Omaha Public Power District

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April 8, 1980

Mr. Darrell G. Eisenhut, Acting Director
Division of Operating Reactors
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Reference: Docket No. 50-285

Dear Mr. Eisenhut:

The Omaha Public Power District received the Commission's letter dated March 27, 1980, requesting further information regarding implementation of the requirements set forth in Item 2.1.7.a of NUREG-0578, "Automatic Initiation of Auxiliary Feedwater System". In response, the following information is provided.

A control grade system which complies with the requirements of the Commission's March 27, 1980, letter has been installed at the Fort Calhoun Station. The system's automatic initiation signals and circuits are designed so that a single failure will not result in the loss of the automatic initiation capability of the auxiliary feedwater system. The power source for the motor driven auxiliary feedwater pump was changed to meet the staff's emergency power requirement without compromising the emergency power source. The methods used to implement Item 2.1.7.a of NUREG-0578 are documented in the District's letter to the Commission dated December 13, 1979.

Installation of the safety grade system requires a plant shutdown, since both auxiliary feedwater trains are required to be removed from service at the same time to perform the required modifications. This would cause the plant to be placed into an unsafe operating condition and would violate Fort Calhoun Station's Technical Specifications. The District proposes to postpone installation of the safety grade system until the 1981 refueling outage, scheduled to commence in March, 1981. Postponement of installation is justified based upon the following considerations:

1. The control grade system will provide adequate protection for the interim period from January 1, 1981, until commencement of the 1981 refueling outage (approximately 90 days).

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2. Operating the facility for 90 days without a safety grade system will not jeopardize the health and safety of the public or in any way significantly increase the probability of a nuclear incident.

3. Installing the system during a scheduled refueling outage would ensure maximum unit availability and minimum power costs to the District's ratepayers. Should the unit be shutdown solely to install the system, more costly replacement power would be needed, possibly originating from oil fired peaking units or purchased from other utilities. It is important to maximize unit availability during the winter months when power usage is at a peak, in order that unforeseen unit shutdowns and/or other contingencies can be handled assuring continued availability of power to our customers.

4. A special shutdown of the Fort Calhoun Station during the high power demand winter months may require the use of oil fired peaking units to compensate for lost power. In the interest of conservation of oil resources and in adherence with our national energy policy, it would be better to generate with nuclear fuels.

5. Installing the system during a refueling outage would minimize the number of required plant outages and resulting thermal stresses on safety related systems. Thermal stress caused by changing power loads is a known contributor to piping failures.

6. Maintaining the plant in a steady state of operation reduces the potential for challenging safety systems. The Commission has expressed a desire through recent correspondence to minimize challenges to safety systems.

7. Minimizing the number of shutdowns required is consistent with ALARA policy. Every time the facility is brought to a cold shutdown for a sustained period of time, certain amounts of liquid and gaseous wastes are generated. These wastes must be processed through the radwaste treatment systems and released and/or disposed of in a controlled manner. Waste handling results in an incremental radiation exposure to personnel handling the waste, as well as to the general public. These doses can be eliminated through conscientious management of reactor shutdowns.

   In addition, doses would generally be less for performing modifications during a refueling outage than a normal cold shutdown because systems containing radioactivity, which would contribute to radiation dose to workers inside the containment, would normally be drained or flushed during a refueling outage.

8. Increasing the number of plant outages also increases the amount of time which the District's staff must dedicate to outage planning and general plant operations. These same personnel are also relied upon to respond to other concerns of NUREG-0578, as well as other licensing regulatory concerns. The more time that is dedicated to outage planning and shutdown operations, the greater the amount of time that cannot be dedicated to meeting our regulatory obligations.

In view of the foregoing considerations, it is believed that installation of the safety grade auxiliary feedwater automatic initiation system can be accomplished in a timely, responsible manner through the use of our refueling outage. In so doing, the plant can be run economically, radiation doses can be kept to a minimum, and the safety and health of the public can be maintained.

Sincerely,

W. C. Jones
Division Manager
Production Operations

WCJ/KJM/BJH:jmm

cc: LeBoeuf, Lamb, Leiby & MacRae
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