CENTRAL MAIL

AMERICAN ELECTRIC POWER *Service Corporation*

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AEP:NRC:00039
August 11, 1978

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

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

Dear Mr. Keppler:

This letter responds to your letter of June 12, 1978 which transmitted to us IE Bulletin No. 78-08 entitled "Radiation Levels from Fuel Element Transfer Tubes." The actions which we have been or will be taking which correspond to Items 1 - 4 in the Bulletin are described in the attachment to this letter.

Very truly yours,

John E. Dolan

John E. Dolan

JED:em
Attachment

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DONALD C. COOK NUCLEAR PLANT UNITS 1 & 2
DOCKET NOS. 50-315 & 50-316
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ATTACHMENT TO AEP:NRC:00039

1. Prior to plant start up, a review of shielding design of the plant areas adjacent to the fuel transfer tube was performed in the American Electric Power Service Corporation. As a result, additional shielding was recommended and subsequently installed.

   Potential high radiation areas during transfer of irradiated fuel through the fuel transfer tube were identified by the Plant Radiation Protection Section and specific precautionary actions were taken as described in Items 2, 3 and 4. These actions were taken prior to moving the first irradiated fuel element from Unit 1. These same actions have been repeated for each subsequent refueling of Unit 1 and are expected to be performed on each refueling of Unit 1 and Unit 2.

2. In the electrical penetration area around the containment building, behind and above a shielding labyrinth, a portion of the transfer tube is accessible. Gates and locks were installed at the entrance to this labyrinth area which are locked prior to the first movement of an irradiated fuel element during each refueling. The keys to that lock are available only to the supervisory personnel of the Plant Radiation Protection Section and Operations Department. In the containment pipe tunnel at elevation 598' the area around the reactor coolant drain tank is permanently gated and locked.

3. The entrance to the electrical penetration area described in Items 2 and 4c is conspicuously posted as a high radiation area prior to the first movement of an irradiated fuel element during each refueling.

   The reactor coolant drain tank area described in Items 2 and 4b is contained within a larger area which is always posted as a high radiation area.

4. During the movement of the first irradiated fuel element from Unit 1, as specified by the Plant Manager's Special Instruction, surveys were taken at all known accessible points or points of closest accessibility along the transfer canal. The areas surveyed included the following:

   a. Lower Containment floor, elevation 598',below the refueling cavity.

   b. Containment pipe tunnel, elevation 598' around the area of the reactor coolant drain tank.

   c. Electrical penetration tunnel, elevations 596', 612' and 633' in the area between the Containment and Auxiliary Buildings.

   Results of these surveys have shown no change in radiation levels on the Containment floor, less than 100 mR/hr near the reactor coolant drain tank, and a few areas of streaming in the electrical penetration area which did not exceed 25 mR/hr. A special file of the results of these surveys is being assembled and will be maintained on future survey results.