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UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

October 23, 1978

Docket Nos.

APPLICANT: Consumers Power Company

Midland Plant, Units 1 & 2 FACILITY:

On September 14, 1978, the NRC staff met in Bethesda, Maryland with Consumers Power Company (CPCO), Bechtel Associates, and the Babcock & Wilcox Company. Meeting attendees are listed in Enclosure 1.

Separation criteria and administrative procedures for installation of Class IE balance-of-plant (BOP) equipment and circuits for Midland Plant, Units 1 & 2 were identified in Amendment 32 of the PSAR and were previously approved by the staff's letter of October 18, 1977. A subsequent CPCO letter dated March 30, 1978 notified the staff of a change affecting the implementation aspects of the criteria; i.e., CPCO decided to use isolation cabinets to isolate the majority of Class IE to non-Class IE circuits, and thereby reduce the need to demonstrate isolation of such circuits through analyses. This CPCO letter also provided separation criteria for the nuclear steam supply system (NSSS) portion of the plant scope, and requested staff approval of the NSSS criteria and approval of the changes associated with the BOP criteria. The purpose of the meeting was to discuss this March 30, 1978 letter and the changes to the design on which it is based.

CPCO stated that the new BOP design utilizes isolation devices, located in isolation cabinets, to separate all but two Class IE circuits from non-Class IE circuits. Testing and/or analyses will be used to confirm that the isolation devices will prevent all coupling between the Class IE and the non-Class IE circuits. The new design is based upon a three-bay cabinet design in which safety channels A and B will be located in separate bays, and channels C and D will share a bay with a barrier separating the two channels.

The two circuits which are not routed through the isolation cabinets provide Class IE inputs to the non-Class IE diesel generator synchronizing circuits. As previously approved, analyses will be utilized to demonstrate acceptable separation of these two circuits.

CPCO stated that the NSSS Class IE to non-Class IE circuits will also use isolation devices. Thus, the same separation criteria applies for the NSSS scope. However, CPCO further stated that the control rod drive control system (CRDCS) trip circuit breakers are classified as non-Class IE. The staff noted that these breakers are required to perform a safety function on both the input trip circuitry and the opening of the breaker contacts. The opening of the breaker contacts disconnects non-Class IE power from the non-Class IE control rod drive system. Failure of these contacts to open on demand can negate the action of the reactor trip system. Therefore, the staff requires that these breakers be qualified to the requirements of a safety system. CPCO replied that documentation to support the qualification of these breakers to safety system requirements is available and will be submitted for staff review.

The staff stated that the use of isolation cabinets represents a general improvement in the implementation aspects of the separation requirements of IEEE Standard 384-1974 and the recommendation of Regulatory Guide 1.75, compared to the previously proposed method of using analyses. The staff expects to conclude its review of this change and respond to the March 30, 1978 letter about mid-October, 1978.

Darl Hood, Project Manager

Light Water Reactors Branch 4 Division of Project Management

Enclosure: List of Attendees

ENCLOSURE

ATTENDEES

September 14, 1978

NRC

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Consumers Power Company

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