broader defense-in-depth approach to safety employed in the design and operation of nuclear plants. Plant security systems are designed to provide deterrence, detection, delay, assessment, and armed response. These features, together with the design, operation, training, and emergency planning and related activities, provide adequate protection of public health and safety from uncontrolled radiological releases. As reflected in statements made at a March 19, 1993, Senate Subcommittee hearing, and as

stated in the regulatory and backfit analyses which support the proposed rule, the NRC agrees with the conclusion that adequate protection against radiological sabotage already exists.

Wisconsin Electric is committed to operating Point Beach Nuclear Plant in such a manner as to protect the health and safety of the public. The NRC has built substantial conservatism into the current design basis threat. We believe that this conservatism and the defense-in-depth philosophy continues to ensure adequate protection against radiological sabotage.

Wisconsin Electric believes that any revisions to the design basis threat should be premised upon substantiated and quantifiable evidence of an increased threat of radiological sabotage. Requirements associated with a revised design basis threat should provide a substantial increase in the overall protection of the public health and safety. If these criteria cannot be met, we believe that a revision to the design basis threat imposes further unjustified and unrealistic conservatism and results in economically imprudent regulation.

WISCONSIN ELECTRIC CONCERNS

Wisconsin Electric has significant concerns relative to this rulemaking. These concerns are in the following areas:

- 1) current assessed threat to nuclear power plants,
- 2) inappropriate coupling of WTC and TMI,
- 3) backfit analysis,
- 4) objectives of the proposed rule,
- 5) unrealistic design attributes,
- 6) role of redundant engineered safeguards systems, and
- 7) rulemaking schedule.

Our concerns are summarized in the following paragraphs.

Current Assessed Threat to Nuclear Power Plants

The need for the rule as proposed cannot be substantiated based upon the current assessed threat against nuclear power plants in the United States. No known terrorist or other type of group has plotted or attempted to penetrate the protected area of a nuclear power plant with the intent of radiological sabotage anywhere in the world. To our knowledge, security measures, such as required by the proposed rule, have not been implemented by other nuclear power producing countries.

Mr. Samuel J. Chilk
December 30, 1993
Page 4

The Nuclear Control Institute and the Committee to Bridge the Gap have periodically petitioned the Commission since 1985 to expand the design basis threat. The NRC denied the 1991 petition based upon the lack of quantifiable evidence of any increased threat of radiological sabotage. At that time, the NRC concluded that the likelihood of terrorism involving the use of large truck bombs against nuclear power reactors in the United States was extremely low, that a change in the design basis threat for radiological sabotage was unwarranted and that contingency planning, as required by Generic Letter 89-07, was sufficient to protect the public health and safety. Furthermore, the NRC concluded that vehicle denial systems would not provide a substantial increase in the overall protection to the public health and safety.

We believe the points made by the NRC in the denial of the 1991 petition remain valid after the unrelated events at TMI and the WTC. We believe the attention given to these two events has resulted in the NRC inappropriately invalidating previous conclusions on the actual terrorist threat to nuclear power reactors.

We are not aware of any evidence presented since 1991 by intelligence community agencies that indicates there may be an increase in this type of threat to nuclear power plants in the foreseeable future. Mr. Harry B. Brandon III, Deputy Assistant Director of the Federal Bureau of Investigation, Intelligence Division, in testimony before Senator Lieberman, stated "...we do not have reason to believe the (World Trade Center bombing) is the forerunner of a wave of terrorism inside the United States. ...Between 1982 and 1992 terrorism incidents within the United States, with few exceptions, have shown a steady decline. Our constant, continuous analysis of all indicators worldwide does not show the beginning of such an initiative or wave of terrorism... We have no current indications of targeting or planning of acts of terrorism by any groups or individuals."

In a 1990 report on terrorist incidents, the FBI stated "Terrorists carefully assess which targets are most vulnerable, and may conduct surveillance to further develop their intelligence on a target. They select operations that pose a minimum of risk with a maximum chance of success." The FBI further concluded that such terrorist activities would be most likely directed against attractive, relatively unprotected targets. Domestic nuclear power plants are security hardened facilities which provide excellent deterrence to potential terrorist attack. Furthermore, notwithstanding the isolated event at the World Trade Center, the United States remains one of the safest countries in the world in avoiding terrorist incidents.

Wisconsin Electric believes the continuous evaluation of the threat of domestic terrorism by the FBI continues to provide adequate warning to licensees if these conditions were to change such that prudent actions could be taken. Present security programs, both those associated with the present 10 CFR 73 design basis threat as well as those initiated by the nuclear power industry, are sufficient to ensure the protection of the health and safety of our employees and the public against any reasonable threat. Further increases in plant safety, as a result of promulgation of this rule, cannot be substantiated based upon the current threat of radiological terrorism.

Inappropriate Coupling of WTC and TMI

No evidence has been presented by the NRC which would indicate that the bombing of the WTC and the intrusion event at TMI are related, or which would suggest that a bombing, such as that experienced at the WTC, will be repeated elsewhere in the country. The parties responsible for this tragic event have been identified and incarcerated.

