

October 29, 1979

Mr. Harold R. Denton, Director Office of Nuclear Reactor Regulation U. S. NUCLEAR REGULATORY COMMISSION Washington, D. C. 20555

Attention: Mr. D. G. Eisenhut, Acting Director Division of Operating Reactors

Gentlemen:

## DOCKET NOS. 50-266 AND 50-301 REQUIREMENTS FOR AUXILIARY FEEDWATER SYSTEMS POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

Your letter dated September 21, 1979, advised us of the requirements for the auxiliary feedwater (AFW) systems at the Point Beach Nuclear Plant. These requirements were identified as falling into two categories: generic requirements applicable to most Westinghouse designed operating plants and plant specific requirements. As requested, we have attempted to evaluate these requirements to determine the degree to which the Point Beach Nuclear Plant currently conforms to these requirements. This evaluation is, in some cases, incomplete at this time. Our Staff has been involved in responding to numerous other bulletins, orders, and information requests, including the NUREG-0578 response. Many of these bulletins, orders and information requests involve matters which we feel are of more immediate importance than the Point Beach Nuclear Plant AFW system. Accordingly, they were given a higher priority in allocation of our considerable but finite Staff resources. We were guided in this allocation, in part, by recognizing that the design of the AFW system at Point Beach already provides for considerable redundancy and reliability. Accordingly, we have been unable to complete our evaluation of every recommendation. As a result, we hereby request that our responses to a number of these items be deferred until January 31, 1979.

Listed below are each of the short term and long term recommendations contained in Enclosure 1 to your letter. They are identified using the same coding provided by the NRC. Our evaluation and response to these items follow the code for each item.

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## **RECOMMENDATION GS-1**

We have evaluated this recommendation which concerns Technical Specification requirements to limit the time that one AFW system pump and its associated flow train can be inoperable. The existing Point Beach Technical Specifications specify that prior to taking a reactor critical, three of the four AFW pumps must be operable for two unit operation or two of the three associated AFW pumps must be operable for single unit operation. After the reactors are operating, one of the operable AFW systems may be out-ofservice for up to 24 hours. If the system cannot be restored to an operable status within 24 hours, the affected unit must be shut down. If the system cannot be restored to service within an additional 48 hours, the affected unit must be cooled down to less than 350°F. These requirements are more stringent than those proposed; hence, no modification of the Technical Specifications is contemplated.

### **RECOMMENDATION GS-2**

All manual valves in the AFW system that could interrupt all AFW flow are presently locked open. Point Beach Nuclear Plant administrative controls, which have been in effect for several years, include monthly valve lineup checks to verify that these valves remain locked open. We do not feel that the inclusion of the monthly valve verification inspection of the auxiliary feedwater system, which is only one of the several systems routinely inspected, into the plant's Technical Specifications is necessary or appropriate. Our administrative procedures, and compliance with the provisions of these procedures, are subject to inspection by IE personnel at any time and can be the subject of NRC compliance action if necessary. We, therefore, see absolutely no reason to include the monthly inspection of the auxiliary feedwater system in the Technical Specification surveillance requirements.

## **RECOMMENDATION GS-4**

Our evaluation of this recommendation is not complete.

## RECOMMENDATION GS-5/GL-3

The plant Staff is presently evaluating equipment modifications which will permit operation of the steam driven auxiliary feedwater pumps independently of any alternating current power source for an indefinite period of time exceeding two hours. This modification will probably consist of a bearing oil cooler which requires no AC power. It is anticipated that the equipment will be modified as necessary and fully operational by the January 1, 1981 date specified for longer term auxiliary feedwater system reliability improvements. Pending these improvements, measures will be taken to ensure that in the event of the total loss of all alternating current, an operator will be stationed at the turbine driven pump to monitor pump bearing and lube oil temperatures and to operate the unit if necessary in an on-off mode.

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#### RECOMMENDATION GS-6

Our evaluation of this recommendation is not complete.

## P\_COMMENDATION GS-7/GL-5

Our evaluation of this recommendation is not complete.

## ADDITIONAL SHORT-TERM RECOMMENDATIONS

1. Redundant level indications and low level alarms in the control room for the AFW primary water supply -- The primary water supply for the AFW system at the Point Beach Nuclear Plant is the condensate storage tanks. There are two tanks, each with a capacity of 45,000 gallons. They are normally operated cross connected with both tanks able to supply all AFW pumps. Each tank is equipped with an independent level indicating system and high and low level alarms. Level indication is both local and in the control room. The high/low level alarms are annunciated in the control room. The low level alarm setpoint is above the Technical Specification minimums of 10,000 gallons for each operating unit. This provides over 25 minutes for operator action assuming that the largest capacity AFW pump is operating. At Point Beach Nuclear Plant, the water supply for each operating auxiliary feedwater pump can be shifted from the primary source to the secondary source by opening a single motor operated valve controllable from the control room.

If the two condensate storage tanks are operated independently, there would be no redundancy of level indication and low level alarms; however, that situation involves off normal operating conditions. It is estimated that such split operation occurs approximately two weeks in a year. Because of this and because of the ease with which the AFW pump water supply can be shifted to the secondary source, we conclude that the installation of additional redundant instrumentation on each condensate storage tank is not justified.

- Perform a 72-hour endurance test on all AFW system pumps --AFW pump endurance tests shall be conducted as required. It is anticipated that these tests will be completed by January 1, 1980.
- 3. Implement the requirements of Item 2.1.7.b of NUREG-0578 --Please refer to our letter dated October 20, 1979. The attachment to that letter discusses our response to this item and commits, depending upon availability of supply, to having this equipment operable by July 1, 1980.
- Local manual realignment of valves for periodic tests on AFW systems -- Our evaluation of this recommendation is not complete.

#### RECOMMENDATION GL-4

Our evaluation of this recommendation is not complete.

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In addition to the various short term and long term recommendations identified and discussed above, Enclosure 2 to your letter requested additional information regarding the basis for auxiliary feedwater system flow requirements. We shall request this design basis information from the plant's NSSS vendor and forward it to you as soon as it is received and reviewed.

Very truly yours,

C. W. Fay, Director Nuclear Power Department

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