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AMERICAN ELECTRIC POWER Service Corporation



2 Broadway, New York, N. Y. 10004  
212/422-1800

June 25, 1979

Donald C. Cook Nuclear Plant Units 1 & 2  
Socket Nos. 50-315 & 50-316  
License Nos. DPR-58 and DPR-74

Mr. James G. Keppler, Regional Director  
U.S. Nuclear Regulatory Commission  
Office of Inspection & Enforcement  
Region III  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

This letter supplements our letter of May 1, 1979 (AEP:NRC:00185) by providing additional information in response to IE Bulletin 79-06A, Revision 1. On June 20, 1979 we received, by telecopy, a request for additional information as a result of the NRC staff review of our May 1, 1979 responses.

In a phone conversation held Friday June 22, 1979 with members of your staff, we were requested to supply you with responses to some parts of action items 4, 7, 8 and 10 before we were allowed to return to power. We provide you our responses in the attachment to this letter. Further clarification of our response to item 7 which was provided to the NRC on June 23, 1979 is also contained in the attachments.

Please note that we belong to a Westinghouse Owner's Group formed at the request of the Commission. Active discussions are now taking place between the group, Westinghouse, and the NRC, where some of the issues contained in your requests are being evaluated. We therefore reserve the right to modify our responses, actions or commitments once a final position is reached.

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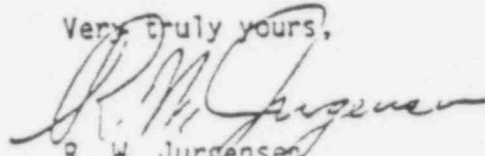
Mr. James G. Keppler, Regional Director

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June 25, 1979

This information is being transmitted to you informally, not for docketing. A formal transmittal will follow this one at the end of next week containing our responses to the requests resulting from your evaluation of our May 1, 1979 transmittal.

Very truly yours,



R. W. Jurgensen  
Chief Nuclear Engineer

RWJ:em

cc: R. C. Callen  
G. Charnoff  
R. W. Jurgensen  
R. S. Hunter  
D. V. Shaller -Bridgman  
S. A. Varga

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ATTACHMENT

Donald C. Cook Nuclear Plant Units 1 & 2  
Docket Nos. 50-315 & 50-316  
License Nos. DPR-58 & DPR-74

ACTION ITEM 4:

The lines automatically isolated by Phase A and Phase B containment isolation are listed in Table 3.6-1 of our Technical Specifications for both Unit 1 and Unit 2. Listed below are all lines penetrating the containment that do not automatically isolate on a Phase A containment isolation signal. Some of these lines are not in service or aligned with an operable flow path during power operation and these are listed separately.

LINE NORMALLY IN SERVICE OR ALIGNED WITH  
AN OPERABLE FLOW PATH THAT DO NOT BE-  
COME ISOLATED ON PHASE A SIGNAL

1. Reactor Coolant Pump Seal Supply
2. Upper Containment Spray Inlet
3. Lower Containment Spray Inlet
4. RHR to Containment Spray
5. RHR Cooldown Suction
6. RHR to RC Hot Legs (LHSI)
7. RHR from Recirculation Sump
8. Safety Injection - (High Head and Intermediate Head)
9. Boron Injection Line
10. Main Feed Water
11. Auxiliary Feed Water
12. Steam Generator Chemical Feed
13. Weld Channel Pressurization Air
14. CCW to Main Steam Penetrations
15. CCW from Main Steam Penetrations
16. CCW to Pressure Equalizing Fans

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(Continued)

17. CCW from Pressure Equalizing Fans
18. Air Particulate - Radiogas Sample Return
19. Containment Pressure Transmitters
20. CCW from Reactor Coolant Pump Oil Coolers
21. CCW from Reactor Coolant Pump Thermal Barriers
22. CCW to RCP Oil Coolers and Thermal Barriers
23. Sample to Air Particulate - Radiogas Detector
24. Non-Essential Service Water to Containment Coolers
25. Non-Essential Service Water from Containment Coolers
26. Non-Essential Service Water to Instrument Room Cooler
27. Non-Essential Service Water from Instrument Room Cooler
28. Non-Essential Service Water to RCP Motor Air Coolers
29. Non-Essential Service Water from RCP Motor Air Coolers
30. Main Steam from Steam Generators

