



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

10 CFR 50.90

February 22, 1993

Dr. Thomas E. Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Document Control Desk

Subject: LaSalle County Station Units 1 and 2
Proposed Amendment to Facility
Operating Licenses NPF-11 and NPF-18,
Appendix A, Technical Specifications
NRC Docket Nos. 50-373 and 50-374
Allowable Outage Time for the "0" Diesel Generator

References:

- (a) P.C. Shemanski (NRC) letter to H.E. Bliss (CECo), dated February 7, 1989; Issuance of Amendment Nos. 63 and 44 to Facility Operating License Nos. NPF-11 and NPF-18 - LaSalle County Station, Units 1 and 2
- (b) H.L. Massin (CECo) letter to H.R. Denton (NRC) dated August 23, 1985, requesting temporary change to the Unit 1 and 2 Technical Specifications to allow single unit operation during installation of the pre-lube modification to the opposite unit diesel generators.
- (c) W.R. Butler (NRC) letter to D.L. Farrar (CECo) dated November 13, 1985, Issuance of Amendment No. 16 to NPF-18.
- (d) C.M. Allen (CECo) letter to H.R. Denton (NRC) dated October 14, 1986, re-submittal of request for temporary change to the Unit 1 Technical Specifications to allow Unit 1 operation during installation of pre-lube modification to Unit 2 diesel generator.
- (e) E.G. Adensam (NRC) letter to D.L. Farrar (CECo) dated February 11, 1987, Issuance of Amendment No. 49 to NPF-11.

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Dear Dr. Murley:

In accordance with 10 CFR 50.90, Commonwealth Edison proposes to amend Appendix A, Technical Specifications of Facility Operating Licenses NPF-11 and NPF-18. The proposed amendment will allow continued operation of one unit for a period of 7 days while the common plant Division 1 diesel generator "0" DG, is out of service for the performance of specified Technical Specification surveillance requirements and the performance of planned maintenance and/or modification work. In addition, clarification of the equipment necessary to determine the operability of a diesel generator air start receiver is proposed.

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This proposed amendment request is subdivided as follows:

1. Attachment A provides a description and safety analysis of the changes proposed in this amendment.
2. Attachment B includes the marked-up Technical Specification pages with the requested changes indicated.
3. Attachment C describes CECO's evaluation performed in accordance with 10 CFR 50.92(c), which confirms that no significant hazards consideration is involved.
4. Attachment D provides the Environmental Assessment.

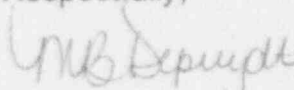
This proposed amendment has been reviewed and approved by CECO On-Site and Off-Site Review in accordance with Commonwealth Edison procedures.

To the best of my knowledge and belief, the statements contained within are true and correct. In some respect these statements are not based on my personal knowledge, but obtained information furnished by other Commonwealth Edison employees, contractor employees, and consultants. Such information has been reviewed in accordance with company practice, and I believe it to be reliable.

Commonwealth Edison is notifying the State of Illinois of this application for amendment by transmitting a copy of this letter and its attachments to the designated state official.

Please direct any questions you may have concerning this submittal to this office.


Respectfully,



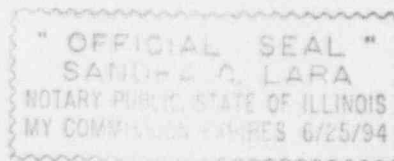
Mary Beth Depuydt
Nuclear Licensing Administrator

Attachments:

- A. Description of Safety Analysis of the Proposed Changes
- B. Marked-Up Technical Specification Pages
- C. Evaluation of Significant Hazards Considerations
- D. Environmental Assessment

State of Ill, County of DuPage
I, Sandra A. Lara, Notary Public,
do hereby certify that the foregoing is a true and correct copy of the original
of February 22, 1993, at Ill day
Notary Public 

cc: A.B. Davis, Regional Administrator - RIII
R.J. Stransky, Project Manager - NRR
D.L. Hills, Senior Resident Inspector - LSCS
Office of Nuclear Facility Safety - IDNS



ZNLD/2143/25

Attachment A

Description of Safety Analysis of the Proposed Changes

Description of the Proposed Change

The proposed amendment will allow continued operation of one unit for a period of 7 days while the common plant Division 1 diesel generator, "0" DG, is out of service for the performance of specified Technical Specification surveillance requirements and the performance of planned maintenance and/or modification work. In addition, clarification of the equipment necessary to determine the operability of a diesel generator air start receiver is proposed.

Description of the Current Requirement

Reference (a) approved Commonwealth Edison's (CECo) request for amendment to Facility Operating Licenses NPF-11 and NPF-18, Appendix A, Technical Specifications. Amendment 63 for Unit 1 and Amendment 44 for Unit 2 revised section 3.8.1.1 of the Unit 1 and 2 Technical Specifications to allow the continued operation of one unit for a period of 7 days while the common plant Division 1 diesel generator, "0" DG, is out of service for the performance of Technical Specification surveillance requirements 4.8.1.1.2.d.1 and 4.8.1.1.2.f.1. As presently worded, Section 3.8.1.1 does not allow entry into the 7 day Limiting Condition for Operation (LCO) to perform pre-planned maintenance and/or modification work.

