

July 2, 1999

FOR: The Commissioners

FROM: William D. Travers /s/
Executive Director for Operations

SUBJECT: DENIAL OF PETITIONS FOR RULEMAKING SUBMITTED BY THE NUCLEAR INFORMATION AND RESOURCE SERVICE

PURPOSE:

To obtain the Commission's approval to publish in the *Federal Register* notices of denial of the petitions for rulemaking (PRM-50-65, PRM-50-66, and PRM-50-67) submitted by the Nuclear Information and Resource Service (NIRS).

BACKGROUND:

The Nuclear Regulatory Commission (NRC) received the subject petitions for rulemaking (PRM-50-65, PRM-50-66, and PRM-50-67) from the NIRS, each dated December 10, 1998. The petitioner requested that the NRC amend its regulations to require the following actions be accomplished:

- (1) That nuclear facilities be shut down if they are not compliant with date-sensitive, computer-related issues regarding Y2K. The petitioner requested that the NRC take this action to ensure that Y2K issues will not cause the failure of nuclear safety systems and thereby pose a threat to public health and safety.
- (2) That every nuclear utility conduct a full-scale emergency planning exercise that involves coping with a date-sensitive, computer-related failure resulting from a Y2K issue. The petitioner requested that the NRC take this action to ensure that nuclear power plant licensees have developed and can implement adequate contingency and emergency plans to address major system failures that may be caused by a Y2K problem.
- (3) Ensure that the safety systems of reactors and other nuclear facilities have reliable back-up sources of electricity in the event of a Y2K incident.

On January 25, 1999, the NRC published notices of receipt of the petitions for rulemaking in the *Federal Register* (64 FR 3789; 64 FR 3791; and 64 FR 3792). Because of the nature of these petitions and the date-specific issues they address, the petitioner requested that the petitions be filed expeditiously and that public comment on the actions be limited to 30 days. The notice of receipt of a petition for rulemaking invited interested persons to submit comments by February 24, 1999.

A total of 70 comments were received on PRM-50-65, with 54 commenters agreeing with the petition and 16 commenters opposing the petition.

A total of 64 comments were received on PRM-50-66, with 46 commenters agreeing with the petition and 18 commenters opposing the petition.

A total of 73 comments were received on PRM-50-67, with 56 commenters agreeing with the petition and 17 commenters opposing the petition.


Many of the comments docketed under PRM-50-65 responded to all three petitions.

DISCUSSION:

In developing the decisions on the NIRS petitions, the staff considered the information provided in the petitions and the comments received in response to the notice of receipt of the petitions. Although the majority of the comments received supported the petition, the planning and implementation activities by the industry, the oversight provided by the NRC in addressing the Y2K problem at licensed nuclear facilities, and the existing regulations, have provided sufficient basis to deny the petitions.


In PRM-50-65, the petitioner requested that the NRC adopt the following text as a rule:

Any and all facilities licensed by the Nuclear Regulatory Commission under 10 CFR Parts 30, 40, 50, and 70 shall be closed by 12 pm Eastern Standard Time, December 1, 1999, unless and until each facility has: (a) fully and comprehensively examined all computer systems, embedded chips, and other electronic equipment that may be date-sensitive to ensure that all such systems that may be relevant to safety are Y2K compliant; (b) repaired, modified, and/or replaced all such systems that are not found to be Y2K compliant; (c) made available to the public all information related to the examination and repair, modification and/or replacement of all such systems; (d) determined, through full-scale testing, that all repairs, modifications, and/or replacements of all such systems are, in fact, Y2K compliant.

The NRC staff has determined that the actions taken by the licensees to implement a systematic and structured facility-specific Y2K readiness program and the NRC's oversight of the licensees' implementation of these Y2K readiness programs provide reasonable assurance of adequate protection to public health and safety. The petition is denied for the reasons cited in detail in the *Federal Register* notice ([Attachment 1A](#) .

