



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 20, 1999

The Honorable Don Young
Member, United States
House of Representatives
222 West 7th Avenue, #3
Anchorage, Alaska 99513-7595

Dear Congressman Young:

I am responding to the letter you sent to Dennis K. Rathbun of the U. S. Nuclear Regulatory Commission (NRC) on September 16, 1999, in which you requested information on concerns raised by one of your constituents, Mr. Ed Mayer, regarding the Year 2000 (Y2K) readiness of the U.S. nuclear power plants.

By way of background information, I am pleased to tell you that over the past several years, the NRC staff has been working with its licensees to ensure that potential Y2K issues have been identified and corrected in order for plants to function properly during the Y2K transition. The NRC has issued Information Notice (IN) 96-70, "Year 2000 Effect on Computer System Software," December 24, 1996; Generic Letter (GL) 98-01, "Year 2000 Readiness of Computer Systems at Nuclear Power Plants," May 11, 1998; and GL 98-01, Supplement 1, "Year 2000 Readiness of Computer Systems at Nuclear Power Plants," January 14, 1999. IN 96-70 informed all licensees of the potential problems that nuclear facility computer systems and software might encounter during the transition to the new century. In GL 98-01, reference is made to Nuclear Energy Institute/Nuclear Utilities Software Management Group (NEI/NUSMG) 97-07, "Nuclear Utility Year 2000 Readiness," which describes an approach that all licensees have agreed to utilize in addressing the Y2K issues at their facilities. This guidance document (NEI/NUSMG 97-07) came out of a joint effort between NEI and NUSMG. In GL 98-01, the NRC accepted the NEI/NUSMG 97-07 guidance as an appropriate program for nuclear power plant readiness and required that all operating U.S. nuclear power plant licensees submit written responses regarding their facility-specific Y2K readiness programs. Licensees were required to report their Y2K readiness status by July 1, 1999. Licensees that were not ready were requested to provide their schedule for completing their Y2K activities. Supplement 1 to GL 98-01 expanded the scope of the reporting requirements to include the systems that are necessary for continued plant operation and that are not covered by the terms and conditions of the plant's license and NRC regulations.

The NRC has received reports that all 103 operating nuclear power plants (units) have no Y2K-related problems that directly affect the performance of safety systems. As of September 30, 1999, licensees for 93 of these plants indicated that all of their computer systems that support plant operation are Y2K ready. Licensees for the remaining 10 plants reported that they have additional work to complete on a few nonsafety computer systems or devices to be fully Y2K ready and provided their schedules for completing the work. Of the 10 plants, about 5 need work on operational support systems, or systems needed to support power generation. Other plants need work on plant monitoring and administrative systems, or systems needed to

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support administrative functions, such as a database for spare parts inventories. Typically, the remaining Y2K work that is to be completed has resulted from the need to wait for a plant outage scheduled in the fall in order to perform the work or the necessity of waiting for delivery of a replacement component. None of the remaining work affects the ability of a plant to shut down safely, if necessary.

One of a number of initiatives undertaken by the NRC staff to address the Y2K issue was the conduct of 12 sample audits of licensee Y2K readiness programs. The NRC staff determined that this approach was an appropriate means of oversight of licensee Y2K readiness efforts because all licensees had committed to the nuclear power industry Y2K readiness guidance (NEI/NUSMG 97-07) in their first response to NRC GL 98-01 and because the NRC staff had not identified any Y2K problems in safety-related actuation systems. The sample of 12 licensees included large utilities, such as Commonwealth Edison and Tennessee Valley Authority, as well as small single-unit licensees, such as North Atlantic Energy (Seabrook) and Wolf Creek Nuclear Operating Corporation. Because licensee Y2K programs are corporate-wide, many of the NRC staff audits encompassed more than a single nuclear power plant site because many utilities own more than one nuclear power plant. In all, 42 of 103 operating nuclear power plant units were associated with the Y2K readiness program audits of 12 utilities. The NRC staff selected a variety of types of plants of different ages and locations in this sample in order to obtain the necessary assurance that nuclear power industry Y2K readiness programs are being effectively implemented and that licensees would be on schedule to meet the readiness target date of July 1, 1999, established in GL 98-01. In late January 1999, the NRC staff completed the 12 audits. On the basis of the audit findings, the staff concluded that the audited licensees were in the process of effectively addressing Y2K issues and were undertaking the actions necessary to achieve Y2K readiness in accordance with the GL 98-01 target date.

