

DAIRYLAND POWER COOPERATIVE

La Crosse, Wisconsin

54601

August 16, 1979

In reply, please
refer to LAC-6474

DOCKET NO. 50-409

Director of Nuclear Reactor Regulation
ATTN: Mr. Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

SUBJECT: DAIRYLAND POWER COOPERATIVE
LA CROSSE BOILING WATER REACTOR (LACBWR)
PROVISIONAL OPERATING LICENSE NO. DPR-45
IE BULLETIN NO. 79-08 - ADDITIONAL INFORMATION
EVENTS RELEVANT TO BWR'S IDENTIFIED DURING
THREE MILE ISLAND INCIDENT

Reference: (1) NRC Letter, Ziemann to Linder,
dated July 20, 1979.

Gentlemen:

Our response to items in the enclosure forwarded with Reference 1
are submitted with this letter as Attachment 1.

If there are any questions concerning this matter, please contact
us.

Very truly yours,

DAIRYLAND POWER COOPERATIVE

Frank Linder

Frank Linder, General Manager

FL:RES:af

cc: J. Keppler, Reg. Dir., NRC-DRO III

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Item No. 2

1. Verify that initiation of containment isolation of the following lines or systems (reported in your response to Item 7) occurs simultaneous with or prior to all initiations of safety injection:
 - . Retention Tank Pump Discharge Line
 - . Decay Heat Blowdown Lines
 - . Main Steam System
 - . Reactor Building Ventilation System

Provide justification for not isolating these lines or prepare and implement the necessary changes to isolate these lines as required by the Bulletin.

2. Prepare and implement all necessary procedural and design changes required to conform to Item No. 2 of IEB 79-08 and provide the schedule for completion of these actions.

DPC RESPONSE:

1. The "Decay Heat Blowdown Isolation Valve" and the "Main Steam Isolation Valve" both close on a low water level signal of < -12 inches as sensed by the reactor safety system, which also provides the signal to initiate safety injection, "ECCS".

The Retention Tank Pump Discharge Isolation Valve and Reactor Building Ventilation System do not presently close on low reactor water level.

The Retention Tank Discharge Isolation Valve is only used to permit discharging the contents of a Retention Tank. Normally, the valve is closed, with a manual valve also closed in the line.

The Reactor Building Ventilation System which isolates on High Radiation, High Containment Building Pressure, and High Reactor Pressure. The High Radiation trip setpoint has been reduced such as to isolate the ventilation system in the event of a small leak.

In addition to the above, an Operations Memorandum has been issued to insure isolation of the Containment Ventilation System manually in the event of low reactor water level.

2. A study of the feasibility of installing additional automatic or manual isolation features to the Retention Tank Pump discharge Isolation Valve and the Reactor Building Ventilation System will be initiated. If changes are necessary, they will be accomplished during the next scheduled refueling outage which is expected to occur in March 1980.

Item No. 4

1. Clarify your response to indicate whether operators have been instructed to utilize other available information to initiate safety systems. Provide your schedule for completion of this action.

DPC RESPONSE:

1. The LACBWR Operating Manual, Volume I, Section 3.3 Emergency Procedures provide steps to insure safety systems are operating and initiate operation of safety systems when necessary. Since LACBWR is a direct cycle Boiling Water Reactor, the redundant water level channels, previously described, provide the primary means of determining water inventory of the reactor vessel. LACBWR Operations Memorandum No. DPC-75 was issued on May 16, 1979 which itemized indications that should be used to provide supplemental information for any manual actions, which are:
 - 1) Area Radiation Monitors
 - 2) Continuous Air Activity Monitors
 - 3) Humidity Monitoring Equipment
 - 4) Containment Building Pressure
 - 5) Reactor Pressure

Item No. 5

1. Your response to Items 5a and 5b does not address training instructions. Amend your response to address this matter.

5a AMENDED DPC RESPONSE:

LACBWR Operating Manual, Volume I, Section 3.3, Emergency Procedures were reviewed and no instance of requiring operators to override automatic actions of engineered safety features were found. The procedures do, however, require manual initiation of required engineered safety features in the event that the automatic actions fail to initiate them.

LACBWR requalification program uses the existing Emergency Procedures in the LACBWR Operating Manual for all training in this area. Therefore, no instance of requiring overriding of automatic actions of engineered safety features exist in the training program. LACBWR does not utilize specially prepared training instructions.

5b AMENDED DPC RESPONSE:

Since LACBWR is a boiling water direct cycle reactor, water level is the main indication of evaluating the water inventory in the reactor vessel. Additional indication is provided to aid in determining manual actions to isolate a leak utilizing reactor pressure; high containment building radiation levels are indicated by continuous activity air monitors, and humidity monitoring equipment.

Use of these additional indications are contained in the existing Emergency Procedure and is therefore included in all training provided to the operators as part of the retraining program.

Additional instruction to rely on other than vessel level indication for manual actions during a reactor accident is provided through the use of DPC Operations Memorandum No. DPC-75. This memo was issued on May 16, 1979, and documentation that all plant operations reviewed this memo was completed on May 31, 1979. Regularly scheduled review of this Operations Memorandum has been included into the scheduled lecture series of the requalification program until it is incorporated into the LACBWR Operations Manual.

