

ILLINOIS POWER

CLINTON POWER STATION, P.O. BOX 878, CLINTON, ILLINOIS 61727-0678, TELEPHONE (217) 838-8881

U-601696
L47-90(06-22)-LP
8E.100

June 22, 1990

10CFR50.91(a) (5)
10CFR50.91

Docket No. 50-461

Mr. A. B. Davis
Regional Administrator
Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

SUBJECT: Request for Waiver of Compliance Regarding
Technical Specification Limiting Condition for
Operation Related to Standby Emergency Diesel
Generator 1B

Dear Mr. Davis:

Events have occurred at Clinton Power Station (CPS) which require your prompt attention as Illinois Power (IP) requests a waiver of compliance regarding the Technical Specification Limiting Condition for Operation specified for the Division II Standby Emergency Diesel Generator (DG1B). IP specifically requests that the current limit of 72 hours for the allowed out-of-service time specified in ACTION b of CPS Technical Specification 3.8.1.1 be waived, as IP desires additional time to effect repairs in response to microbiologically induced corrosion (MIC) existing in the diesel generator heat exchangers on the 12-cylinder and 16-cylinder engines of DG1B.

IP requests that this waiver of compliance remain in effect until the DG1B heat exchangers are repaired and operability of DG1B has been restored and verified. IP estimates that this would require an additional 72 hours beyond the 72 hours allowed by the Technical Specifications. Notwithstanding, not more than seven days beyond the allowed out-of-service time will be permitted before a plant shutdown will be initiated.

9007030094 900626
PDR ADDOCK 05000461
P FDC

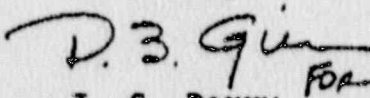
4 PG 4 08.22.90 04:48 PM

A more detailed description of the condition, including the circumstances surrounding the event, an evaluation of the safety significance, justification for this request, and a discussion of why this request does not involve a significant hazards consideration is provided in Attachment 1 of this letter. A copy of the relevant portions of CPS Technical Specification 3.8.1.1 is provided in Attachment 2 for reference.

IP has reviewed this request against the criteria of 10CFR31.22 for categorical exclusion from environmental impact considerations. The request does not involve a significant hazards consideration, or significantly increase the amounts or change the types of effluents that may be released offsite, nor does it significantly increase individual or cumulative occupational radiation exposures. Based on the foregoing, IP concludes that the proposed request meets the criteria given in 10CFR31.22 (c)(9) for a categorical exclusion from the requirement for an Environmental Impact Statement and therefore does not involve irreversible environmental consequences.

This request has been reviewed and approved by the CPS Facility Review Group.

Sincerely,


J. S. Perry
Vice President

TBE/alh

Attachments

cc: NRC Clinton Licensing Project Manager
NRC Resident Office
Illinois Department of Nuclear Safety

Description of Condition/Reason for Request

During normal shift rounds at approximately 0200 on June 22, 1990, an operator discovered (via the sight glass) that the water level in the jacket cooling water expansion tank on DG1B was overflowing. From earlier experience, IP suspected that this may be caused by service water leaking through the diesel generator heat exchanger tubes and into the DG jacket cooling water within the associated heat exchangers. [A heat exchanger is provided for each of the two tandem engines (one 16-cylinder and one 12-cylinder) associated with DG1B.] Although the condition described above would not prevent the DG from performing its safety function (since the diesel can function with direct service water flow into the cooling jacket), DG1B was removed from service at 0243 hours for investigation and repair.

MIC was first identified in the DG heat exchangers at CPS in 1989 as IP was preplanning and implementing its response to Generic Letter 89-13 and the associated supplement.* As an immediate corrective action, cleaning and closed loop chemical treatment of the DG heat exchangers were performed during planned outage 3 (PO-3) (February, 1990) to temporarily arrest the MIC problem. IP is currently working towards a long-term solution to the MIC problem, including obtaining an Illinois State discharge permit for chemically treating service water on an open-loop basis and retubing the DG heat exchangers. (Retubing of the heat exchanger for DG1A was completed during PO-3.)

