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ILLINOIS POWER COMPANY



CLINTON POWER STATION, P.O. BOX 678, CLINTON, ILLINOIS 61727

DPH-0852-88
September 23, 1988
10CFR50.90

Docket No. 50-461

Document Control Desk
Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Clinton Power Station Proposed Amendment to
Facility Operating License NPF-62

Dear Sir:

Pursuant to 10CFR50.90, Illinois Power (IP) hereby applies for an amendment to Facility Operating License NPF-62 Clinton Power Station (CPS). IP requests a change to the Technical Specifications to increase the minimum volume of fuel oil required for operability of the Division II diesel generator. This increase is required due to the Fuel Pool Cooling and Cleanup (FC) system pump motors being replaced with motors that meet the requirements for environmental qualification (10CFR50.49). Completing the FC pump motor replacement fulfills IP's commitment to install the environmentally qualified FC pump motors prior to the first refueling outage.

A complete description of and justification for the change, including a basis for no significant hazards consideration, is provided in Attachment 2 to this letter. Attachment 1 to this letter contains an affidavit supporting the facts set forth in this letter.

This request for amendment is being submitted in accordance with the provisions of 10CFR170.12 and 10CFR170.21. In addition, pursuant to 10CFR50.91(b)(1), a copy of this request for amendment has been sent to the Illinois Department of Nuclear Safety.

IP has reviewed the proposed Technical Specification changes against the criteria of 10CFR51.22 for environmental considerations. The proposed changes do not involve a significant hazards consideration, do not significantly increase the amounts or change the types of effluents that

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may be released offsite, nor do they significantly increase individual or cumulative occupational radiation exposures. Based on the foregoing, IP concludes that the proposed Technical Specification changes meet the criteria given in 10CFR51.22(c)(9) for a categorical exclusion from the requirement for an Environmental Impact Statement.

NRC review and approval of this proposed change is requested prior to January 7, 1989, in order to support offloading of irradiated fuel which is scheduled for January 10, 1989. IP requests that this change be effective upon issuance of the amendment by the NRC.

Sincerely yours,



D. P. Hall
Vice President

GSL/krm

Attachments

cc: NRC Resident Office
NRC Region III, Regional Administrator
NRC Clinton Licensing Project Manager
Illinois Department of Nuclear Safety

STATE OF ILLINOIS
COUNTY OF DEWITT

DONALD P. HALL, being first duly sworn, deposes and says: That he is Vice President of Illinois Power Company; that the provided information has been prepared under his supervision and direction; that he knows the contents thereof; and that to the best of his knowledge and belief said request and the facts contained therein are true and correct.

DATED: This 23rd day of September 1988

Signed: 
Donald P. Hall

Subscribed and sworn to before me this 23rd day of September 1988.

OFFICIAL SEAL
Debra L. Bean
Notary Public, State of Illinois
My Commission Expires 10/1/90


Notary Public

Description of Proposed Change

Technical Specifications 3.8.1.1 and 3.8.1.2, which are the Limiting Conditions for Operation specified for the AC electrical power sources (for OPERATING and SHUTDOWN conditions respectively), specify the minimum amount of diesel fuel that should be contained in the diesel generator fuel storage tanks to support OPERABILITY of the diesel generator. IP requests a change to these Technical Specifications (3.8.1.1.b.2 and 3.8.1.2.b.2) to revise the number of gallons of fuel oil specified for the Division II diesel generator (1B). The number of gallons should be changed from 41,500 to 25,000 as shown on the attached marked-up pages from the CPS Technical Specifications.

Background

In January of 1986, IP submitted Amendment 36 to the FSAR for Clinton Power Station. This amendment included a revision to Section 9.1.3.3 in which it was indicated that the maximum normal temperature to which both of the Fuel Pool Cooling and Cleanup (FC) System pump motors (1A and 1B) were designed to operate could be exceeded in a post-LOCA environment. The revised section stated, "Until the first refueling, the pump motors will be tripped on a LOCA signal.... By the first refueling, replacement motors qualified to the maximum environment conditions will be installed and the LOCA-trip signal will be removed." This commitment was subsequently acknowledged in Supplement 6 of the Safety Evaluation Report.

