



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555
September 8, 1988

MEMORANDUM FOR: Sholly Coordinator

FROM: Byron Siegel, Project Manager
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

SUBJECT: REQUEST FOR PUBLICATION IN BIWEEKLY FR NOTICE - NOTICE
OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO PROVISIONAL
OPERATING LICENSE AND PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION AND OPPORTUNITY FOR HEARING
(TACS 69262 AND 69263)

Commonwealth Edison Company, Docket Nos. 50-237 and 50-249, Dresden Nuclear Power
Station, Unit Nos. 2 and 3, Grundy County, Illinois

Date of application for amendment: August 31, 1988

Description of amendment request: The amendments would provide specific operability requirements for low pressure ECCS systems while the reactor is in cold shutdown and refueling conditions. Present Dresden Technical Specifications require Low Pressure Coolant Injection (LPCI) and both Core Spray subsystems to be operable whenever irradiated fuel is in the reactor vessel except that all the subsystems may be inoperable in cold shutdown provided no work is being done which has the potential for draining the reactor vessel. Also, containment cooling is required whenever irradiated fuel is in the reactor vessel and reactor coolant temperature is greater than 212°F with the same exception as for the LPCI and Core Spray subsystems while in cold shutdown. Since the primary system is not pressurized in cold shutdown or refuel, the ECCS water makeup requirements are significantly less than for the conditions of reactor power operation or hot shutdown.

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Specifically, one proposed change would rewrite present Technical Specification 3.5.F.3 and replace it with more prescriptive requirements for ECCS operability during cold shutdown and refueling. The proposed Technical Specifications would be applicable when the reactor is in cold shutdown or refueling condition with irradiated fuel in the reactor vessel and would require at least two pumps of low pressure ECCS to be operable along with an operable flow path for each pump taking suction from the suppression pool or the condensate storage tank and transferring water to the reactor vessel. These pumps could be the two Core Spray pumps, two Low Pressure Coolant Injection pumps, or a Core Spray pump and LPCI pump. Two new Technical Specifications are proposed, 3.5.F.4 and 3.5.F.5, to provide action requirements if one or both of the required ECCS systems are inoperable. Another new Technical Specification, 3.5.F.6, is proposed to allow all the low pressure core and containment cooling subsystems to be inoperable when the reactor is in the cold shutdown or refueling conditions and irradiated fuel is in the reactor vessel, provided that the reactor vessel head is removed, the reactor cavity is flooded, and the spent fuel pool water level is maintained above the low level alarm point with the pool to cavity gates removed.

Basis for proposed no significant hazards consideration determination:

The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92(c). A proposed amendment to an operating license for a facility involves no

significant hazards considerations if operation of the facility in accordance with the proposed amendment would not; (1) involve a significant increase in the probability or consequences of an accident previously evaluated; (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The licensee addressed the above three standards in the amendment application as follows:

(1) The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated. The licensee stated that the necessary ECCS pumps and flow paths to provide makeup water to the reactor vessel in the cold shutdown and refuel conditions would be maintained. Further, the licensee maintains that the proposed action would ensure that operations with a potential for draining the reactor vessel or core alterations are not performed without ECCS makeup capability or the reactor cavity water inventory maintained above the fuel pool low level alarm point. As an additional restriction, with both of the required ECCS pumps and/or associated flow paths inoperable, secondary containment integrity would be established. Standard Technical Specifications permit current BWR operations at other plants during similar conditions so that two ECCS pumps with associated flow paths to the reactor are available to provide sufficient makeup capability for accidents that have a potential to drain the vessel. Necessary ECCS makeup capability is maintained. Therefore, this does not involve a

significant increase in the probability or consequences of an accident previously evaluated.

2) The proposed amendment does not create the possibility of a new or different kind of accident from any previously evaluated. The licensee states that the necessary ECCS makeup capability during cold shutdown and refueling conditions would be maintained. The proposed changes would add restrictions to take all low pressure code and containment cooling systems out of service during cold shutdown and refueling conditions. The licensee further stated that these restrictions would ensure that sufficient water volume would be available in the reactor cavity and refueling pools before taking all these systems out of service. The proposed changes would not introduce any new modes of operation but would maintain necessary ECCS availability; therefore they do not create the possibility of a new or different kind of accident than previously evaluated.

3) The proposed amendment does not involve a significant reduction in the margin of safety. Fewer ECCS systems would be required to be operable in cold shutdown and refueling conditions than are required by present Technical Specifications. The licensee maintains that the present Technical Specifications are overly restrictive and do not reflect the difference in water makeup requirements for reactor power operation conditions and cold shutdown conditions. With the reactor not pressurized in cold shutdown and refueling conditions, the ECCS makeup requirements are less than when in the pressurized condition. Later BWR plants similarly require that two ECCS pumps

with associated flow paths to the reactor be available to provide sufficient water makeup capability for the cold shutdown and refueling conditions. The added action requirements if one or both of the required ECCS pumps and/or associated flow paths are inoperable would ensure that operations such as core alterations and those with a potential for draining the vessel are not conducted without ECCS makeup capability or the reactor cavity water inventory maintained above the fuel pool low level alarm point. In addition, the actions proposed will require establishing secondary containment integrity if the required ECCS pumps and/or associated flow paths are not returned to operable status.

Restrictions would also be added to present Technical Specification 3.5.F.3 requirements concerning all low pressure core and containment cooling systems being allowed out of service during the cold shutdown conditions. The proposed restrictions would require the reactor vessel head to be removed, the cavity to be flooded, the spent fuel pool gates to be removed, and the fuel pool water level to be maintained above the low level alarm point. These restrictions would also be applied to the refueling conditions.

The licensee states that the present margin of safety shall not be significantly affected because necessary ECCS water makeup capability for the cold shutdown and refueling conditions would be maintained and additional restrictions would be imposed before taking all low pressure core and containment cooling systems out of service. Hence, the changes do not result in a significant decrease in the margin of safety.

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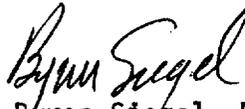
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The staff has reviewed the licensee's no significant hazards analyses given above. Based on this review, the staff proposes to determine that the proposed amendments meet the three 10 CFR 50.92(c) standards and do not involve a significant hazards consideration.

Local Public Document Room location: Morris Public Library, 604 Liberty Street, Morris, Illinois 60450.

Attorney for licensee: Michael I. Miller, Esquire; Sidley and Austin, One First National Plaza, Chicago, Illinois 60603.

NRC Project Director: Daniel R. Muller



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