

June 8, 1995



U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

SUBJECT: Application for Amendment to Facility Operating Licenses, Appendix A,
Technical Specifications Section 3/4.8, Electrical Power Systems

LaSalle County Nuclear Power Station Units 1 and 2
NPF-11 and NPF-18; NRC Docket Nos. 50-373/374

Braidwood Nuclear Power Station Units 1 and 2
NPF-72 and NPF-77; NRC Docket Nos. 50-456/457

Byron Nuclear Power Station Units 1 and 2
NPF-37 and NPF-66; NRC Docket Nos. 50-454/455

Pursuant to 10 CFR 50.90, ComEd proposes to amend Appendix A, Technical Specifications of Facility Operating Licenses NPF-11, NPF-18, NPF-72, NPF-77, NPF-37 and NPF-66. Commonwealth Edison (ComEd) proposes to revise Technical Specifications Section 3/4.8, Electrical Power Systems, and the associated Bases for LaSalle County, Byron, and Braidwood Stations. The proposed changes revise surveillance and administrative requirements associated with emergency diesel generators (EDGs) in accordance with the guidance of NRC Generic Letter 94-01, "Removal of Accelerated Testing and Special Reporting Requirements for Emergency Diesel Generators," Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation," and Regulatory Guide 1.9, "Selection, Design, Qualification, and Testing of Emergency Diesel Generators Used as Class 1E Onsite Electric Power Systems at Nuclear Power Plants."

ComEd requests that this proposed amendment be categorized as a Cost Benefit Licensing Action (CBLA). The amendment will save approximately \$60,000/yr for Byron, approximately \$60,000/yr for Braidwood, and approximately \$50,000/yr for LaSalle. The savings will be realized mainly due to the elimination of increased EDG testing and the associated operator time and fuel oil costs. Savings will also result from the elimination of the special reporting requirements and by fewer EDG starts to meet Limiting Condition for Operation (LCO) requirements. Additionally, de-coupling the 24 hour EDG run from the Loss of Offsite Power (LOOP) sequencing provides the station with greater flexibility in scheduling the 24 hour EDG run surveillance, which could potentially shorten an outage's critical path. Also, elimination of the fast load test will increase the longterm reliability of the EDG, thus potentially lowering future maintenance costs.

9506130145 950608
PDR ADOCK 05000373
PDR PDR

Accol
1/1

1. Attachment A gives a description and safety analysis of the proposed changes.
2. Attachment B provides the proposed changes to the Technical Specification pages for LaSalle Units 1 and 2, Braidwood Units 1 and 2, and Byron Units 1 and 2.
3. Attachment C describes ComEd's evaluation performed in accordance with 10 CFR 50.92 (c), which confirms that no significant hazard consideration is involved.
4. Attachment D provides an Environmental Assessment Applicability Review.
5. Attachment E provides a change summary of the proposed changes.

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

There are no specific schedule requirements associated with this amendment proposal. Therefore, ComEd requests that this amendment be approved by the NRC within about six months, i.e., NRC approval by approximately December of 1995, with an implementation time of 90 days.

To the best of my knowledge and belief, the statements contained above 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.

Very truly yours,



Gary G. Benes
Nuclear Licensing Administrator

June 8, 1995

Subscribed and Sworn to before me
on this 8th day of
June, 1995.



Mary Jo Yack
Notary Public

Attachments:

- A. Description and Safety Analysis of the Proposed Changes
- B. Marked-Up pages to the Technical Specifications
- C. Evaluation of Significant Hazards Considerations
- D. Environmental Assessment Applicability Review
- E. Change Summary of the Proposed Changes

cc: J. Martin, Regional Administrator - RIII
P. Brochman, Senior Resident Inspector - LSCS
S. Dupont, Senior Resident Inspector - Braidwood
H. Peterson, Senior Resident Inspector - Byron
W. Reckley, Project Manager - NRR
R. Assa, Project Manager - NRR
G. Dick, Project Manager - NRR
Office of Nuclear Facility Safety - IDNS

ATTACHMENT A

DESCRIPTION AND SAFETY ANALYSIS OF THE PROPOSED CHANGES

Description of the Proposed Changes

Commonwealth Edison (ComEd) proposes to revise Technical Specifications Section 3/4.8, Electrical Power Systems, and the associated Bases for LaSalle County, Byron, and Braidwood Stations. The proposed changes revise surveillance and administrative requirements associated with emergency diesel generators (EDGs) in accordance with the guidance of NRC Generic Letter 94-01, "Removal of Accelerated Testing and Special Reporting Requirements for Emergency Diesel Generators," Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation," and Regulatory Guide 1.9, "Selection, Design, Qualification, and Testing of Emergency Diesel Generators Used as Class 1E Onsite Electric Power Systems at Nuclear Power Plants." The proposed changes include:

1. Eliminating increased testing requirements for EDGs,
2. Eliminating special reporting requirements for EDGs,
3. Eliminating the semi-annual fast load test and replacing it with a requirement to load EDG semi-annually in accordance with the vendor recommendations for all test purposes other than the refueling outage Loss of Offsite Power (LOOP) tests,
4. De-coupling the 24-hour endurance run and the LOOP/LOCA (LOOP only for LaSalle) sequencing requirements for the hot start test,
5. Removing Regulatory Guide 1.108 references to testing requirements,
6. Eliminating testing requirements when an EDG becomes inoperable due to an inoperable support system, an independently testable component, or preplanned maintenance or testing, or if there is not a potential common mode failure for the remaining diesel generator,
7. Deleting the requirement for inspecting the EDGs in accordance with procedures prepared in conjunction with its manufacturer's recommendations, and
8. Making editorial changes.

The marked up Technical Specification pages for each station indicating the proposed changes are provided in Attachment B. An Evaluation of No Significant Hazards Consideration is provided in Attachment C, and an Environmental Assessment is provided in Attachment D. A summary of the proposed changes is in Attachment E. A discussion of each proposed change follows.

1. Proposed Generic Letter 94-01 Changes

Description of the Current Requirements

Technical Specification surveillance requirement 4.8.1.1.2 requires that each EDG be demonstrated operable in accordance with the frequency specified in the Diesel Generator Test Schedule, located in Table 4.8.1.1.2-1 for LaSalle and in Table 4.8-1 for Byron and Braidwood. The Diesel Generator Test Schedule specifies the frequency of testing based on the number of failures during the last 20 valid tests (LaSalle, Byron, and Braidwood) and last 100 tests (LaSalle only) of each EDG.

Surveillance requirement 4.8.1.1.3 requires all EDG failures, valid or non-valid, to be reported to the Commission.

Surveillance requirements 4.8.1.1.2.d.1 for LaSalle and 4.8.1.1.2.f.1 for Byron and Braidwood require subjecting the EDG to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service.

Bases for the Current Requirements

The operability of AC power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety related equipment required for safe shutdown of the facility and the mitigation and control of accident conditions within the facility. The operability of AC power sources and associated distribution systems during shutdown and refueling ensures that sufficient power will be available to maintain the facility in the shutdown or refueling condition for extended periods of time, and sufficient instrumentation and control capability is available for monitoring and maintaining the unit status.

Description of the Proposed Changes

ComEd proposes to delete the Diesel Generator Test Schedule, located in Table 4.8.1.1.2-1 for LaSalle and in Table 4.8-1 for Byron and Braidwood, and revise surveillance requirement 4.8.1.1.2 to require the surveillance to be performed at least once per 31 days. As a result, the test frequency would be independent of the number of previous failures, and there would be no increased testing requirements.

ComEd also proposes to delete surveillance requirement 4.8.1.1.3, which had requirements for reporting EDG failures.

ComEd is deleting the surveillance requirement to subject the EDGs to inspections in accordance with manufacturer's recommendations.

Bases of the Proposed Changes

NRC Generic Letter 94-01 (GL 94-01) advises licensees that they may request a license amendment to remove accelerated testing and special reporting requirements for EDGs from plant technical specifications. GL 94-01 states that licensees must commit to implement a maintenance program or NRC acceptable alternative for monitoring and maintaining diesel generator performance consistent with the provisions of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants" and Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," within 90 days of the issuance of the license amendment.

Each station is committing to implement an "Alternative Approach" to Maintenance Rule for the EDG System within 90 days of issuance of the amendment. This will be performed through a revision to each station's EDG Reliability Program to incorporate appropriate industry guidance pertaining to the Maintenance Rule. This approach to implementing the Maintenance Rule for EDGs is considered an "Alternative Approach" due to certain exceptions taken to the regulatory interpretation of industry guidelines. The Alternate EDG System Maintenance Rule Implementation Program will encompass the EDG and all EDG subsystems that are designed solely to support the EDG. The system boundary provided in Figure 1 of Regulatory Guide 1.9, Revision 3, will be utilized for this Alternate Approach Program.