Item No. 5

2. *Your response to Item 5a is incomplete. Your review of operating procedures and training instructions should assure that operators are directed not to override automatic actions of engineered safety features.....(e.g., vessel integrity). Amend your response to clarify this point.*

5a AMENDED DPC RESPONSE:

LACBWR Operating Manual, Volume I, Section 3.3, Emergency Procedures, were reviewed and no instance of requiring operators to override automatic actions of engineered safety features were found. The procedures do, however, require manual initiation of required engineered safety features in the event that the automatic actions fail to initiate them.

In addition, LACBWR Operations Memorandum No. DPC-75, issued May 16, 1979, is used to supplement existing operating procedures and directs operators not to override automatic actions of engineered safety features unless continued operation of engineered safety features will result in unsafe plant condition (e.g., vessel integrity).

Since the Operating Manual and Operations Memorandum are used as the training material, operators are provided training to not override automatic safety features until the entire situation has been evaluated.

3. *It is not clear from your response whether your review of operating procedures and training instructions with respect to the actions directed by Item 5b included additional information and instructions to operators to not rely upon vessel level indication alone for manual actions but to also examine other plant parameter indications in evaluating plant conditions. Amend your response to clarify this point.*

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5b AMENDED DPC RESPONSE:

As stated in the amended answers, operators are directed to use the additional instrumentation and not depend on vessel level indications alone for manual actions. These instructions are contained in the LACBWR Operating Manual, Operations Memoranda, and in the operator requalification lecture series.

Item No. 5

4. *Provide a schedule for any actions on Item 5 that have not yet been completed.*

AMENDED DPC RESPONSE:

All actions subject to Item 5 are already being conducted at LACBWR. Therefore, no schedule is provided.

Item No. 6

1. *Your response did not clearly indicate that all accessible safety-related valves had been inspected to verify proper position. Nor was a schedule for performing the position verification for all safety-related valves provided. Please supplement your response to provide this information.*

DPC RESPONSE:

1. LACBWR's response did not clearly indicate that all accessible safety-related valves had been inspected to verify proper position, because the plant was in Condition 5 Refueling for a scheduled refueling and maintenance outage. Therefore, the valves had not been inspected to verify that they were in the proper position for operation.

A schedule for performing the position verification for all safety related valves was provided in that the positions are verified after refueling or maintenance outages where maintenance could have affected the position of valves beyond those covered by ACP-15.2 - Equipment Lock and Tag Control. The valve check-off lists were completed on May 25, 1979, thus verifying all valves in their proper position for plant operation.

Item No. 7

1. *Discuss how assurance is achieved for preventing inadvertent transfer of radioactive gases and liquids on resetting of engineered safety features.*

Item No. 7 - (Cont'd)

2. Provide your schedule for completion of the study regarding the basis upon which continued operability of the features designed to prevent inadvertent transfer of radioactive liquids and gases from primary containment.

DPC RESPONSE:

1. The reactor ventilation system will reopen on the resetting of the reactor pressure and containment building trips, whereas the radiation monitor trip requires manual resetting of its trip. Since the radiation monitor trip would not automatically reset, the dampers remain closed to prevent the inadvertent transfer of radioactive gases. As an added precaution, Operations Memorandum No. 79 has been issued which requires that the control switch is turned to close at the receipt of an automatic closure or a low reactor water level.

The decay heat blowdown valve is normally closed and is only used as a means of water removal during reactor heatup and cooldown. It closes on low water level, but resets. This valve is normally used to blowdown approximately 5 to 15 gpm of water to the main condenser to compensate for seal injection water injected into pump seals and control rod drives when the reactor is not steaming.

2. A study of the features designed to prevent inadvertent transfer of radioactive liquids and gases will be made and required design changes identified and implemented during the next scheduled refueling outage.

Item No. 8

1. We understand from your response that operability tests are performed on redundant safety related systems prior to removal of any safety related system from service. Since you may be relying on prior operability verification within the current technical specification surveillance interval, operability should be further verified by at least a visual check of the system status to the extent practicable, prior to removing the redundant equipment from service. Please supplement your response to provide a commitment that you will revise your maintenance and test procedures to adopt this position.

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Item No. 8 - (Cont'd)

2. *It is not clear from your response that all involved reactor operational personnel in the oncoming shift are explicitly notified about the status of systems removed from or returned to service. Please indicate how this information is transferred at shift turnover.*

DPC RESPONSE:

1. Operability of safety systems is presently verified by a visual check, i.e., Channel Check, and qualitative determination of acceptable operability by observation of channel behavior during observation which is performed on some systems as often as once per shift per LACBWR Technical Specifications, and an indication of the observation of a given system, i.e., water level meter reading, recorded on the operator's log. Where practicable, maintenance and test procedures will be revised to reflect at least a visual check of the system status.
2. In addition to the Maintenance Request which insures that the Shift Supervisor is aware of system status, when a system or component is taken out of service, it is entered in the Control Room log. While it is out of service, each shift enters the item in the log under the heading of the shift, in the space for Equipment Out of Service or Out of Commission, as appropriate. When the system is placed back in service and declared operable, it is entered in the control room log and then dropped from subsequent shift entries in the Out of Service or Out of Commission space. This information is also verbally passed on to and acknowledged by both Shift Supervisors and operators during shift transition, per ACP-02.3.