POLICY ISSUE
(Information)

January 6, 1999 SECY-99-003

FOR: The Commissioners

FROM: William D. Travers
Executive Director for Operations

SUBJECT: PROPOSED SUPPLEMENT 1 TO NRC GENERIC LETTER 98-01, "YEAR 2000 READINESS OF COMPUTER SYSTEMS AT NUCLEAR POWER PLANTS"

PURPOSE:

To inform the Commission of the staff's intent to issue the attached Supplement 1 to NRC Generic Letter (GL) 98-01, "Year 2000 Readiness of Computer Systems at Nuclear Power Plants." The purpose of this supplemental generic letter is to provide nuclear power plant licensees with a voluntary alternative response to item (2) of the required responses to GL 98-01 on the Year 2000 (Y2K) readiness of their facilities. This action is consistent with the Nuclear Energy Institute's (NEI) recommendation as stated in the letter from Joe Colvin, Chairman and CEO, NEI, dated November 9, 1998, to the Chairman, NRC. The alternative response would provide information on the overall Y2K readiness of the plant consistent with the Year 2000 Information and Readiness Disclosure Act (Public Law No: 105-271). Under this alternative response, licensees would provide information about the Y2K readiness of those systems covered by GL 98-01, but in addition, the Y2K readiness of those systems necessary for continued plant operation which are not covered by the terms and conditions of the license and NRC regulations.

DISCUSSION:

As discussed in GL 98-01, the Y2K problem pertains to the potential for date-related problems in computer systems such as the inability of the software to recognize the "00" digits as the year 2000 rather than 1900 and thereby interfere with the proper operation of these systems. As indicated in GL 98-01, because the use of computers in nuclear power plant safety-related

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systems is limited, the greatest impact of the Y2K problem is on systems required for continued plant operation. Such systems include security computers, control systems, radiation monitoring systems, plant process and data collection computers, and engineering programs.

From the beginning of the efforts to address the Y2K problem, both the NRC and nuclear power industry recognized the importance of the concern not only on plant safety but on the ability of the plant to continue to operate to support the grid and the nation's electric power infrastructure. Nuclear power plant Y2K readiness programs and NRC staff oversight efforts have focused on both aspects of nuclear power plant operations. This focus was reinforced by enactment of the Year 2000 Information and Readiness Disclosure Act on October 19, 1998, which encourages broad information exchanges on the Y2K problem as a means of achieving readiness of all the nation's infrastructure sectors on January 1, 2000.

In keeping with the spirit of the Year 2000 Information and Readiness Disclosure Act, the staff believes it is desirable to obtain information on the status of nuclear power plant Y2K readiness beyond the current (more narrowly focused) response in item (2) of GL 98-01. The proposed Supplement 1 to GL 98-01 requests a voluntary alternative response to GL 98-01 item (2) in which licensees by July 1, 1999, will report on the Y2K readiness status of the entire facility including its ability to continue to operate on January 1, 2000. Licensees are reminded, however, in Supplement 1 to GL 98-01 that existing reporting requirements under 10 CFR Part 21, 10 CFR 50.72 ,10 CFR 50.73 and 10 CFR 50.9 are still applicable as appropriate. These provisions should be sufficient to assure the integrity of all safety significant information provided notwithstanding that the staff is not, in this supplement, asking that the responses be submitted under oath or affirmation.

The Committee to Review Generic Requirements (CRGR) has agreed that CRGR review of the proposed draft Supplement 1 to GL 98-01 is not required.

The Office of the General Counsel has reviewed this generic letter supplement and has no legal objection to its contents. Furthermore, the Office of Management and Budget has confirmed that the proposed generic letter supplement is a non-major "rule" under the provisions of the Small Business Regulatory Enforcement Fairness Act (see 5 U.S.C., Chapter 8), enacted March 29, 1996.

The Chief Information Officer had no objection to the issuance of the proposed generic letter supplement.

The staff intends to issue the generic letter supplement approximately 5 working days after the date of this information paper.

William D. Travers
Executive Director
for Operations

Attachments:
1. Proposed Supplement 1 to GL 98-01, "Year 2000 Readiness of Computer Systems at Nuclear Power Plants"
2. Associated Press Release on Supplement 1 to GL 98-01

DISTRIBUTION:
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ATTACHMENT 1

UNITED STATED
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
WASHINGTON, D.C. 20555-0001

December, 1998

NRC GENERIC LETTER 98-01, SUPPLEMENT 1: YEAR 2000 READINESS OF COMPUTER SYSTEMS AT NUCLEAR POWER PLANTS

Addressees

All holders of operating licenses for nuclear power plants, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.

Purpose

The U. S. Nuclear Regulatory Commission (NRC) is issuing this generic letter supplement to provide addressees with a voluntary alternative response to that required in Generic Letter 98-01 on the Year 2000 (Y2K) readiness of their respective facilities. This offer is consistent with the Nuclear Energy Institute's (NEI) recommendation in their letter to the NRC dated November 9, 1998. The alternative response should provide information on the overall Y2K readiness of the plant, including those systems necessary for continued plant operation which are not covered by the terms and conditions of the license and NRC regulations.

Description of Circumstances

On May 11, 1998, the NRC issued Generic Letter (GL) 98-01, requesting information regarding the licensee's programs, planned or implemented, to address the year 2000 (Y2K) problem in computer systems at their facilities. Specifically, item (2) under Required Response, requires addressees to provide a written response upon completing the Y2K program or, in any event, no later than July 1, 1999, confirming that the facility is Y2K ready, or will be ready, by the year 2000 with regard to compliance with the terms and conditions of the license and NRC regulations. For incomplete programs as of that date, the licensee is to provide a status report, including completion schedules, of work remaining to be done to confirm the facility is/will be ready by the year 2000.