In accordance with GL 94-01, the Alternate Approach Program will (1) establish performance criteria for both EDG reliability and availability, under paragraph (a)(2) of the maintenance rule, (2) perform appropriate root cause determination and corrective action following a single maintenance preventable failure, (3) establish goals and monitor subsequent EDG performance under paragraph (a)(1) of the maintenance rule if any performance criterion is not met or a second repetitive EDG maintenance-preventable failure occurs, and (4) per paragraph (a)(3), licensees make adjustments where necessary to ensure that the objective of preventing failures through maintenance is appropriately balanced against the objective of minimizing unavailability due to monitoring and preventive maintenance.

The LaSalle, Byron and Braidwood Stations' alternate approach to EDG maintenance rule implementation is consistent with this guidance, as well as that provided in Regulatory Guide 1.160 and NUMARC 93-01. Two specific areas, however, are not directly covered in this guidance when implementing the maintenance rule specifically for the EDG system and its associated

sub-systems. The LaSalle, Byron and Braidwood Stations' alternate approach to maintenance rule implementation for the EDG System differs from regulatory interpretation in these two specific areas as follows:

- 1) **System Boundaries:** The boundaries for the EDG system are considered to be those outlined in Figure 1 of Regulatory Guide 1.9, Revision 3, dated July 1993. GL 94-01 addresses the elimination of increased EDG testing. Increased testing is currently required when the number of valid failures exceeds the limits specified in Technical Specifications Section 4.8. Valid failures are currently evaluated against Regulatory Guide 1.108 guidance, which addresses components in the EDG system only. The EDG system boundaries used today for determining increased EDG testing, which is the primary focus of GL 94-01, are the same system boundaries used in this alternate approach to Maintenance Rule program. Therefore, this alternate approach is consistent with the intent of GL 94-01.

It should be noted that two of the support systems for the EDG that are not considered to be part of the EDG System boundary are the service water system and the DC power system. It should also be noted that poor performance of these systems could directly impact EDG system availability, which would be monitored by ComEd's approach to implementation of the maintenance rule for the EDG System.

- 2) **Evaluation of Systems to be Removed from Service:** This portion of the Maintenance Rule represents a plant wide issue, and is not specific to the EDG system. This aspect of the Maintenance Rule will be fully implemented in 1996 with the implementation of each station's maintenance rule for all affected systems, structures, and components. However, the LaSalle, Byron and Braidwood Stations' alternate approach to EDG maintenance rule implementation does account for evaluating the impact on safety when the EDG is removed from service.

The proposed change to delete surveillance requirements 4.8.1.1.2.d.1 for LaSalle and 4.8.1.1.2.f.1 for Byron and Braidwood is not explicitly part of the GL 94-01 recommendations, however, it is consistent with the intent of the generic letter. ComEd will relocate the appropriate requirements to the reliability and alternative maintenance programs. ComEd's alternative to the maintenance rule ensures that all appropriate maintenance is performed.

Impact of the Proposed Change

The proposed change is consistent with the model Standard Technical Specifications in Enclosure 2 of GL 94-01. LaSalle, Byron, and Braidwood Stations will implement an alternate EDG system maintenance rule implementation program that meets the provisions of 10 CFR 50.65 and Regulatory Guide 1.160 within 90 days of issuance of the license amendment.

The proposed change will allow LaSalle, Byron, and Braidwood more flexibility in scheduling and performing EDG surveillance tests. Mechanical, electrical, and instrument maintenance technicians, systems engineers, and outage planning personnel will be able to re-direct their efforts in support of other critical path outage tasks that have a significant impact on plant safety. Additionally, these changes will reduce the potential for engine degradation and increase overall reliability and longevity. Diesel Generator performance will be monitored and maintained by the EDG reliability and maintenance program.

Deleting the requirement to report EDG failures, valid or invalid, to the Commission is also consistent with the guidance in GL 94-01. ComEd will continue to notify the Commission of significant EDG failures in accordance with 10 CFR 50.72 and 50.73.

Deleting the surveillance requirement to inspect the EDGs in accordance with the manufacturer's recommendations is consistent with the intent of GL 94-01. The EDGs will continue to be inspected in accordance with the manufacturer's recommendations as part of plant controlled maintenance programs. The change permits taking credit for current maintenance activities without specifically requiring the inspection activity in the Technical Specifications. Sufficient Technical Specifications surveillance requirements are retained to demonstrate the functional capability of the EDGs. This is consistent with the applicable Standard Technical Specifications (NUREG-1433/1434 for LaSalle and NUREG-1431 for Byron and Braidwood) in that the requirement is not specifically included. EDG reliability and availability will be monitored by ComEd's alternative to the maintenance rule, ensuring sufficient inspections and maintenance are performed.