The unauthorized intrusion by a vehicle at TMI appears to be a simple act of trespass by an unstable individual. There is no indication that the perpetrator had any intent on performing an act of radiological sabotage or terrorism.

The linking of these two dissimilar and unrelated incidents has not been substantiated and therefore cannot alone justify the imposition of additional security requirements. Reevaluation of the design basis threat should be performed with these two incidents "uncoupled" to prevent the formulation of unreasonable regulatory requirements.

Backfit Analysis

The backfit analysis performed by the NRC presents no quantifiable evidence that an increased threat of radiological sabotage exists. As explained in Section I, paragraph 2 of the backfit analysis document, "In its subsequent review of the threat environment, (NRC) staff concluded that there is no indication of an actual vehicle threat against the domestic commercial nuclear industry." This lack of evidence has prevented the NRC from performing the "systematic and documented analysis" on the actual threat environment as required by 10 CFR 50.109(a)(2). Furthermore, the "...substantial increase in the overall protection of the public health and safety or the common defense and security..." requirement in 10 CFR 50.109(a)(3) cannot be demonstrated without this evidence.

As mentioned earlier, the NRC's rationale for denying the 1991 petition by the Nuclear Control Institute and the Committee to Bridge the Gap was based upon the lack of quantifiable evidence on any increased threat of radiological sabotage. Wisconsin Electric believes this lack of evidence has once again prevented the backfit requirements of 10 CFR 50.109 from being fulfilled.

A "substantial increase in the overall protection of the public health and safety" has been asserted but not demonstrated by the backfit analysis by the NRC. NRC staff's own conclusion "...that there is no indication of an actual vehicle threat against the domestic commercial nuclear industry..." indicates that a substantial increase in the health and safety of the public cannot be realized through the promulgation of this rule.

Objectives of Proposed Rule

The background section of the Regulatory Analysis for this proposed rule discusses the objectives of the rulemaking process. Although concluding "...that there is no indication of an actual vehicle threat against the domestic commercial nuclear industry...", the proposed rulemaking is required "...to enhance reactor safety by maintaining a prudent margin between what is the current threat estimate (low) and the design basis threat for radiological sabotage specified in 10 CFR 73.1(a) (higher)."

Even though the NRC acknowledges that there has been no increase in the threat of radiological sabotage to the domestic nuclear power industry, this rulemaking action has been deemed necessary to enhance public safety. The NRC's reason for pursuing regulatory action at this time is to restore the so-called "margin of prudence," the protection necessary to thwart the hypothetical DBT of 10 CFR 73.1 as opposed to that required to protect against the current threat estimate. Some of this "margin of prudence" has been perceived by the NRC as lost after the TMI and WTC incidents.

Wisconsin Electric believes enhancements made as a matter of prudence are the province of each individual licensee. During staff presentations on November 3-4, 1993, members of the Advisory Committee on Reactor Safeguards also challenged the "margin of prudence" argument. NRC responsibilities, as defined in the Atomic Energy Act, are protection of public health and safety. NRC expansion into matters of prudence is unwarranted and would result in expansion of the NRC's sphere of regulatory influence beyond plant safety.

Unrealistic Design Attributes

If the NRC proceeds with promulgation of this rule, we believe that proposed design attributes should be reconsidered. Design attributes such as vehicle weight, speed, and explosive size which are provided in the safeguards addendum should be reconsidered.

Wisconsin Electric concurs with the selection of the design basis vehicle (DBV); however, the specification for the DBT vehicle speed has been made with no supporting evidence. Also, consideration of the effect of site specific terrain or seasonal conditions on attainable vehicle speed has not been considered. A more realistic design basis threat would be that of impact of the design basis vehicle at the maximum speed attainable at various points along the perimeter of each licensee's protected area, not to exceed the stated design basis vehicle speed. This method of DBT development would further meet the intent of the proposed rule and prevent the hardening of facilities beyond that which is required.

The design basis explosive specified by the NRC in the safeguards information is also unrealistic. The low explosive type device detonated at the WTC was comprised entirely of ingredients which are readily obtainable in the United States. We acknowledge that the WTC bombing incident demonstrates that this type of device could be assembled without detection in the future if the assessed threat environment would radically change; however, this incident alone does not justify the type and size of explosive device outlined in the safeguards material. The type and size of explosive device outlined in the safeguards information remains extremely rare internationally and unprecedented in the United States.

Access to the quantity of high explosive material outlined in the safeguards information is seen as highly unlikely if not impossible in the United States. Other than government agencies, these materials are only available to licensed parties in quantities many times smaller than the design basis explosive. An attempt to obtain such a large quantity of this material would very likely draw the attention of the federal agencies responsible for monitoring this activity. Also, import of such a large quantity of this material would likely not go unnoticed. We therefore believe that this type of device could not be assembled, delivered, and detonated in the United States in the foreseeable future. We therefore assert that the proposed design basis explosive should be no larger than the largest device previously detonated in the United States.

Mr. Samuel J. Chilk
December 30, 1993
Page 8

Wisconsin Electric encourages the NRC to reevaluate the proposed design basis threat taking into consideration historical, domestic terrorism evidence and the expertise of the federal agencies responsible for monitoring this activity.

