

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

3. Verifying that a sample of diesel fuel from the fuel storage tank is within the acceptable limits specified in Table 1 of ASTM D975 when checked for viscosity, water and sediment,
 4. Verifying the fuel transfer pump can be started and transfers fuel from the storage system to the day tank,
 5. Verifying the diesel starts from ambient condition,
 6. Verifying the generator is synchronized, loaded to $\geq 4,238$ kw, and operates for at least 60 minutes, and
 7. Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.
 8. Verifying the lubricating oil inventory in storage.
- b. At least once per 18 months during shutdown by:
1. Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service,
 2. Verifying the generator capability to reject a load of ≥ 825 kw without tripping,
 3. Simulating a loss of offsite power in conjunction with a safety injection signal, and:
 - a) Verifying de-energization of the emergency busses and load shedding from the emergency busses.
 - b) Verifying the diesel starts from ambient condition on the auto-start signal, energizes the emergency busses with permanently connected loads, energizes the auto-connected emergency loads through the load sequencer and operates for > 5 minutes while its generator is loaded with the emergency loads.
 4. Verifying that on a loss of power to the emergency busses, all diesel generator trips, except engine overspeed, generator differential current, and generator overexcitation are automatically disabled. backup phase fault detection
 5. Verifying the diesel generator operates for at least 60 minutes while loaded to $\geq 4,238$ kw.

ATTACHMENT B

Proposed Technical Specification Change Unit No. 2 - Change No. 2A-11

Safety Analysis

Description of Amendment Request: The proposed amendment request would revise the Emergency Diesel Generator Surveillance Requirement 4.8.1.1.2.b.4 to include backup phase fault protection as one of the diesel generator trips which are not bypassed on a loss of power to the emergency buses.

As described in the Unit 2 FSAR Section 8.3.1.1.11.5, item 3, the primary protection for each Emergency Diesel Generator unit is a three-phase percentage differential relay sensitive to both phase and ground faults. Backup protection consist of a three phase distance relay, three single phase long time overcurrent relays and a three phase instantaneous overcurrent relay with a built in timer. The distance relay torque controls the overcurrent relays and discriminates between faults and step load currents from the diesel generator units.

The Unit 2 FSAR further states in Section 8.3.1.1.15 that all Emergency Diesel Generator trips are bypassed when the diesel generators receive an emergency start signal except for generator current differential, generator overexcitation, engine overspeed protection and backup phase fault detection. However, due to a qualification problem with the distance relays for the backup phase fault detection, this protection scheme had to be bypassed during the startup phase until qualified relays could be obtained.

New distance relays have been purchased and qualified for the backup phase fault protection. The design change planned to install these qualified relays will return the backup phase fault protection to a diesel generator trip that is not bypassed during loss of power to the emergency buses and therefore requires a revision to the Technical Specifications surveillance item 4.8.1.1.2.b.4. The circuit modification will have redundant relays with coincident trip logic for the backup phase fault overcurrent detection and therefore will comply with the requirements of Regulatory Guide 1.9 paragraph c.7.

The proposed Technical Specification change will not change the consequences of nor increase the possibility of spurious diesel generator trips. With this proposed change, the Technical Specifications will be consistent with the description of the Emergency Diesel Generators phase fault protection as provided in the FSAR and the Unit 2 Safety Evaluation Report, Supplement 1 (page 8-1). This change is therefore considered safe.

ATTACHMENT C

No Significant Hazard Evaluation

Proposed Technical Specification Change
Unit No. 2 - Change No. 2A-11

Basis for Proposed No Significant Hazards Consideration Determination: The Commission has provided standards for determining whether a significant hazards consideration exists (10 CFR 50.92(c)). A proposed amendment to an operating license for a facility involves no significant hazards consideration 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 proposed change does not involve a significant hazards consideration because:

1. This change will not significantly increase the potential for spurious trips of the diesel generators under emergency start operation. While the backup phase fault trip of the diesels is not bypassed during emergency operation, the redundant relaying and coincident trip logic and properly qualified relays will protect against spurious trips and ensure availability of the diesel generators during accident situations. Since the availability of the diesel generators has not been impacted, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.
2. The proposed change does not modify or impact any other IE electrical system or components as described in the FSAR. Therefore, the probability of an accident or a malfunction of a different type than previously evaluated will not be created.
3. This change will not affect the assumptions or consequences of any safety analysis presented in the FSAR. The proposed change will revise the Technical Specification to be consistent with the description of the diesel generator protection trips as presented in section 8.3 of the Unit 2 FSAR. Therefore, no reduction in the margin of safety will be created by this change.

Based on the above considerations, it is proposed to characterize the change as involving no significant hazards consideration.