In an effort to verify and assess the effectiveness of licensee contingency planning, in May and June 1999, NRC audit teams conducted additional comprehensive audits focused on the area of Y2K contingency planning at 6 unaudited plants. The audits reviewed internal facility risks, external risks, individual component/system contingency planning, and integrated contingency planning. The results of these audits, as well as the results of the 12 sample audits, are available at NRC's Public Document Rooms and can also be found on the NRC's Y2K Web site, <<http://www.nrc.gov/NRC/NEWS/year2000.html>>.

In addition to the NRC staff activities previously mentioned, regional NRC inspectors reviewed plant-specific Y2K program implementation and contingency activities at all nuclear power plant facilities. The inspectors used guidance prepared by the NRC Headquarters staff who conducted the 12 sample audits and the 6 contingency planning audits. On the basis of the reviews, the staff found that licensees were implementing Y2K programs in accordance with staff-approved industry guidelines. Additional details regarding NRC reviews and licensee readiness are contained in NUREG-1706, "Year 2000 Readiness in U.S. Nuclear Power Plants," a copy of which is enclosed for your review.

Mr. Mayer wanted to know whether power outages would occur if the Nation's reactors are shut down 30 days before January 1, 2000, to give reactors time to cool down. On the basis of the NRC's audits, reviews, and licensee reports, the staff believes that none of the 103 operating nuclear power plants will have Y2K-related problems that directly affect the performance of

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safety systems and components necessary for plant operation. Therefore, the NRC is not planning to require licensees to shut down nuclear power plants. Nuclear power plant licensees are interacting with the North American Electric Reliability Council (NERC) to develop electrical grid stability plans for generation and transmission. In this regard and based on the state of readiness from the activities discussed above, we have concluded that operation of nuclear facilities through the transition to the year 2000 is the prudent course of action. In its report to the Department of Energy, "Preparing the Electric Power Systems of North America for Transition to the Year 2000," dated August 3, 1999, NERC makes the following statement: "The current industry status leads to high confidence that nuclear generation plants will continue to reliably deliver their share of the nation's electricity needs well into the next century."

The NRC will continue to monitor progress at those plants that have remaining work to be performed and will independently verify completion of these items, including Y2K contingency plans that specify procedures for dealing with unexpected events. The staff has developed guidance for appropriate regulatory actions to be taken for those facilities that were not Y2K ready by July 1, 1999. As stated in the enclosed press release, the NRC has sent letters to those utilities with nuclear power plants that were scheduled to be Y2K ready after September 30, 1999 to verify the status of readiness and the dates when the plants will be fully Y2K ready. However, two of these plants (South Texas Project Units 1 and 2) achieved readiness before September 30. We believe that all licensees will be able to operate their plants safely during the transition from 1999 to 2000 and beyond, and we do not believe that significant plant-specific action directed by the NRC to address possible Y2K problems is likely to be needed.

Additional Y2K information on all operating nuclear power plants is available at NRC's Y2K Web site at <<http://www.nrc.gov/NRC/NEWS/year2000.html>>. This Web site also identifies Y2K resources, notices, conferences, and other related information.

The NRC remains committed to its oversight of the nuclear power plant licensee Y2K readiness efforts in order to ensure safe operation of these facilities throughout 1999, 2000, and beyond. Please contact me if you have any additional questions on this matter.

Sincerely,
Original signed by
Frank [unclear]
William D. Travers
Executive Director
for Operations

- Enclosures: 1. NUREG-1706, "Year 2000 Readiness in U.S. Nuclear Power Plants"
2. Press Release No. 99-207, "NRC Sends Letters to Utilities To Follow Up Y2K Readiness at Nuclear Power Plants"

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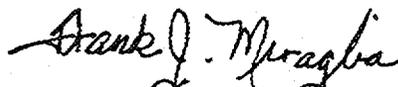
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