Since issuance of GL 98-01, increased public awareness and government attention to the Y2K problem have resulted in concern over not only public health and safety of nuclear power plants but also concern over the ability of nuclear power plants to continue to provide power to the national electric power grid. A key aspect of this concern is the recognition of the need for significant disclosure and sharing of information on the Y2K problem and its impact on the nation's infrastructure as described in the Year 2000 Information and Readiness Disclosure Act (Public Law No: 105-271) which was enacted on October 19, 1998. The information requested in this supplement to GL 98-01 is consistent with this Act.

Discussion

As discussed in Generic Letter 98-01, the Y2K computer problem pertains to the potential for date-related problems that may be experienced by a computer system or an application. The Y2K problem has the potential of interfering with the proper operation of computer systems, hardware that is microprocessor-based (embedded software), and software or databases relied upon at nuclear power plants. Diverse concerns are associated with the potential impact of the Y2K problem on nuclear power plants because of the variety and types of computer systems in use. These concerns result from a reliance upon (1) software to schedule maintenance and technical specification surveillance, (2) programmable logic controllers and other commercial off-the-shelf software and hardware, (3) digital process control systems, (4) software to support facility operation, (5) digital systems for collection of operating data, and (6) digital systems to monitor post-accident plant conditions.

Some examples of systems and computer equipment that may be affected by Y2K problems follow:

- Security computers
- Plant process (data scan, log, and alarm) and safety parameter display system computers
- Radiation monitoring systems
- Dosimeters and readers
- Plant simulators
- Engineering programs
- Communication systems
- Inventory control systems
- Surveillance and maintenance tracking systems
- Control systems

The NRC and the nuclear industry recognized the importance of the Y2K concern to the above systems, even though some of the systems may not be covered by specific requirements of the facility license, because of their impact on the ability of the plant to support the grid and the nation's electric power infrastructure. For this reason, the NRC will permit addressees to provide an alternative response to that identified in item (2) of GL 98-01 which addresses overall plant Y2K readiness. Addressees may still provide the more narrowly focused response required by GL 98-01 on the readiness of only those systems within the scope of the facility license and NRC regulations under the provisions of 10 CFR 50.54(f). However, addressees are reminded that existing reporting requirements under the provisions of 10 CFR Part 21, 10 CFR 50.72, 10 CFR 50.73 and 10 CFR 50.9 are still applicable as appropriate when Y2K problems in safety-related systems are identified.

Voluntary Response

Addressees may respond to this supplement to GL 98-01 on or before July 1, 1999, in lieu of item (2) of GL 98-01 but must respond to one or the other. In responding to this supplement to GL 98-01, the addressee should confirm the Y2K readiness of the facility with regard to those systems within the scope of the license and NRC regulations, and those systems required for continued operation of the facility after January 1, 2000. For those systems which are not Y2K ready as of July 1, 1999, the addressee should provide a status and completion schedule for achieving readiness by the year 2000.

Address the written response to the U.S. Nuclear Regulatory Commission, Attention: Document Control Desk, Washington, D.C. 20555-0001.

Backfit Discussion

The response noted above is a voluntary alternative to the required response to item (2) of GL 98-01 and, therefore, no backfit analysis was prepared.

Paperwork Reduction Act Statement

Since the requested response is voluntary, it is not subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

If you have any questions about this matter, please contact one of the persons listed below or the appropriate office of Nuclear Reactor Regulation (NRR) project manager.

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Office of Nuclear Reactor Regulation

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ATTACHMENT 2

DRAFT PRESS RELEASE ***DRAFT***

NRC REQUESTS INFORMATION FROM NUCLEAR POWER PLANT LICENSEES ABOUT OVERALL YEAR 2000 READINESS

The Nuclear Regulatory Commission has requested all utilities operating nuclear power plants to inform NRC of steps they are taking to ensure their power plants will be able to function after January 1, 2000, to maintain stability of the national electric power grid.

The request for information is broader in scope than previous requests for information, and may be responded to as a voluntary alternative to the previous request. The new request includes systems necessary for continued plant operation which are not covered by the terms and conditions of the plant's license and NRC regulations. Consequently, this information does not require submital under oath or affirmation. Utilities have a choice whether they report by July 1, 1999 on their plants' Y2K readiness for systems within their license and NRC regulations or all those systems required for continued operation.

The "Year 2000" or Y2K problem refers to computers' potential inability to recognize 20th Century dates beginning with January 1, 2000, and beyond. It is caused by computer programs that use two-digit numbers to represent a calendar year (such as "98" for 1998). If the problem is not corrected, vulnerable computer systems will read "00" as 1900, rather than 2000, possibly causing some systems or equipment to malfunction.

Earlier this year, NRC notified all utilities to provide detailed information on steps they are taking to deal with the Year 2000 computer problem in order to ensure that key computer systems will continue to function after January 1, 2000. Since that time, however, increased public awareness and government attention to the Year 2000 problem have resulted in concern over not only public health and safety of nuclear power plants, but also over their ability to continue to provide power.

In September, the NRC started conducting Year 2000 audits at 12 nuclear power plants. These audits, which are ongoing, evaluate the effectiveness of measures licensees are taking to identify and correct Y2K problems at their facilities. Audit results will be used to determine if NRC needs to take further regulatory action and will be made available on this web page as they are issued. Results of the first three audits have been posted.

The text of the letter sent to all utilities operating nuclear power plants will be posted on the NRC Internet web page at: **http://www/nrc/gov/NRC/NEWS/year2000html.** This site has additional information relating to steps NRC is taking to deal with the Year 2000 problem.

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