Role of Redundant Engineered Safeguards Systems

The proposed amendment to 10 CFR 73.55 (8), "Vehicle control measures, including vehicle barrier systems, must be established to protect against use of a land vehicle, as specified by the Commission, as a means of transportation to gain unauthorized proximity to vital areas," does not adequately take into consideration the existing engineered safeguards systems installed at domestic nuclear power plants. The unauthorized access and possible damage to any one vital area does not necessarily prevent the safe shut down of the nuclear reactor.

Redundant safeguards systems were designed in such a way that the failure of any one train of safety related equipment would not prevent the safe shutdown of the nuclear reactor. The suggestion that all access to vital equipment must be prevented does not give sufficient consideration to this key design feature of nuclear power plants. Security measures to protect against any design basis threat should be allowed to take credit for these redundant engineered safeguards systems.

We recommend that the NRC give consideration to redundant safeguards systems, as is done with other rulemaking issues, while reevaluating the proposed amendments to the design basis threat.

Rulemaking Schedule

This rulemaking is concerned with only one of two phases of the NRC's DBT reevaluation. The first phase has resulted in this proposed rulemaking. The second phase explores the makeup, equipment, and capabilities of a postulated paramilitary force that a licensee must protect against. Completion of this second phase is not expected until later in 1994. Wisconsin Electric believes there should be no rule promulgation while the NRC continues its second phase of the design basis threat reevaluation. Separate rulemaking could result in more expensive, layered, and potentially inconsistent action. Wisconsin Electric recommends that the NRC delay determining the implementation date on a final rule concerning the DBT until both phases of the DBT reevaluation have been completed and evaluated. Licensees should be assured that their protected area perimeter will not need additional modifications resulting from the phase two reevaluation.

If the NRC proceeds with phase one rulemaking, the implementation schedule proposed is too stringent. As proposed, implementation of increased security measures would be required within 360 days of the rule effective date. We believe this time frame would deny the licensees sufficient opportunity to complete proper evaluations to identify prudent compliance measures. We believe the NRC staff's own conclusion that there is no imminent threat of radiological sabotage to the nuclear power industry supports an extended schedule for this proposed rulemaking process.

Wisconsin Electric suggests that the NRC extend the time period for the licensees to submit "...a summary description of the proposed vehicle intrusion control measures and the results of its evaluation comparing the measures to protect against vehicle intrusion with the design goals and criteria for protecting against a land vehicle bomb" from 90 days to 180 days from the rule effective date. We also suggest that a minimum of 18 months should be allowed for vehicular barrier system procurement and installation following issuance of the design description to the NRC.

SUMMARY

Wisconsin Electric believes that arguments presented by the NRC in staff papers (SECY-93-102 and SECY-93-166) and the documents supporting this proposed rule (SECY-93-270) lacks sufficient quantifiable data and facts to support the proposed amendments to the design basis threat.

Since the NRC staff simply asserts, but does not demonstrate, that a substantial increase in public health and safety would accrue from the installation of a vehicle barrier system, no regulatory basis, analytical or otherwise, has been provided. Adequate protection against radiological sabotage already exists; therefore, we believe the amendments currently proposed to 10 CFR Part 73 cannot be supported or justified.

The threat of domestic terrorism has not changed significantly since the most recent review of the design basis threat in 1991. We believe the NRC's linking of the unrelated events at TMI and the WTC has resulted in the NRC inappropriately invalidating their previous conclusions on the threat of radiological sabotage. These two events should be "uncoupled" when assessing a credible design basis threat.

The backfit requirements of 10 CFR 50.109 have been asserted, but not demonstrated by the Commission. The NRC's objective of

Mr. Samuel J. Chilk
December 30, 1993
Page 10

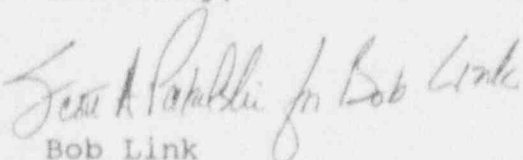
reestablishing a "margin of prudence" through the promulgation of this rule results in the expansion of NRC regulatory influence beyond plant safety.

If the NRC proceeds with the promulgation of this rule, Wisconsin Electric encourages the NRC to reevaluate the proposed design attributes. The effect of site terrain and seasonal conditions on attainable vehicle speed should be considered. The design basis explosive should be based upon historical precedence rather than on speculation. Credit for the role of the redundant safeguards systems of nuclear power plants should be allowed during development of additional security measures to prevent unnecessary hardening of facilities.

Finally, Wisconsin Electric proposes that the rulemaking schedule be expanded. This will allow sufficient time for the licensees to complete proper evaluation of the regulation and facilitate cost-effective implementation schedules.

Wisconsin Electric appreciates the opportunity to provide these comments on this proposed rule, and would welcome the opportunity to discuss these issues further with appropriate NRC staff.

Sincerely,



Bob Link
Vice President
Nuclear Power

GAP/jg

cc: NUMARC