2. Proposed Generic Letter 93-05 Changes

Description of the Current Requirements

- a. LaSalle Technical Specification 3.8.1.1 Action a requires demonstrating the operability of the remaining diesel generators that have not been successfully tested within the previous 24 hours by performing surveillance requirement 4.8.1.1.2.a.4 (hot start test) for each such EDG, separately, within 24 hours, if one offsite circuit of the required AC electrical power sources is inoperable.
- b. LaSalle Technical Specification 3.8.1.1 Action b requires demonstrating the operability of remaining operable diesel generators if the EDG became inoperable due to any cause other than preplanned preventive maintenance or testing. The operability of the remaining operable EDG must be demonstrated separately by performance of the hot start test within 24 hours.

Byron and Braidwood Technical Specification 3.8.1.1 Action a requires demonstrating the operability of the remaining diesel generator(s) by performing Surveillance Requirement 4.8.1.1.2.a.4 (hot start test) within 24 hours if a diesel generator or offsite circuit is inoperable.

- c. LaSalle Technical Specification 3.8.1.1 Action c requires that the operability of remaining operable diesel generators be demonstrated, separately, by performing Surveillance Requirement 4.8.1.1.2.a.4 within 8 hours, if a diesel generator became inoperable due to any cause other than preplanned preventive maintenance or testing.

Byron and Braidwood Technical Specification 3.8.1.1 Action b requires demonstrating the operability of the remaining EDG by performing surveillance requirement 4.8.1.1.2.a.4 within 8 hours if one offsite circuit and one diesel generator of the required AC electrical power sources are inoperable.

- d. LaSalle Technical Specification 3.8.1.1 Action d requires demonstrating the operability of remaining operable diesel generators, separately, by performing Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours, if the diesel generator became inoperable due to any cause other than preplanned preventive maintenance or testing.
- e. LaSalle Technical Specification 3.8.1.1 Action e requires demonstrating the operability of the remaining AC sources, separately, by performing Surveillance Requirement 4.8.1.1.2.a.4 within 8 hours.

Byron and Braidwood Technical Specification 3.8.1.1 Action d requires demonstrating the operability of both EDGs by performing Surveillance Requirement 4.8.1.1.2.a.4 within 8 hours.

- f. LaSalle Technical Specification 3.8.1.1 Action g requires demonstrating the operability of the 1A(2A) diesel generator, by performing Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours, if the 2A(1A) diesel generator became inoperable due to any cause other than preplanned preventive maintenance or testing.
- g. Surveillance Requirements 4.8.1.1.2.a.4 and 5 describe the hot start test and fast load test, respectively. The fast load test specifies that the EDGs be synchronized and loaded to their continuous rating within 60 seconds following synchronization during the fast load test. The EDGs must be operated at 2400-2600 Kw for LaSalle, and 5500 Kw for Byron and Braidwood, for at least 60 minutes.
- h. LaSalle Surveillance Requirement 4.8.1.1.2.d.8 describes the 24 hour endurance run that is required at least once per 18 months during shutdown. The requirement includes performing Surveillance Requirements

4.8.1.1.2.d.4.a).2) and b).2. within 5 minutes after completing the 24 hour test. The surveillances demonstrate operability of the diesel generators by simulating a loss of offsite power and verifying the diesel generator starts, energizes the appropriate busses and auto-connected loads, and operates for a specified time while the generator is loaded.

Byron and Braidwood Surveillance Requirement 4.8.1.1.2.f.7 describes the 24 hour endurance run that is required at least once per 18 months during shutdown. The requirement includes performing Surveillance Requirement 4.8.1.1.2.f.6).b within 5 minutes after completing the 24 hour test. The surveillance demonstrates the operability of the diesel generators by simulating a loss of Engineered Safety Features (ESF) bus voltage in conjunction with an ESF actuation test signal and by verifying the diesel generator starts, energizes the appropriate busses and auto-connected loads, and operates for a specified time while the generator is loaded.

Bases for the Current Requirements

The operability of AC and DC power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety related equipment required for safe shutdown of the facility and the mitigation and control of accident conditions within the facility. The operability of AC and DC power sources and associated distribution systems during shutdown and refueling ensures that sufficient power will be available to maintain the facility in the shutdown or refueling condition for extended periods of time, and sufficient instrumentation and control capability is available for monitoring and maintaining the unit status.