The operability requirements (during operational conditions 1, 2, and 3) for the emergency standby diesel generators, including the actions to be taken if one (or more) is inoperable, are specified in CPS Technical Specification 3.8.1.1. (See Attachment 2 of this submittal.) Action "b" requires that with either diesel generator 1A or 1B inoperable, operability of the required AC offsite sources must be demonstrated, operability of the remaining operable diesel generators must be demonstrated (unless the DG became inoperable solely due to preplanned preventive maintenance or testing), and the inoperable DG must be restored to operable status within 72 hours. If the inoperable DG cannot be restored within 72 hours, the plant must be brought to a hot shutdown condition within the next 12 hours and to a cold shutdown condition within the following 24 hours.

* Reference: IP Letter U-601574; dated January 29, 1990

By 1300 (on June 22, 1990), IP completed a visual inspection of the tubes within the heat exchanger associated with the 12-cylinder engine. Based on the visual inspection performed and previous experience with MIC in the Division I diesel generator heat exchanger, tube replacement is required for both heat exchangers (i.e., the heat exchanger associated with the 12-cylinder engine and the heat exchanger associated with the 16-cylinder engine). This work will not be able to be completed before the 72-hour time limit expires at 0243 on Monday, June 24, 1990. It is currently estimated that an additional 72 hours will be needed to complete the retubing and to complete the testing required to reverify operability of DG1B. Regardless, IP does not expect and will not permit the retubing and testing to exceed an additional 7 days beyond the out-of-service time normally allowed by the Technical Specifications before a plant shutdown must be initiated.

Safety Significance/Basis for No Significant Hazards Consideration

IP does not consider this request to be safety significant in view of the following:

- 1) Only the Division II DG is currently inoperable. (DG1A and DG1C are operable.) As offsite power is also available, sufficient redundancy exists (assuming no concurrent failures) to provide emergency power to systems designed to mitigate the consequences of an accident.
- 2) Generally, operation under the provisions of an action statement is permitted for limited periods of time as it is recognized that single-failure criteria may not be met during such operation. IP believes that operation with only DG1B out of service for a period of time longer than normally allowed but within the noted limit constitutes no significant increase in risk regarding the safe operation of the facility.
- 3) In addition, IP does not believe that the present situation should require subjecting the plant to an unnecessary shutdown. The risk associated with the increased allowed out-of-service time is insignificant relative to the risk that may be incurred when, without the requested waiver, plant systems could be subjected to unnecessary challenges as the plant is shut down due to the current action time limit.

According to 10CFR50.92, a proposed change to the license (Technical Specifications) involves no significant hazards consideration if operation of the facility in

Attachment 1
to U-601696
Page 3 of 3

accordance with the proposed change would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, or (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 proposed changes are evaluated against each of these criteria below.

- 1) As noted above, the proposed one-time request would permit DG1B (and only DG1B) to be out-of-service for a longer period of time than normally allowed by the Technical Specifications. However, in view of the operability of all other required on-site sources and all required off-site sources, IP believes that the proposed request does not constitute a significant increase in risk with respect to the capability of safety systems to mitigate the consequences of an accident. Additionally, the proposed request would permit a reasonable amount of time to restore the DG1B heat exchangers to a like-new condition while avoiding an unnecessary plant shutdown and potential challenges to safety systems. Therefore, the proposed request does not involve a significant increase in probability or consequences of any accident previously evaluated.
- 2) The proposed request does not involve any changes to the design or operation of the plant. Since no new failure modes are effected by the proposed request, the proposed request does not create the possibility of a new or different kind of accident from any accident previously evaluated.
- 3) Under the proposed request, the allowed out-of-service time for DG1B (although longer than normally allowed) would still be limited to a reasonable period of time. With DG1A and DG1C operable, the proposed change does not involve a significant reduction in the margin of safety normally ensured by the Technical Specifications with respect to the availability of emergency onsite AC sources.