In PRM-50-66, the petitioner requested that the NRC adopt the following text as a rule:

All licensees subject to 10 CFR Part 50 and Appendix E will conduct a full-scale emergency planning exercise (as normally required under 10 CFR 50.47) during 1999. This exercise shall include a component that includes failure of one or more computer or other digital systems (this is popularly known as the "Y2K bug") on January 1, 2000, or other relevant date. Licensees that do not conduct, or that fail, this exercise shall close their facilities licensed under this part by December 1, 1999, until such time as the licensees have conducted a successful exercise.

The NRC staff has determined that the existing required emergency operating and emergency plans, along with actions taken by the licensees to implement systematic and structured Y2K readiness contingency plans for critical Y2K dates, and NRC's oversight of the licensees' implementation of these Y2K readiness contingency plans provide reasonable assurance of adequate protection to public health and safety. The petition is denied for the reasons cited in detail in the *Federal Register* notice ([Attachment 1B](#) .

In PRM-50-67, the petitioner requested that the NRC adopt the following text as a rule:


The Nuclear Regulatory Commission recognizes that date-sensitive computer programs, embedded chips, and other electronic systems that perform a major role in distributing, allocating, and ensuring electric power throughout the United States may be prone to failure beginning on January 1, 2000. Loss of all alternating current electricity from both the offsite power grid and onsite emergency generators (commonly known as "station blackout,") long has been identified by the NRC as among the most prominent contributors to risk for atomic reactors.

(1) For these reasons, the NRC requires of Part 50 and 70 licensees as of December 1, 1999: (a) that all emergency diesel generators that provide back-up power to nuclear licensees must be operational and remain operational; (b) that licensees that cannot demonstrate full operational capabilities of all emergency diesel generators must close until such time that full operational capabilities of emergency diesel generators are attained; (c) that all licensees must have a 60-day supply of fuel for emergency diesel generators.

(2) Further, to ensure adequate protection of public health and safety, the NRC requires that all licensees under these sections must provide alternate means of back-up power sufficient to ensure safety. These may include, but are not limited to: solar power panels, wind turbines, hydroelectric power, biomass power, and other means of generating electricity. These additional back-up systems must provide electricity directly to the licensee rather than to the broader electrical grid.

(3) Irradiated fuel pools are to be immediately classified as Class 1-E; back-up power systems must be sufficient to provide cooling for such pools.

Licensees which cannot demonstrate compliance with sections (1) and (2) must cease operations as of December 1, 1999, until compliance with these sections is attained.

The NRC staff has determined that the actions taken by the licensees to implement a systematic and structured Y2K readiness program adequately address Y2K issues and NRC's oversight of the implementation of these industry programs provide reasonable assurance of adequate protection to public health and safety. The petition is denied for the reasons cited in detail in the *Federal Register* notice ([Attachment 1C](#) .

CONCLUSION:

The staff agrees that the Y2K issue is significant and acknowledges the importance of the issues raised by the petitioners. However, the staff has concluded that these issues can be and are being addressed without implementation of new rules.

The staff recommends that the Commission deny the petitions for rulemaking related to Y2K issues. The staff considers that the actions taken by licensees to address Y2K issues and NRC's oversight of these activities provide reasonable assurance of adequate protection to public health and safety. Establishing new prescriptive regulations, as proposed by the petitioner, is not necessary to ensure safe operation of facilities and the ability of the facilities to shutdown safely in the event of a Y2K incident.

RECOMMENDATION:

That the Commission:

1. Approve the *Federal Register* notices that deny the petitions ([Attachments 1A-1C](#)).
2. Note:
 - a. The petitioner will be informed of this action ([Attachment 2](#)).
 - b. The appropriate congressional committees will be informed of this action ([Attachment 3](#)).
 - c. Upon publication of the notices of denial in the *Federal Register*, the Office of Administration will make the notices of denial available on NRC's rulemaking web site.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection to its content. The Office of the Chief Information Officer has reviewed this paper for information technology and information management implications and concurs in it.

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- Attachments:
1.
 - a. *Federal Register* Notice 50-65
 - b. *Federal Register* Notice 50-66
 - c. *Federal Register* Notice 50-67
 2. Letter to Petitioner Michael Marriotte, Nuclear Information and Resource Service
 3. Letters to Congress -- Honorable Joe L. Barton and Honorable James M. Inhofe