Description of the Proposed Changes

- a. LaSalle Technical Specification 3.8.1.1 Action a is revised to delete the requirement to demonstrate the operability of the remaining diesel generators that have not been successfully tested within the previous 24 hours by performing Surveillance Requirement 4.8.1.1.2.a.4 for each such EDG, separately, within 24 hours.
- b. LaSalle Technical Specification 3.8.1.1 Action b is revised to eliminate testing requirements when a diesel generator becomes inoperable due to an inoperable support system, independently testable component, or preplanned maintenance or testing. The proposed change also requires performing Surveillance Requirement 4.8.1.1.2.a.4 if the EDG became inoperable due to any cause other than those previously listed. The operability of the remaining operable EDG must be demonstrated separately by performance of Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours, unless the absence of any potential common mode failure for the remaining EDG is demonstrated.

Byron and Braidwood Technical Specification 3.8.1.1 Action a is revised to delete the requirement to demonstrate the operability of the EDGs by performing Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours if only an offsite circuit becomes inoperable. In addition, Action a is revised to eliminate diesel generator testing requirements if a single diesel generator becomes inoperable due to an inoperable support system, an independently testable component, or preplanned maintenance or testing. If the diesel generator becomes inoperable due to any cause other than those previously listed, Surveillance Requirement 4.8.1.1.2.a.4 must be performed within 24 hours, unless the absence of any potential common mode failure for the remaining diesel generator is demonstrated.

- c. LaSalle Technical Specification 3.8.1.1 Action c is revised to eliminate testing requirements when an EDG becomes inoperable due to an inoperable support system, an independently testable component, or preplanned maintenance or testing. The proposed change also requires performing Surveillance Requirement 4.8.1.1.2.a.4 within 8 hours, unless the absence of any potential common mode failure for the remaining EDG is demonstrated.

Byron and Braidwood Technical Specification 3.8.1.1 Action b is revised to eliminate testing requirements when an EDG becomes inoperable due to an inoperable support system, an independently testable component, or preplanned maintenance or testing. The proposed change also requires performing Surveillance Requirement 4.8.1.1.2.a.4 within 8 hours, unless the absence of any potential common mode failure for the remaining EDG is demonstrated.

- d. LaSalle Technical Specification 3.8.1.1 Action d is revised to delete the requirement to perform Surveillance Requirement 4.8.1.1.2.a.4, if the diesel generator became inoperable due to any cause other than an inoperable support system, an independently testable component, or preplanned maintenance or testing. The proposed change also requires performing Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours, unless the absence of any potential common mode failure for the remaining EDGs is demonstrated.
- e. LaSalle Technical Specification 3.8.1.1 Action e and Byron and Braidwood Technical Specification 3.8.1.1 Action d are revised to delete the requirement to perform Surveillance Requirement 4.8.1.1.2.a.4 within 8 hours.
- f. LaSalle Technical Specification 3.8.1.1 Action g is revised to delete the requirement to demonstrate the operability of remaining AC power sources by performing Surveillance Requirement 4.8.1.1.2.a.4, if the diesel generator became inoperable due to any cause other than inoperable support system, an independently testable component, or preplanned maintenance or testing.

The proposed change also requires performing Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours, unless the absence of any potential common mode failure for the remaining EDGs is demonstrated.

- g. The fast load test of Surveillance Requirement 4.8.1.1.2.a.5 is amended by changing the time requirement of "within 60 seconds" to "in accordance with the manufacturer's recommendations". LaSalle's footnote (**) associated with this item is revised to remove the reference to the 60 second limit.
- h. LaSalle Surveillance Requirement 4.8.1.1.2.d.8 is revised to require that Surveillance Requirement 4.8.1.1.2.a.4 be performed within 5 minutes after completing the 24 hour run instead of Surveillance Requirements 4.8.1.1.2.d.4.a).2) and b).2. That is, a diesel would be demonstrated operable by completing a hot start test rather than by simulating a loss of offsite power by itself.

Byron and Braidwood Surveillance Requirement 4.8.1.1.2.f.7 is revised to require that Surveillance Requirement 4.8.1.1.2.a.4 be performed within 5 minutes after completing the 24 hour run instead of Surveillance Requirement 4.8.1.1.2.f.6).b). That is, a diesel would be demonstrated operable by completing a hot start test rather than by simulating a loss of ESF bus voltage in conjunction with an ESF actuation test signal.

