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

November 15, 1999

The Honorable John F. Tierney
United States House of Representatives
Washington, DC 20515-2106

Dear Congressman Tierney:

I am responding to the letter you sent to Dennis K. Rathbun of the U.S. Nuclear Regulatory Commission (NRC) on September 30, 1999, requesting information on actions and precautions implemented, or ready to be implemented, at the Seabrook Station to prevent possible problems from year 2000 (Y2K) issues including:

- Back-up diesel generators in the event of coolant failure or some other external electricity supply available to maintain circulation of sufficient water to cool the radioactive core and also to keep spent fuel cool.
- A contingency plan in case of an accident related to Y2K including evacuation plans, availability of potassium iodide tablets for use to block the absorption of radioactive iodine by the thyroid gland, and a means for effective distribution to the potentially exposed populace.

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. 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. 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 plants' license and NRC regulations. The NRC has confirmed by onsite reviews and audits that there are no Y2K-related problems that affect the performance of safety systems needed to safely shut down the reactors at all nuclear power plant sites. In September 1999, the NRC issued NUREG-1706, "Year 2000 Readiness in U.S. Nuclear Power Plants," a copy of which is enclosed for your review. The results of the onsite reviews and audits are contained in NUREG-1706 which also shows that the Seabrook Station has completed all activities to ensure that its computer systems that support plant operations are "Y2K ready."

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In addition to achieving Y2K readiness, all licensees have prepared and are implementing Y2K contingency plans. Licensees' contingency plans include methods for obtaining additional diesel fuel and other necessary supplies to cope with potential Y2K-induced long-term loss of offsite power and are based on the guidance in NEI/NUSMG 98-07, "Nuclear Utility Year 2000 Readiness Contingency Planning," dated August 1998. The NRC has accepted the guidance presented in NEI/NUSMG 98-07. As part of our review of licensees' Y2K program implementation at all nuclear power plants, NRC inspectors confirmed that the Seabrook Station's Y2K programs address emergency power sources, arrangements for obtaining critical commodities (e.g., diesel fuel oil), and other considerations identified in NEI/NUSMG 98-07.

More specifically, and with regard to your first concern, the Seabrook Station, as well as other nuclear power plants, depends primarily on the electricity supplied to the plant from external sources to operate the safety systems and to provide sufficient reactor and spent fuel cooling. For the Seabrook Station, the external electricity supply, which is referred to as the "offsite power source," is the New England 345-kV transmission grid. The Seabrook Station has three separate connections to different parts of the grid and the New England grid is connected to three other grids.

However, if offsite power is not available, nuclear power plants also have an onsite backup power system which, for nearly all nuclear power plants, is powered by emergency diesel generators (EDGs). The Seabrook Station is equipped with two separate and independent standby EDGs. Each EDG is configured to automatically supply power to the safety loads upon a loss of offsite power and is designed to have the capacity to perform this function even during the mitigation of a design basis accident such as a loss-of-coolant accident. The safety loads automatically powered by the EDGs include the appropriate pumps and other components to cool both the reactor and the spent fuel. NRC's regulations require the EDGs to be highly reliable and licensees to demonstrate EDG operability by testing them on a regular basis. The reliability values for the EDGs were established in accordance with the requirements of the station blackout rule. Each licensee monitors these values in accordance with the requirements of the maintenance rule and associated industry guidance. This monitoring ensures that the EDGs maintain the established reliability.

Therefore, sufficient redundant backup power sources are currently present at the Seabrook Station, as well as other nuclear power plants, because loss of offsite power and station blackout are issues that the nuclear industry has already addressed. In addition, because of the demonstrated reliability of the EDGs, the staff is confident that the reactor and the spent fuel at all nuclear power plants will remain in a safe configuration during the Y2K transition.

With regard to your second concern, in the unlikely event of a radiological emergency during Y2K critical dates, the Seabrook Station is responsible for determining and conveying specific accident information, dose assessment information, and protective action recommendations to the emergency response organizations in the State of New Hampshire and the Commonwealth of Massachusetts. It is the responsibility of the State emergency response organizations to then evaluate this information and make decisions about appropriate protective actions, including evacuation. The NRC has concluded that plant-specific industry planning for Y2K contingencies, which is built upon existing emergency response plans and procedures

required by the current emergency preparedness regulations, provides reasonable assurance that adequate protective measures including evacuation, if necessary, will be taken.

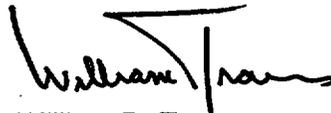
Regarding the availability of potassium iodide (KI) tablets for use by the public in the event of a radiological emergency, the NRC is in the process of publishing a final amendment to its emergency planning regulations that would require consideration of the use of KI as a protective measure for the general public as a supplement to evacuation and sheltering. The NRC is also working closely with the Federal Emergency Management Agency (FEMA), the Food and Drug Administration, and other Federal agencies in developing a revision to the Federal policy on the use of KI. Offsite emergency plans, which are approved by FEMA and implemented by the respective states, currently require KI to be available only for emergency workers and institutionalized persons within the plume exposure pathway (about a 10-mile) emergency planning zone for all nuclear plant sites, including the Seabrook Station. The NRC is also developing guidance to assist State and local governments in making decisions on the role and use of KI for the general public in their site-specific emergency plans. As a result, New Hampshire is reconsidering its KI policy.

In summary, the Seabrook Station is already designed and equipped to deal with possible problems associated with Y2K issues. The Seabrook Station has three separate connections to the power grid which is connected to three other grids. If offsite power is not available, the Seabrook Station has two standby EDGs, each of which is designed to meet the electrical demand caused by a loss of offsite power, even in the unlikely event of a coincident design basis accident such as a loss-of-coolant accident. In preparation for possible problems from Y2K issues, the Seabrook Station has been deemed "Y2K ready" and also has a contingency plan in place. In addition, the NRC is working closely with other federal agencies to assist states in making decisions regarding the appropriate use of KI for the general public.

Lastly, I note that in its most recent report issued on August 3, 1999, the North American Electric Reliability Council states, "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 report indicates that the transition through critical Y2K rollover dates should have a minimal impact on electric systems' operations in North America.

I reaffirm that the NRC is strongly committed in its oversight of nuclear power plant licensees to ensure Y2K readiness so that these facilities can operate safely throughout 1999, 2000, and beyond. I trust this information satisfactorily addresses your concerns. Please contact me if you have any additional questions on this matter.

Sincerely,



William D. Travers
Executive Director
for Operations

Enclosure: NUREG-1706, "Year 2000 Readiness
in U.S. Nuclear Power Plants"