3/4.8 ELECTRICAL POWER SYSTEMS

Attachment 2
to U-601696
Page 1 of 3

3/4.8.1 AC SOURCES

AC SOURCES - OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following AC electrical power sources shall be OPERABLE:

- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system, and
- b. Three separate and independent diesel generators, each with:
 1. A separate day fuel tank containing a minimum of 385 gallons of fuel for diesel generators 1A and 1B and 240 gallons of fuel for diesel generator 1C.
 2. A separate fuel storage system containing a minimum of 48,000 gallons of fuel for diesel generator 1A and 45,000 gallons for diesel generator 1B and 29,500 gallons of fuel for diesel generator 1C.
 3. A separate fuel transfer pump.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With one offsite circuit of the above required AC electrical power sources inoperable, demonstrate the OPERABILITY of the remaining AC sources by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter. If either diesel generator 1A or 1B has not been successfully tested within the past 24 hours, demonstrate its OPERABILITY by performing Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 for each such diesel generator, separately, within 24 hours. Restore the offsite circuit to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With either diesel generator 1A or 1B inoperable, demonstrate the OPERABILITY of the above required AC offsite sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter. If the diesel generator became inoperable due to any cause other than preplanned preventive maintenance or testing, demonstrate the OPERABILITY of the remaining OPERABLE diesel generators, separately, by performing Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 within 24 hours*. Restore the inoperable diesel generator to OPERABLE

*This test is required to be completed regardless of when the inoperable diesel generator is restored to OPERABLE status. The provisions of Specification 3.0.2 are not applicable.

ELECTRICAL POWER SYSTEMSAC SOURCES - OPERATINGLIMITING CONDITION FOR OPERATION (Continued)3.8.2.1 ACTION (Continued):

status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

- c. With one offsite circuit of the above-required AC sources and diesel generator 1A or 1B of the above required AC electrical power sources inoperable, demonstrate the OPERABILITY of the remaining AC sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter. If a diesel generator became inoperable from any cause other than preplanned preventive maintenance or testing, demonstrate the OPERABILITY of the remaining OPERABLE diesel generators, separately, by performing Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 within 8 hours*. Restore at least one of the inoperable AC sources to OPERABLE status within 12 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. Restore at least two offsite circuits and diesel generators 1A and 1B to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- d. With diesel generator 1C of the above required AC electrical power sources inoperable, demonstrate the OPERABILITY of the offsite AC sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter. If the diesel generator became inoperable as a result of any cause other than preplanned preventive maintenance or testing, demonstrate the OPERABILITY of the remaining OPERABLE diesel generators, separately, by performing Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 within 24 hours*. Restore diesel generator 1C to OPERABLE status within 72 hours or declare the MPCS system inoperable and take the ACTION required by Specifications 3.9.1 and 3.7.1.1.
- e. With diesel generator 1A or 1B of the above required AC electrical power sources inoperable, in addition to taking ACTION b or c, as applicable, verify within 2 hours that all required systems, subsystems, trains, components and devices that depend on the remaining OPERABLE diesel generator as a source of emergency power are also OPERABLE; otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- f. With both of the above required offsite circuits inoperable, demonstrate the OPERABILITY of three diesel generators, separately, by performing Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 within 8 hours unless the diesel generators are already operating. Restore at least one

*This test is required to be completed regardless of when the inoperable diesel generator is restored to OPERABILITY. The provisions of Specification 3.9.2 are not applicable.

ELECTRICAL POWER SYSTEMS

AC SOURCES - OPERATING

LIMITING CONDITION FOR OPERATION (Continued)

3.0.2.2 ACTION (Continued):

of the above-required offsite circuits to OPERABLE status within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours. With only one offsite circuit restored to OPERABLE status, restore at least two offsite circuits to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. A successful test(s) of diesel generator OPERABILITY per Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5, performed under this ACTION statement for the OPERABLE diesel generators, satisfies the diesel generator test requirements of ACTION statement a.

- e. With diesel generators 1A and 1B of the above-required AC electrical power sources inoperable, demonstrate the OPERABILITY of the remaining AC sources by performing Surveillance Requirement 4.8.1.1.2.a within 1 hour and at least once per 8 hours thereafter and Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 for diesel generator 1C within 8 hours.* Restore at least one of the inoperable diesel generators 1A and 1B to OPERABLE status within 2 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. Restore both diesel generators 1A and 1B to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- h. With one offsite circuit of the above-required AC electrical power sources inoperable and diesel generator 1C inoperable, apply the requirements of ACTION statements a and d specified above.
- i. With either diesel generator 1A or 1B inoperable and diesel generator 1C inoperable, apply the requirements of ACTION statements b, d and e specified above.

*This test is required to be completed regardless of when the inoperable diesel generator is restored to OPERABILITY. The provisions of Specification 3.0.2 are not applicable.