

November 3, 2000

EA-00-252

Mr. J. Sorenson
Site General Manager
Prairie Island Nuclear Generating Plant
Nuclear Management Company, LLC
1717 Wakonade Drive East
Welch, MN 55089

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT - NOTICE OF
ENFORCEMENT DISCRETION, NOED NO. 00-3-01 (TAC
NO. MB0408/MB0409)

Dear Mr. Sorensen:

By letter dated November 2, 2000, the Prairie Island Nuclear Generating Plant (PINGP) staff requested that the Nuclear Regulatory Commission (NRC) staff exercise discretion not to enforce compliance with the required shutdown of both reactor units contained in PINGP's Technical Specification (TS) Limiting Condition for Operation (LCO) 3.0.C., as it applied to TS 3.3.D, "Cooling Water System," specifically Section 3.3.D.2. Your staff's letter documented information previously discussed with the NRC in a telephone conference on November 1, 2000, at 3:15 p.m. CST. The principal NRC staff members who participated in that telephone conference included myself; S. Singh Bajwa, Director, Project Directorate III, Office of Nuclear Reactor Regulation (NRR); Roy Caniano, Deputy Director, Division of Reactor Safety, Region III; Claudia Craig, Chief, Section 1, Project Directorate III, NRR; T. J. Kim, Project Manager, Section 1, Project Directorate III, NRR; Roger Lanksbury, Branch Chief, Division of Reactor Projects, Region III; James Tatum, Plant Systems Branch, NRR; Steve Ray, Prairie Island Senior Resident Inspector, Region III; Mike Parker, Senior Reactor Analyst, Region III; and Ken O'Brien, Reactor Inspector, Region III.

During the telephone conference, your staff stated that on November 1, 2000, at 1:40 p.m. CST, all three of the safety-related Cooling Water System (CWS) pumps were declared inoperable. This meant that both reactor units at PINGP were not in compliance with the requirements of TS 3.3.D.2., which would require that the actions of TS 3.0.C. be complied with. TS 3.0.C required that both units be in hot shutdown in 6 hours and in cold shutdown in the following 30 hours. As a result, the PINGP staff requested that a Notice of Enforcement Discretion (NOED) be issued pursuant to the NRC's policy regarding exercise of discretion for an operating facility, set out in Section VII.c, of the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy) in NUREG-1600, and be effective for the period November 1, 2000, until November 14, 2000. This letter documents our telephone conversation on November 1, 2000, at 3:15 p.m. CST when we orally issued this NOED.

Your staff's request indicated that a NRC Safety System Design Inspection (SSDI) team on site performing a routine inspection had raised questions with respect to the downgrade of the Filtered Water System (FWS) from Quality Assurance (QA) Type I to QA Type III in 1977, and the effect of this downgrade on the operability of the Cooling Water System (CWS). Specifically, the NRC inspection team questioned why the CWS pumps were considered operable with a nonsafety-related system that could not be credited for accident mitigation providing pump shaft bearing water flow. In the 1988 to 1990 time frame, the FWS was modified to tie in well water so that a cleaner supply of water to the bearings was available which would enhance bearing life and reduce maintenance on the small filters at the pump. The well water source does not have a safety-related power source. Additionally, some of the steel piping in the FWS was replaced with polyvinyl chloride (PVC) piping. Based on discussions with bearing and pump vendors and evaluation of the concern, your staff determined that bearing water flow was required to consider the three safety-related CWS pumps operable. Because of the modifications made to the FWS, it could not be credited for accident mitigation and the three safety-related CWS pumps were declared inoperable.

In your staff's request for enforcement discretion it was stated that the FWS, even though downgraded, has remained in place and functional throughout plant operation and that the filters in the system are in the plant's Preventive Maintenance Program. A walkdown of the system was performed to assess its overall condition and a pipe stress analyst has made a qualitative evaluation of the PVC piping and noted that it was adequately supported and that because of the generally flexible nature of PVC piping, the pipe would likely survive a seismic event. Your staff also considered the impact of the loss of the three safety-related CWS pumps' bearing water flow on the ability of the system to perform its accident mitigation functions. The increase in the potential for failure of the pumps to run in response to a transient or accident initiating event was assumed to be small, since diverse means of providing bearing water flow are available with the existing system. However, a significant increase in plant risk can occur for those initiating events that directly result in the loss of bearing water flow and the loss of other equipment important to safety. The only initiating events identified by your staff in this category were a significant seismic event and loss of offsite power (LOOP).

