

**NUCLEAR REGULATORY COMMISSION****10 CFR Part 50**

[Docket No. PRM-50-66]

**Nuclear Information and Resource Service; Receipt of Petition for Rulemaking****AGENCY:** Nuclear Regulatory Commission.**ACTION:** Petition for rulemaking; Notice of receipt.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) has received and requests public comment on a petition for rulemaking filed by the Nuclear Information and Resource Service. The petition has been docketed by the Commission and has been assigned Docket No. PRM-50-66. The petitioner requests that the NRC amend its regulations to require every nuclear utility to conduct a full-scale emergency planning exercise that involves coping with a date-sensitive, computer-related failure resulting from a Year 2000 issue (Y2K). The petitioner requests 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.

**DATES:** Submit comments by February 24, 1999. Comments received after this date will be considered if it is practical to do so, but assurance of consideration cannot be given except as to comments received on or before this date.

**ADDRESSES:** Submit comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Attention: Rulemakings and Adjudications Staff.

Deliver comments to 11555 Rockville Pike, Rockville, Maryland, between 7:30 am and 4:15 pm on Federal workdays.

For a copy of the petition, write: Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

You may also provide comments via the NRC's interactive rulemaking website through the NRC home page (<http://www.nrc.gov>). This site provides the capability to upload comments as files (any format), if your web browser supports that function. For information about the interactive rulemaking website, contact Ms. Carol Gallagher, (301) 415-5905 (e-mail: [CAG@nrc.gov](mailto:CAG@nrc.gov)).

**FOR FURTHER INFORMATION CONTACT:** David L. Meyer, Office of

Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Telephone: 301-415-7162 or Toll-Free: 1-800-368-5642 or E-mail: [DLM1@NRC.GOV](mailto:DLM1@NRC.GOV).

**SUPPLEMENTARY INFORMATION:****Background**

The Nuclear Regulatory Commission received three related petitions for rulemaking, each dated December 10, 1998, submitted by the Nuclear Information Resource Service concerning various aspects of Y2K issues and nuclear safety. This petition requests that the NRC amend its regulations to require nuclear power plant and major fuel cycle facilities to develop and implement adequate contingency and emergency plans to address potential system failures. The two related petitions would require that nuclear facilities be shut down if they are not compliant with Y2K issues (PRM-50-65) and that nuclear facilities provide reliable back-up sources of power for nuclear facilities (PRM-50-67).

Because of the nature of these petitions and the date-specific issues they address, the petitioner requests that the petitions be filed expeditiously and that public comment on the actions be limited to 30 days.

**The Petitioner's Suggested Amendment**

The petitioner requests 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 shall publish and provide to each licensee, within 30 days of the date of this rule, a Regulatory Guide that outlines potential emergency exercise scenarios. The NRC shall publish and provide to each licensee, by December 1, 1999, a Regulatory Guide that describes the various scenarios that have been undertaken and the successful (and unsuccessful) responses to the problem posed.

**Discussion**

The petitioner states that although the probability of Y2K-related events occurring that would require emergency response and the implementation of contingency plans is unknown, it would fall within the range of safety matters for which NRC requires emergency

planning exercises. Furthermore, the petitioner asserts that addressing Y2K-related problems will require the use of potentially unfamiliar contingency plans, relying on ingenuity to circumvent failure of essential communications systems or the failure of off-site emergency responders to perform their tasks effectively, and coping with issues not normally tested during emergency exercises.

The petitioner believes that it is prudent to require each licensee to conduct an exercise and that each exercise address a different aspect of the Y2K problem. The petitioner suggests that some exercises should test problems initiated by Y2K-related failures and that others should test problems exacerbated by Y2K-related failures. The petitioner believes that this would provide some familiarity with the possible range of issues that could develop and create an overall industry capability to address potential Y2K problems.

Under the petitioner's suggested regulation, the licensees would develop exercise scenarios that would be approved by the NRC in an expedited fashion and the NRC would publish and distribute regulatory guides that would outline potential emergency response scenarios and describe the scenarios that were tested and the successful responses to the problem posed.

The petitioner believes that this action would provide reasonable assurance 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 the Y2K problem.

The petitioner also believes that other major fuel cycle facilities should be subject to a similar rule.

Dated at Rockville, Maryland, this 15th day of January, 1999.

For the Nuclear Regulatory Commission.

