

U.S. NUCLEAR REGULATORY COMMISSION  
Region III Office of Public Affairs  
801 Warrenville Road, Lisle, IL 60532-4351

NEWS ANNOUNCEMENT: RIII-97-86 Sept. 22, 1997  
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NOTE TO EDITORS:

The NRC staff has issued the attached Confirmatory Action Letter to American Electric Power Co., documenting the utility's agreement to evaluate and resolve a number of issues related to the functioning of certain safety systems and components at the D. C. Cook Nuclear Power Station near Bridgman, Michigan.

The two units at the station were shut down earlier this month to resolve a question on the adequacy of water flow during the long-term reactor cooling mode following a potential major reactor accident.

This water flow issue and other issues were identified during an NRC engineering and design team inspection which was completed September 12 and in additional inspections and reviews by the NRC Region III staff.

The utility will meet with the NRC staff prior to returning the two units to service. No date has been set for the meeting, which will be open to public observation.

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September 19, 1997

CAL No. RIII-97-011

Mr. E. E. Fitzpatrick  
Executive Vice President  
Nuclear Generation Group  
American Electric Power Company  
500 Circle Drive  
Buchanan, MI 49107-1395

SUBJECT: CONFIRMATORY ACTION LETTER

Dear Mr. Fitzpatrick:

In August of this year, an NRC Architect and Engineering (AE) team began inspection activities at your D. C. Cook facility. During this inspection, the AE team identified issues which resulted in concerns with the operability of safety related systems and components. In response to these inspection findings your personnel began evaluating these issues and also identified operability concerns with some components. In response to one of these issues you elected to shutdown both units until you could resolve the issue.

In a letter (AEP:NRC:1260G1, copy attached) from you to the NRC on September 18, 1997, you identified several issues and the actions you intend to take on those issues prior to start up of either unit at the D. C. Cook facility. These items are repeated below as items (1) through (7) along with additional concerns of our own.

**(1) Recirculation Sump Inventory/Containment Dead Ended Compartments Issue (AEP)**

Analyses will be performed to demonstrate that the recirculation sump level is adequate to prevent vortexing, or appropriate modifications will be made.

**(2) Recirculation Sump Venting Issue (AEP)**

Venting will be re-installed in the recirculation sump cover. The design will incorporate foreign material

exclusion requirements for the sump.

**(3) Thirty-six Hour Cooldown, with One Train of Cooling (AEP)**

Analyses will be performed that will demonstrate the capability to cool down the units consistent with design basis requirements and necessary changes to procedures will be completed.

**(4) ES-1.3 (Switchover to Recirculation Sump) Procedure (AEP)**

Changes to the emergency procedure used for switchover of the emergency core cooling and containment spray pumps to the recirculation sump will be implemented. These changes will provide assurance there will be adequate sump volume, with proper consideration of instrument bias and single failure criteria.

**(5) Compressed Air Overpressure Issue (AEP)**

Overpressure protection will be provided downstream of the 20 psig, 50 psig, and 85 psig control air regulators to mitigate the effects of a postulated failed regulator.

**(6) Residual Heat Removal (RHR) Suction Valve Interlock Issue (AEP)**

A Technical Specification change to allow operation in Mode 4 with the RHR suction valves open and power removed is being processed. Approval of this change by the NRC will be required prior to restart.

**(7) Fibrous Material in Containment (AEP)**

Removal of fibrous material from containment that could clog the recirculation sump will be completed.

**(8) Refueling Water Storage Tank (RWST) Mini-flow Recirculation Lines (NRC)**

Only two of six mini-flow recirculation line valves have leakage verification tests. Justification will be provided that the total leakage for the six valves is less than 10 gpm to ensure that Part 100 dose rates are not exceeded if containment sump water were to leak back to the RWST during a design basis accident.

**(9) Instrument Uncertainties Incorporated into Procedures and Analyses (NRC)**

Emergency procedures and other important-to-safety procedures, calculations, or analyses will be reviewed to account for instrument uncertainties.

With regard to item (4) above, I would remind you of the need to ensure the revised procedure is validated and all licensed operating crews are trained on its use.

It is my understanding that you will perform the actions described in items (1) through (8) above for each D. C. Cook unit prior to restart of the respective unit. Further, I understand AEP will meet with the NRC to discuss resolution of all of the above issues (including item (9)), as appropriate, prior to restarting the D. C. Cook Units.

Lastly, given the limited scope of our inspection and its substantial findings, it is necessary to determine the extent of these problems and their potential impact on other systems. It is my understanding, in the short term, you will perform an assessment to determine whether these types of engineering problems exist in other safety related systems and whether they affect system operability. In the long term, you will evaluate your programs for improvements to assure these kinds of engineering problems are promptly identified, thoroughly evaluated, and resolved.

Nothing in this confirmatory action letter is intended to preclude you from taking actions which you deem necessary to place the plant in a safe condition or maintain it in a safe condition in the event of changing conditions.

Pursuant to Section 182 of the Atomic Energy Act, 42 U.S.C. 2232, you are required to:

- (1) Notify me immediately in writing if your understanding differs from that set forth above;
- (2) Notify me if for any reason you cannot complete the actions within the specified schedule and advise me in writing of your modified schedule of the change; and
- (3) Promptly notify me in writing if for any reason you cannot complete the actions discussed above.

Issuance of this Confirmatory Action Letter does not preclude issuance of an order formalizing the above commitments or requiring other actions on the part of the licensee; nor does it preclude the NRC from taking enforcement action for violations of NRC requirements that may have prompted the issuance of this letter. In addition, failure to take the actions addressed in this Confirmatory Action Letter may result in enforcement action.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such

information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Sincerely,

/signed/

A. Bill Beach  
Regional Administrator

Docket No. 50-315; 50-316