Your staff noted that PINGP is located in a region of low seismic activity, such that the frequency of strong seismic events near the plant is expected to be very low and that a significant seismic event was unlikely during the 14 days requested to modify the FWS. Your staff also noted that the effects on loss of the FWS due to a LOOP were mitigated by other aspects of plant design combined with the compensatory measures planned to be put in place during the 14 days requested to allow a temporary modification to be designed and installed. Your staff concluded that the risk of continued operation with the nonsafety-related FWS was low. This was based on the low likelihood of risk-significant initiating events, the equipment that remains available to protect the decay heat removal safety function should an event occur, the compensatory measures put in place, and the limited time over which the condition will exist. Therefore, the risk to the public of temporary operation with the nonsafety-related FWS was considered to be low and to be no greater than the TS required shutdown to cold shutdown of both units.

Your staff proposed the following compensatory measures to be implemented throughout the duration of the NOED. An hourly fire watch for the lower level of the screenhouse; a list of equipment to be protected, based on a risk assessment to identify accident sequences that have the potential to increase risk, that will only be removed from service for essential corrective maintenance; and a dedicated operator in the screenhouse for the purpose of providing a backup bearing water supply. In addition to the dedicated operator, two hoses connected to the safety-related cooling water system, tools to make the connection of the hoses to the bearing supply piping, and procedural guidance are staged in the screenhouse.

Your staff stated that the request has been reviewed and approved by the PINGP Operations Committee.

A follow-up call was conducted on November 3, 2000, with the licensee to clarify several statements made in the NOED request. Item 3 of Attachment 1 of the NOED request stated that the completion of the temporary modification to provide bearing water from a safety-related portion of the cooling water system to the bearings would restore the safety-related CWS pumps to operable. It was clarified that only the pumps for which the modification is performed (currently planned for only the two diesel-driven CWS pumps) would be considered operable. This would mean that one of the safety-related CWS pumps (the swing pump) would remain inoperable. Item 6 indicated that the compensatory measure backup supply of bearing water consisted of a single hose. It was clarified that two hoses would be utilized.

The NRC accepted the licensee's safety rationale, combined with compensatory actions, as an adequate basis for this NOED. Following the phone call on November 1, 2000, the NRC resident inspectors verified that the compensatory actions had been put in place as stated. The staff also accepted the proposed duration of the NOED based on the time to design and implement a temporary modification to the FWS. Both units of PINGP are currently operating at full power. In order to avoid the transient associated with a dual plant shutdown, the NRC staff concluded that the requested NOED should be authorized. Based on considerations discussed in the previous paragraphs, the staff concluded that Criterion 1 of Section B.2 and the applicable criteria in Section C.4 of NRC Manual Chapter 9900, "Technical Guidance, Operation - Notice of Enforcement Discretion," were satisfied. Criterion 1 of Section B.2 states that for an operating plant, the NOED is intended to avoid an undesirable transient as a result of forcing compliance with the license and, thus, minimizes the potential safety consequences and operational risks.

On the basis of the staff's evaluation of your staff's request, we have concluded that a NOED is warranted because we are clearly satisfied that this action involves minimal safety impact, is consistent with the enforcement policy and staff guidance, and has no adverse impact on public health and safety. Therefore, it is our intention to exercise discretion not to enforce compliance with TS 3.0.C as applied to TS 3.3.D.2 for the period from 4:34 p.m. CST, November 1, 2000, until 11:59 p.m. CST on November 14, 2000, unless a plant shutdown occurs prior to that time. If a plant shutdown occurs, the PINGP will be required to be in compliance with TS 3.3.D.2 prior to startup.

J. Sorenson

-4-

As stated in the Enforcement Policy, action will be taken, to the extent that violations were involved, for the root cause that led to the noncompliance for which this NOED was necessary.

Sincerely,

/RA/

Geoffrey E. Grant, Director
Division of Reactor Projects

Docket Nos. 50-282; 50-306
License Nos. DPR-42; DPR-60

cc w/encl: Site General Manager, Prairie Island
Plant Manager, Prairie Island
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G. Eckholt, Site Licensing Manager
S. Northard, Nuclear Asset Manager
J. Malcolm, Commissioner, Minnesota
Department of Health
State Liaison Officer, State of Wisconsin
Tribal Council, Prairie Island Dakota Community
J. Silberg, Esquire
Shawn, Pittman, Potts, and Trowbridge
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