In addition, Surveillance Requirement 4.8.1.1.2.a.7, presently requires verification that the pressure in "all" diesel generator air start receivers is greater than or equal to 200 psig. Each diesel generator has two full capacity air start subsystems, however, only one air start subsystem is required to be charged to assure that the diesel generator will meet its design function. As presently worded, Surveillance Requirement 4.8.1.1.2.a.7 does not clarify that only the one required air start receiver on the diesel needs pressure verification.

Bases for the Current Requirement

Presently, while the "0" DG is out of service for surveillances, the unit is in a 7 day action statement. Specification 3.8.1.1 allows a 7 day allowable outage time to perform surveillance 4.8.1.1.2.d.1, which allows disassembly and inspection of the diesel, and surveillance 4.8.1.1.2.f.1, which involves draining and cleaning of the diesel fuel oil storage tank. To demonstrate that no significant additional risk was incurred by this out-of-service time, CECO performed a comparative Probabilistic Risk Assessment (PRA). The PRA, as discussed in reference (a), determined that the increased risk was insignificant, and that a 7 day LCO for "0" DG surveillance work was acceptable.

Attachment A

Description of Safety Analysis of the Proposed Changes (continued)

As described in UFSAR Section 9.5.6, the starting air system is designed to automatically start the diesel generator such that rated frequency and voltage are achieved, and the diesel generator is ready to accept the required loads within the required time. The UFSAR also states that the starting air system on each diesel generator is independent of the starting air systems for the other diesel generators, and that each diesel generator's starting air system consists of two full capacity subsystems.

Description of the Need for Amending the Technical Specifications

Under the current Technical Specification action statement requirements, with one unit in operation and the other unit in cold shutdown, refuel, or defueled modes, surveillances may be performed on the "0" DG during a 7 day outage, while maintenance and modification work may be performed during a 3 day outage. As the diesel generators and support systems accumulate more service time, the types of maintenance and recommended preventive maintenance become more involved, making it more difficult to complete the work within 72 hours. If work outside the scope of the specified surveillance requirements exceeds 72 hours, the operational unit is required to be shutdown. Historically, diesel generator work has been divided into parts which could be completed within 72 hours. This division of work leads to diesel re-assembly and operability runs, followed by diesel teardown for the next parcel of work. As a result, the total diesel generator unavailability does not change, but needless rework and diesel starts are incurred.

The current wording of the surveillance requirement for the air start receivers implies that the air receivers of both subsystems for a diesel generator are required to be pressurized in order for the diesel generator to be Operable. Both subsystems are normally in service for each diesel generator, and are only removed from service for maintenance or surveillance. By allowing a diesel generator to remain operable with one air start subsystem pressurized, unnecessary diesel generator starts are avoided.

Description of the Amended Technical Specification Requirement

CECo proposes that Technical Specification 3.8.1.1 footnote * be revised to allow a 7 day outage time for "0" DG surveillances, pre-planned maintenance and modification activities. Planned maintenance may include generator inspections, diesel cooling water system and other support system repair, inspection, and cleaning. Work that resulted from a valid diesel generator failure would be excluded from being performed under this specification. CECo requests that Technical Specification 3.8.1.1 footnote * be revised as follows:

Attachment A

Description of Safety Analysis of the Proposed Changes (continued)

"For the purposes of completing maintenance, modification, and/or technical specification surveillance requirements on the 0 diesel generator and its support systems during a refuel outage, as part of pre-planned maintenance, modifications, and/or the surveillance program, the requirements of action statements b are modified to:"

CECo proposes that air start system surveillance requirement 4.8.1.1.2.a.7 be clarified to state:

"Verifying the pressure in required diesel generator air start receivers to be greater than or equal to 200 psig."

Bases for the Amended Technical Specification Request

In reference (a), the NRC approved a 7 day outage for the "0" DG to perform surveillance requirements 4.8.1.1.2.d.1, disassembly and inspection of the diesels, and 4.8.1.1.2.f.1, draining and cleaning of the diesel fuel oil storage tanks. This change was approved provided that LaSalle met five specific conditions which were incorporated into Technical Specification 3.8.1.1. CECO will ensure that these same five criteria are met prior to performing maintenance or modification work on the "0" DG.