Justification for Proposed Change

IP has prepared a plant modification to replace the FC pump motors and remove the associated LOCA shunt trips in accordance with the commitment described above. (The shunt trips automatically disconnect the FC pump motors from the safety-related bus by opening their associated breakers when a LOCA signal is received.) Removing the associated LOCA shunt trips and ensuring the FC pump motors are qualified to operate in a post-LOCA environment allows the pump motors to be regarded as safety-related essential loads powered from the Class 1E emergency busses. This effectively increases the maximum expected emergency loading for the associated diesel generators (1A and 1B). The resultant increase in the maximum expected loading thus requires a revision of the minimum fuel oil volume specified in the Technical Specifications to ensure that the diesels are capable of supplying and maintaining emergency power for all essential loads.

The fuel oil storage requirements for the diesel generators have been reviewed. The initial calculation of 48,000 gallons for the required minimum volume of fuel oil for the Division I diesel generator fuel oil storage tank was conservative. As a result, the current minimum volume specified in the Technical Specifications for the Division I diesel generator (IA) is still acceptable and in accordance with the guidance of Regulatory Guide 1.137, FUEL-OIL SYSTEMS FOR STANDBY DIESEL GENERATORS. However, the Technical Specification minimum limit of 41,500 gallons for the Division II diesel generator must be increased as noted to account for the increased fuel consumption required to support the additional load resulting from installation of the plant modification.**

Although Technical Specifications 3.8.1.1.b.2 and 3.8.1.2.b.2 must be changed to reflect the increased fuel consumption due to the increased load, no changes to any other Technical Specifications are required. Technical Specifications 4.8.1.1.2.a.5 and 4.8.1.1.2.e.8, for example, are not affected since the specified full-load-carrying capability for each diesel generator remains unchanged. (The full-load-carrying capability of the diesel generators is based on the ratings provided by the manufacturer and not on the maximum expected loading.) Additionally, a review of the diesel generator capabilities confirms that the diesel generators will continue to meet the requirements of Regulatory Guide 1.9, SELECTION, DESIGN, AND QUALIFICATION OF DIESEL-GENERATOR UNITS USED AS STANDBY (ONSITE) ELECTRICAL POWER SYSTEMS AT NUCLEAR POWER PLANTS.

Basis for No Significant Hazards Consideration

According to 10CFR50.92, a proposed change to the license (Technical Specifications) involves no significant hazards consideration if operation of the facility in accordance with the proposed change 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 loading calculation originally performed for the Division I diesel generator included the FC pump motor (IA) as a load even though it was originally designed to be shunt-tripped by a LOCA signal. Including the FC pump motor as a load was a conservative provision that was not applied to the loading calculation performed previously for the Division II diesel generator. (That is, FC pump motor IB was not included in the list of essential loads for Division II.) It was then decided that, although only one FC pump is required for cooling and maintaining the volume and quality of water in the spent fuel storage pools, FC pump motor IB must also be included as an essential load for Division II. (Thus it must be environmentally qualified and the associated shunt trip must be removed.)

- (1) The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated because the proposed change will ensure that an adequate volume of diesel fuel is available for the diesel generator (1B) to perform its intended function in mitigating the consequences of the design basis accident while carrying the maximum expected load (including the associated FC pump motor). The increased maximum expected loading for the diesel generator(s), resulting from the plant modification, does not exceed the rated capacity of the diesel generators.
- (2) The impact of the proposed change is confined to two areas of concern: diesel generator operability and the ability to maintain an adequate supply of high quality cooling water in the spent fuel storage pool(s) under post-accident conditions. The changes proposed by the plant modification have been thoroughly evaluated and found to have no adverse impact on the associated diesel generators' capability to perform their intended function during or following a design basis accident (DBA-LOCA). With respect to any concerns regarding the spent fuel storage pool, including the FC pump motors as essential loads will ensure that an FC pump is available for cooling and maintaining the volume and quality of water in the spent fuel storage pools under post-accident conditions. The proposed change therefore does not create the possibility of a new or different kind of accident from any accident previously evaluated.
- (3) The proposed change does not involve a significant reduction in a margin of safety because the increased minimum amount of diesel fuel to be stored for diesel generator 1B is well within the storage capacity of the fuel storage tank. In addition, the added electrical load requiring the extra amount of diesel fuel does not cause the maximum expected load for diesel generator 1B to exceed its rated capacity. The electrical loading and fuel storage demand for diesel generator 1B will still be in compliance with the original design requirements.