The footnote (**) associated with Surveillance Requirement 4.8.1.1.2.d.8 for LaSalle and 4.8.1.1.2.f.7 for Byron and Braidwood is revised to reflect the hot start test surveillance (4.8.1.1.2.a.4), rather than the loss of offsite power test. The footnote also allows the EDG to operate for 2 hours at the continuous rating, rather than 1 hour, or until operating temperature has stabilized.

Bases of the Proposed Changes

The changes are consistent with Generic Letter 93-05 (GL 93-05). Item 10.1 provides recommendations for revising EDG surveillance requirements. Proposed changes a through f, described above, correspond to recommendation 1 of the generic letter. Proposed changes g and h correspond to recommendations 2 and 3, respectively. Recommendation 4 for the EDG surveillance requirements does not apply. The proposed changes are compatible with plant operating experience and are consistent with the guidance provided in NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements".

NUREG-1366 provides the results of the NRC's comprehensive examination of surveillance requirements in Technical Specifications that require testing during power operation. It also provides recommendations and describes the intent of the changes. The impact of specific items is discussed below.

Items a., b., c., d., e., and f.

Items a., b., c., d., e., and f. are based on the GL 93-05 recommendation that when an EDG itself is inoperable (not including a support system or independently testable component), the other EDG(s) should be tested only once (not every 8 hours) and within 8 hours unless the absence of any potential common-mode failure can be demonstrated.

NUREG-1366 recommends that the requirements to test the remaining EDG(s) when one EDG is inoperable due to any cause other than preplanned preventive maintenance or testing be limited to those situations where the cause for inoperability has not been conclusively demonstrated to preclude the potential for a common mode failure. However, when such testing is required, it should be performed within 8 hours.

The proposed changes deviate from this recommendation in two areas. The first deviation is that ComEd is proposing to retain the requirement to perform the testing within 24 hours, rather than the 8 hours suggested in the generic letter (the 8 hour requirement is being retained in Item c). The guidance provided in Generic Letter 91-18 (GL 91-18), "Information to Licensees Regarding Two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability," supports this change. Specifically, Section 6.1 of GL 91-18 describes the scope and timing of operability determinations and states that a decision on operability can usually be made within 24 hours. The NRC approved a similar change as part of Amendment 187/192 for PECO Energy Company's Peach Bottom Unit 2 and 3 on April 5, 1994.

ComEd's other proposed deviation from the recommendation in GL 93-05 is omitting the word "preventive" from the phrase "preplanned preventive maintenance." This deviation was supported by NRC representatives at the Cooper-Bessemer Owners' Group meeting on January 25, 1995. The NRC approved a similar change as part of Amendment 54 for Niagara Mohawk Power Corporation's Nine Mile Point Unit 2 on December 15, 1993.

- g. NUREG-1366 also recommends eliminating the semi-annual fast load test and loading the EDGs in accordance with the manufacturer's recommendations, except for the 18-month loss of offsite power tests. The proposed change is consistent with the generic letter recommendation. Fast loading of EDGs has proven to be part of the root cause of increased engine wear and tear, which has led to several significant EDG failures. Cylinder head cracking, crankcase explosions (due to excessive tin transfer between cylinder liners and pistons), and bearing failures have all been attributed by root cause analysis to fast loading. Slow loading of EDGs, as recommended by the manufacturer, allows the engine to heat up gradually, which significantly reduces thermal stresses on the engines. Monthly EDG testing and the refueling outage LOOP/LOCA tests, in addition to the other

surveillances, have proven adequate to assure that EDGs will perform their design function and handle full load, and transient loading conditions. Therefore, eliminating the fast load test will decrease EDG degradation.

- h. In NUREG-1366, the NRC concluded that there is no safety reason for performing a startup of a diesel generator within 5 minutes of completing the 24 hour test run. The hot-restart test is performed to verify that the diesel generator does not have impaired performance following operation at full load or equilibrium temperature. Diesel generators like those used by ComEd typically do not experience any significant temperature rise transients during operation or after shutdown and are not likely to fail to restart when hot. The NRC agreed with Duke Power's proposal to substitute a diesel generator run at continuous-rated load for 1 hour or until the operating temperature had stabilized, followed within 5 minutes by a diesel engine start. To ensure that operating temperatures stabilized, Generic Letter 93-05 established a 2 hour time limit.