1. One of the units is in operational condition 4 or 5 or defueled prior to taking the 0 diesel generator out of service.
2. Surveillance requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 are successfully completed for the offsite power sources and the 1A and 2A diesel generators within 48 hours prior to removal of the 0 diesel generator from service.
3. No maintenance is performed on the offsite power circuits or the 1A or 2A diesel generators while the 0 diesel generator is inoperable.
4. Technical Specification requirement 4.8.1.1.1.a is performed daily while the 0 diesel generator is inoperable.
5. The control circuit for the unit cross-tie circuit breakers between buses 142Y and 242Y are temporarily modified to allow the breakers to be closed with a diesel generator feeding the bus, while the 0 diesel generator is inoperable.

Attachment A

Description of Safety Analysis of the Proposed Changes (continued)

The first condition which requires one unit in operating condition 4, 5, or defueled, minimizes the consequences of a Loss of Offsite Power (LOOP) transient with one diesel generator inoperable. The next three conditions reduce the probability that an ESF bus will be without power, and the last condition ensures that power will be available to at least one of the ESF buses following a LOOP event. In the event that the above conditions cannot be met, the appropriate Technical Specification action statement requirements will be followed. Work necessitated due to a valid failure of the "0" diesel generator would not be allowed under this proposed specification.

Performing necessary "0" DG work within one 7 day outage, rather than two shorter outages, eliminates redundant preparatory work, avoids unnecessary diesel operability runs, and facilitates work planning activities. In addition safety is enhanced because the longer outage Maintenance and modification work attempted during a shorter outage may result in a shutdown of the operating unit, resulting in a major plant evolution, an unnecessary reactor cooldown cycle, and needless challenges to safety systems. Replacing two shorter outages with one 7 day outage does not reduce overall diesel generator availability, and therefore does not pose a significant hazard.

Expanding the scope of the allowed outage time to include modifications was previously accepted by the NRC in Amendments 49 and 16 to the LaSalle Unit 1 and 2 Technical Specifications, allowing one unit to operate for a period of thirty days while a diesel generator on the other unit was out of service to allow lube oil modification installation. References (b) through (e) discuss these extensions.

With respect to the diesel generator air start system, CEC Co proposes to clarify Technical Specification Surveillance Requirement 4.8.1.1.2.a.7 so that one air start subsystem satisfies the monthly requirement to verify air start receivers are greater than or equal to 200 psig. However, the system design, as described in the UFSAR section 9.5.6 and accepted in NUREG-0519, section 9.6.3.3., is that each diesel generator has two separate full capacity air start subsystems. Also, the preoperational tests of the diesel generators verified each subsystem full capacity by performance of starting time tests with each air start subsystem. The required essential service system redundancy is met by each diesel generator, not by the redundancy of the supporting systems for each diesel generator. Air start system work is considered to be high priority, so the time that an air start subsystem is out of service will be administratively kept to a minimum by the work request priority system and planning department practices, thus compensating for any slight reduction in safety by this change. Therefore, the monthly surveillance requirement performed monthly on each diesel generator is proposed to read:

4.8.1.1.2.a.7: Verifying the pressure in required diesel generator air start receivers to be greater than or equal to 200 psig.

Attachment A

Description of Safety Analysis of the Proposed Changes (continued)

This change will allow the diesel generator to remain operable during repairs, maintenance, modification, or surveillance on one air start subsystem provided the other subsystem remains in service and meets the surveillance requirement. Because there are two full capacity air start subsystems for each diesel generator, the failure of one air start subsystem does not constitute a failure to start of the associated diesel generator nor does it make the associated diesel generator inoperable. By the current wording of the surveillance requirement, a failure of one subsystem (such as pressure in one receiver dropping below 200 psig) could be interpreted to be a diesel generator failure and require the starting of the other three diesel generators per the applicable unit Technical Specifications. Since both air start subsystems are normally in service, the failure of one air start subsystem does not prevent the diesel from starting and should not cause the diesel generator to be inoperable. A locked closed crosstie valve is located downstream of the subsystem air start receivers. When one compressor is inoperable, this valve is opened (under administrative procedures) to keep the receivers for both subsystems pressurized using only one air compressor, thus minimizing the time the receivers for a subsystem are less than 200 psig.

The air start systems at LaSalle are designed to provide reliable redundancy. Each subsystem has a moisture separator and a refrigerated air dryer downstream of the air compressor to minimize moisture in the air used to charge the air start receivers, and each supply line to the diesel air start motors is equipped with an in-line lubricator to provide lubrication during the start of the diesel generator. The air start systems at LaSalle are maintained per manufacturer recommendations to help assure continued reliability. The air start motors are periodically replaced to assure continued reliable performance. The associated diesel generator is started once on each individual air start subsystem whenever air start motors are replaced, and the operation of each air start subsystem is functionally verified by semi-annual verification of air receiver pressure drop during a diesel generator start.

Therefore, each air start subsystem is operated and maintained to assure that either subsystem can fully meet the design and operability requirements for the associated divisional diesel generator system.

Schedule

CECo requests that this proposed amendment be approved prior to the start of the Unit 2 fifth refuel outage, L2R05, which is presently scheduled to begin in September of 1993. It is also requested that this amendment be made effective on the date of issuance.