**Annette Vietti-Cook,**

*Secretary of the Commission.*

[FR Doc. 99-1593 Filed 1-22-99; 8:45 am]

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**NUCLEAR REGULATORY COMMISSION****10 CFR Parts 50 and 70**

[Docket No. PRM-50-67]

**Nuclear Information and Resource Service; Receipt of Petition for Rulemaking****AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Petition for rulemaking; Notice of receipt.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) has received and requests public comment on a petition for rulemaking filed by the Nuclear Information and Resource Service. The petition has been docketed by the Commission and has been assigned Docket No. PRM-50-67. The petitioner requests that the NRC amend its regulations to require that nuclear facilities ensure the availability of electricity to power atomic reactor and other nuclear facility safety systems in the event of a date-sensitive, computer-related incident resulting from a Year 2000 issue (Y2K). The petitioner requests that the NRC take this action to ensure that reliable back-up sources of power are available in the event of a Y2K incident.

**DATES:** Submit comments by February 24, 1999. Comments received after this date will be considered if it is practical to do so, but assurance of consideration cannot be given except as to comments received on or before this date.

**ADDRESSES:** Submit comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Attention: Rulemakings and Adjudications Staff.

Deliver comments to 11555 Rockville Pike, Rockville, Maryland, between 7:30 am and 4:15 pm on Federal workdays.

For a copy of the petition, write: Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

You may also provide comments via the NRC's interactive rulemaking website through the NRC home page (<http://www.nrc.gov>). This site provides the capability to upload comments as files (any format), if your web browser supports that function. For information about the interactive rulemaking website, contact Ms. Carol Gallagher, (301) 415-5905 (e-mail: [CAG@nrc.gov](mailto:CAG@nrc.gov)).

**FOR FURTHER INFORMATION CONTACT:** David L. Meyer, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Telephone: 301-415-7162 or Toll-Free: 1-800-368-5642 or E-mail: [DLM1@NRC.GOV](mailto:DLM1@NRC.GOV).

**SUPPLEMENTARY INFORMATION:**

**Background**

The Nuclear Regulatory Commission received three related petitions for rulemaking, each dated December 10, 1998, submitted by the Nuclear Information Resource Service

concerning various aspects of Y2K issues and nuclear safety. This petition requests that the NRC amend its regulations to provide reliable back-up sources of power for nuclear facilities. The two related petitions would require that nuclear power plant and major fuel cycle facilities be shutdown if they are not compliant with Y2K issues (PRM-50-65) and require that nuclear facilities develop and implement adequate contingency and emergency plans to address potential system failures (PRM-50-66).

Because of the nature of these petitions and the date-specific issues they address, the petitioner requests that the petitions be filed expeditiously and that public comment on the actions be limited to 30 days.

**The Petitioner's Suggested Amendment**

The petitioner requests 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.

**Discussion**

The petitioner acknowledges that the NRC has recognized the potential safety and environmental problems that could result if date-sensitive electronic systems fail to operate or provide false information. The petitioner also notes that NRC has required its reactor and major fuel cycle facilities to report on their programs to ensure compliance with Y2K issues by July 1, 1999.

The petitioner is addressing a related problem concerning the availability of electricity to power atomic reactor and other safety systems. Electricity is required to operate atomic reactor safety and cooling systems. This electricity is provided by offsite sources, referred to by the petitioner as the overall electrical grid. The petitioner states that the NRC has long recognized that the loss of all alternating current from both onsite and offsite systems, known generally as "station blackout", is the most important contributor to risk at most atomic reactors. The petitioner notes that the NRC has required licensees to have back-up sources of onsite emergency power, normally multiple emergency diesel generators, capable of supplying the electricity necessary to operate essential safety systems.

The petitioner asserts that the emergency diesel generators used at atomic reactors have proven unreliable and are often out of service. The petitioner asserts that the unprecedented condition posed by the Y2K problem, coupled with the demonstrated and ongoing failures of emergency diesel generators, constitutes reasonable doubt that emergency fuel generators can be relied on. Therefore, the petitioner believes that the NRC should require all emergency diesel generators be operational, have a 60-day supply of fuel as of December 1, 1999, and that licensed facilities that cannot meet these requirements be closed.

The petitioner discusses the likelihood and potential consequences of a failure of all or a portion of the electric power grid in the United States. The petitioner recognizes that the failure of all or a portion of the electrical grid due to Y2K issues is well beyond the scope of NRC's authority. However, the petitioner states that the extended failure of all or a portion of the electrical grid would place severe stress on the current emergency diesel generator system of back-up power supply and that the failure of emergency diesel generators at one or more reactor sites could result in extended station blackouts and nuclear catastrophes. The petitioner asserts that this possibility is well within the range of probabilities for

which the NRC routinely requires action by its licensees. The petitioner further asserts that reliance on unreliable emergency diesel generators is insufficient under these conditions.

Therefore, the petitioner believes it is essential that the NRC take the type of regulatory action suggested in this petition on an expedited basis.

Dated at Rockville, Maryland, this 15th day of January, 1999.

For the Nuclear Regulatory Commission.

**Annette Vietti-Cook,**

*Secretary of the Commission.*

[FR Doc. 99-1594 Filed 1-22-99; 8:45 am]

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