The proposed change would also de-couple the 24-hour endurance run and the LOOP/LOCA (LOOP only for LaSalle) EDG sequencing requirements for the hot start test. A large number of station personnel are required for the performance of the LOOP/LOCA (LOOP only for LaSalle) test, and these tests can be unnecessarily delayed if an EDG problem occurs during the 24-hour endurance run. ComEd agrees that each test is necessary to ensure EDG reliability; however, it should not be necessary to perform these tests in series. Requirements for a separate 24-hour test, LOOP/LOCA (LOOP only for LaSalle) test, and a hot start test (requiring that the EDG be operated at full load for a minimum of two hours, or until operating temperature has stabilized, prior to the performance of this test) would ease the administrative burden of scheduling personnel resources during outages, as well as reduce equipment degradation.

Impact of the Proposed Changes

ComEd developed a detailed reliability program for EDGs as part of the alternate EDG system maintenance rule implementation. The comprehensive program ensures EDG reliability and diesel generator reliability required by station blackout are monitored and maintained above target levels. The program is consistent with Regulatory Guide 1.155, "Station Blackout", Regulatory Guide 1.9, and NUMARC 87-00, "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout at Light Water Reactors," Appendices D and E, Revision 1. The program includes surveillances for EDG support systems and subsystems, monitoring, a database of important data and information, preventive and corrective maintenance, failure analysis and root cause investigation, and problem closeout. Flowcharts guide engineers to the appropriate parts of the program and detailed requirements are provided in a station procedure. The procedure is highly structured and specific to ensure that the requirements are

met. For example, specific actions are required depending on the nature of a failure and number of triggers exceeded.

ComEd is proposing to retain the 24 hours allowed to determine the possibility of any potential common mode failure in items b, d, and f above, rather than allowing only 8 hours as GL 93-05 recommends. This deviation from GL 93-05 is supported by GL 91-18, which states that, in most cases, it is expected that the determination can be made immediately. In other cases, it is expected that the determination can be made within approximately 24 hours of discovery even though complete information may not be available. For systems and components in the Technical Specifications, the allowed outage times generally provide reasonable guidelines for safety significance. However, there is not an explicit requirement in the regulations for the timing of the determination.

It should also be noted that the words proposed in GL 93-05 that correspond to items b, c, d, and f above had the phrase "preplanned preventive maintenance." ComEd is proposing to omit the word "preventive." The intent of this exclusion is to require additional testing only in those cases where a potential for a common mode failure exists. Limiting the reduced testing to time periods of preplanned preventive maintenance would cause unnecessary testing of the operable EDG when preplanned corrective maintenance is required. Corrective maintenance is not necessarily considered work that is required to be performed to maintain EDG operability (i.e., preplanned corrective maintenance could be delayed without declaring the EDG inoperable). Accordingly, the condition requiring corrective maintenance will not prevent the EDG from performing its intended safety function. The proposed GL 93-05 wording could delay minor corrective maintenance in order to preclude having to demonstrate the operability of the remaining EDG. The ability to perform types of maintenance other than preventive without subsequent testing does not affect the design or performance characteristics of the EDGs. If during the performance of preplanned maintenance, it is discovered that an EDG is, in fact, inoperable and requires additional maintenance to restore it to operable status, plant personnel would either verify that the cause of the EDG being inoperable does not impact the operability of the other EDG or perform testing to provide assurance of continued operability of that EDG.

3. Proposed NRC Regulatory Guide Changes

Description and Basis of the Current Requirements

Surveillance Requirement 4.8.1.1.3 requires reports of all diesel generator failures, valid or non-valid, to be reported to the Commission. Reports shall include the information recommended in Regulatory Guide 1.108, "Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants." Regulatory Guide 1.108 is the original source of the guidance provided by the NRC regarding provisions for accelerated testing and

special reporting requirements for EDGs, as well as detailing specific tests required for EDGs.

Description and Basis of the Proposed Changes

Generic Letter 94-01 provides guidance to delete Surveillance Requirement 4.8.1.1.3. The change is described in detail in item 1 of this attachment. ComEd will continue to notify the Commission of significant EDG failures in accordance with 10 CFR 50.72 and 50.73.

The Bases for each station are revised to state that the surveillance requirements for demonstrating the operability of the diesel generators are based on the recommendations of Regulatory Guide 1.9, Revision 3, with the exceptions noted in the UFSAR. The reference to Regulatory Guide 1.108 is deleted because the document is superseded.