LINES NOT NORMALLY IN SERVICE  
WHICH DO NOT RECEIVE  
PHASE A AND B SIGNALS

<u>LINE</u>	<u>MEANS OF ISOLATION</u>
1. S.I. and Accumulator Test Line	2 Manual Valves - locked closed
2. Fuel Transfer Tube	Blind Flange
3. Service Air to Containment	Manual Valve - locked closed and Blind Flange
4. Ice Loading Supply Line	Blind Flange
5. Containment Pressurization Test Line	Blind Flange
6. Ice Loading Return Line	Blind Flange
7. Refueling Water Supply	2 Manual Valves - locked closed

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<u>LINE</u>	<u>MEANS OF ISOLATION</u>
<u>(Continued)</u>	
8. Demineralized Water Supply	2 Manual Valves - locked closed
9. Refueling Cavity Drain	2 Manual Valves - locked closed
10. Dead Weight Test Connection	Manual Valve - closed
11. Lower Containment Radiation Sample	2 Manual Valves - closed
12. Upper Containment Radiation Sample	2 Manual Valves - closed
13. Instrument Room Radiation Sample	2 Manual Valves - closed
14. Incore Flux Detection System Access	Blind Flange

The Reactor Coolant Pumps (RCP) can be operated under a Phase A containment isolation. The RCP seal water discharge is isolated by Phase A containment isolation. However the seal water supply line is not isolated and the charging pumps can continue to supply seal water to the RCP's under a Phase A containment isolation. In this manner the RCP's can continue operating. A safety valve set at 150 psi, discharges to the pressurizer relief tank to prevent these lines from overpressurizing. Operator action would be required to reset Phase A containment isolation and place the seal water return line back into service by operation of each isolation valve control switch for valves QCH -250 and QCH -350. Phase A containment isolation will not be reset unless an unsafe plant condition develops in accordance with our response to item 7.

The RCP's cannot be operated under a Phase B containment isolation. Component cooling water (CCW) to and from the RCP oil coolers and thermal barrier is isolated under Phase B containment isolation. Non-essential Service Water (NESW) to and from the RCP Motor Air Coolers and Air Cooler Vents are isolated under a Phase B containment Isolation. Operator action would be required to reset Phase B containment isolation and place these lines in service by operation of each isolation valve control switch. Phase B containment isolation will not be reset unless an unsafe plant condition develops requiring the use of the RCP's in accordance with our response to item 7. Should a subsequent unsafe condition develop from the use of the RCP's such as loss of seal integrity, the RCP's will be tripped and Phase B containment isolation manually initiated.

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Action Item 7:

- 7A) Operating procedures and training instructions have been reviewed and in no case is the operator instructed to reset or override any automatic ESF actuation signal. The procedures have been changed to include the statement "unless it would result in unsafe plant conditions." This requirement does not apply to spurious or inadvertent actuation when the cause is known.
- 7B) After 50°F of sub-cooling has been achieved, termination of Safety Injection operation prior to 20 minutes is only permissible if it has been determined that continued operation would result in an unsafe plant condition. This requirement does not apply to spurious or inadvertent actuation when the cause is known.
- 7C) The following procedural steps exist requiring that a minimum of 2 Reactor Coolant Pumps remain in operation as long as the pump is providing forced flow and continued operation shall not result in any unsafe plant condition.

PROCEDURE STEPS

- 4.2.7 Maintain a minimum of 2 Reactor Coolant pumps running for primary coolant circulation.

KEY POINTS

1. It is essential that a minimum of two R.C.P.'s be maintained in service in order to provide forced cooling of the Reactor core.
2. Pumps operation must be continued even though the normal minimum operating requirements may not be met.
3. If the continued operation of the R.C.P.'s threatens to cause an increase in the severity of the accident condition, the pump or pumps should be removed from service.
4. If component cooling water flow to the R.C.P.'s is lost bearing failures will occur very rapidly and therefore the pump or pumps must be removed from service. It is estimated that bearing failure may occur within 5 minutes of loss of component cooling water.

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Action Item 8:

A complete valve lineup walk around of all safety related valves including locked valves will be performed prior to the startup following the current May 19, 1979 Unit 2 outage and following the current April 6th outage of Unit 1.

Action Item 10:

There is an administrative requirement which has been in effect since July 7, 1978 which instructs the Shift Supervisor, at the start of each shift, to place in his log all Tech. Spec. items that are inoperable. The requirement also includes instructions to log any equipment that becomes inoperable during the shift and also any equipment that is returned to operable status during the shift. These logs must be reviewed by the incoming Shift Supervisor and verified by signoff. In this manner the status of safety related systems is known at a shift change.

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