Revision 3 of Regulatory Guide 1.9 was issued as part of the resolution of Generic Safety Issue B-56, "Diesel Generator Reliability." It integrates pertinent guidance previously addressed in Revision 2 of Regulatory Guide 1.9, Revision 1 of Regulatory Guide 1.108, and Generic Letter 84-15, "Proposed Staff Actions to Improve and Maintain Diesel Generator Reliability," into a single Regulatory Guide. It also endorses, as appropriate, guidelines set forth in IEEE Standard 387-1984, "IEEE Standard Criteria for Diesel Generator Units Applied as Standby Power Supplies for Nuclear Power Generating Stations." Regulatory Guide 1.9, Revision 3 does not include increased testing or special reporting as part of the current guidance. The definitions in Section C.2.1 are applicable to the regulatory positions of the regulatory guide that address testing, recordkeeping, and reporting of EDG performance.

Impact of the Proposed Changes

Revision 3 of Regulatory Guide 1.9 integrates pertinent guidance previously addressed in Revision 2 of Regulatory Guide 1.9, Revision 1 of Regulatory Guide 1.108, and Generic Letter 84-15 into a single regulatory guide. The guide also endorses, as appropriate, guidelines set forth in IEEE Standard 387-1984, "IEEE Standard Criteria for Diesel-Generator Units Applied as Standby Power Supplies for Nuclear Power Generating Stations." The guide provides explicit guidance in the areas of preoperational testing, periodic testing, reporting and recordkeeping requirements, and valid demands and failures. It is no longer necessary to refer to Regulatory Guide 1.108 in the bases since the corresponding Technical Specification is deleted and the Regulatory Guide is superseded.

The guidance in Regulatory Guide 1.9, Revision 3, was used in preparation of Section 10.1 of GL 93-05. The proposed surveillance changes based on GL 93-05 are described in item 2 of this section.

LaSalle, Byron and Braidwood plan to integrate recommendations in Section C.2.1, "Definitions," of Regulatory Guide 1.9, Revision 3, as guidance for evaluating diesel generator failures. The stations will revise their UFSARs accordingly.

4. Proposed Editorial Changes

Description and Bases for the Proposed Changes

ComEd proposes to correct the spelling of "electrical" on page 3/4 8-2 of LaSalle Unit 2 Technical Specifications.

ComEd proposes to delete two notes from Byron Technical Specification 3.8.1.1 Action c.2 and Surveillance requirement 4.8.1.1.2.i and 4.8.1.1.2.j. The notes described applicability of requirements that were in effect until 2 years after issuance of an operating license for Unit 1 and are no longer needed. Page XI of the Table of Contents is revised to reflect a table that was added in Amendment 10 and to show that the page applies to Units 1 and 2 at Byron. The spelling of "requirements" is corrected on page 3/4 8-4.

ComEd proposes to delete a note that applied to Cycle 1 only from surveillance requirement 4.8.1.1.2.f for Byron and Braidwood. The note is no longer applicable.

For all stations, the Table of Contents is revised to reflect the deleted diesel generator test schedule table. Deleting the table is described in item 1 in this attachment.

References to the FSAR are changed to UFSAR to reflect the current document.

These changes are administrative in nature and improve readability.

The proposed amendment will enhance both the performance of the EDG and the operability of AC power sources and associated distribution systems during power operation, shutdown, and refueling modes. ComEd concludes that the proposed Technical Specification changes do not adversely affect or endanger the health or safety of the public or involve an unreviewed safety question.

Schedule Requirements

There are no specific schedule requirements associated with this amendment proposal. Therefore, ComEd requests that this amendment be approved by the NRC within about six months, i.e., NRC approval by approximately December of 1995, with an implementation time of 90 days.

ATTACHMENT B-1

PROPOSED CHANGES TO APPENDIX A,
TECHNICAL SPECIFICATIONS, OF FACILITY
OPERATING LICENSES NPF-11 AND NPF-18,
LASALLE COUNTY STATION UNITS 1 & 2

NPF-11

XXIII
3/4 8-1
3/4 8-1a*
3/4 8-2
3/4 8-2a
3/4 8-2b*
3/4 8-3
3/4 8-4
3/4 8-5*
3/4 8-6*
3/4 8-7
3/4 8-7a
3/4 8-7b
3/4 8-8*
3/4 8-9*
B 3/4 8-1

NPF-18

XXIII
3/4 8-1
3/4 8-1a*
3/4 8-2
3/4 8-2a
3/4 8-2b*
3/4 8-3
3/4 8-4
3/4 8-5*
3/4 8-6*
3/4 8-7
3/4 8-7a
3/4 8-7b
3/4 8-8*
3/4 8-9*
B 3/4 8-1

* These pages are provided for information only; there are no changes.