



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

ENCLOSURE

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO DIVISION 2, 125V DC BATTERY REPLACEMENT

COMMONWEALTH EDISON COMPANY

LASALLE UNIT 1

DOCKET NO. 50-373

1.0 INTRODUCTION

The DC power supply configuration at LaSalle Unit 1 consists of three 125V batteries, one for each division. Divisions 1 and 2 supply a variety of safety loads while division 3 supplies only the High Pressure Core Spray (HPCS) system. Due to the additional station load requirements, and also, in response to the Station Blackout Rule, LaSalle, Unit 1 is replacing the division 1 and 2 125V DC batteries during the February 1991 refueling outage. By letter dated October 17, 1990, Commonwealth Edison requested approval of the proposed temporary battery supply arrangement that is required to support the replacement of the division 2, 125V DC batteries.

2.0 EVALUATION

The replacement of the division 2 batteries requires that alternative DC power be supplied while the battery is being replaced and tested. This action is required to avoid a shutdown of both units because of Technical Specification (TS) Limiting Conditions for Operations (LCO) requirements. Technical Specification 3/4.8.2.3 requires that the 125V division 2 battery of the shutdown unit be available within seven days. Since installation and testing will take longer than the LCO requirement, the licensee has proposed a temporary arrangement that involves the use of the 250V battery which is being replaced. The 250V battery will be center-tapped and temporary cables will be used from the 250V battery to the 125V division 2 bus. Eight 500 MCM cables, four positive and four negative, will be used. These cables will not be seismically supported. The licensee states that this temporary arrangement is limited to 6 weeks and the cables will be surveilled once per shift to inspect for the cable damage. In addition, the combustibles will be limited in the path created by the temporary run.

The existing division 2 battery charger is used as the preferred source of 125V DC power and division 2 battery is needed only in the event of charger failure or the loss of offsite power. The charger is a Class 1E charger and has the capacity to handle the normal loads. Emergency Core Cooling System (ECCS) loads will not be required as the reactor will be defueled. One-half of the 250V battery located in the division 1 switchgear room will power the division 2 bus, however, the battery will be electrically and physically isolated from

division 1. The cable separation is maintained by the temporary cable configuration by three feet horizontally and five feet vertically from the division 1 electrical equipment.

Based on the above, the staff believes that LaSalle Unit 1 can be operated safely without undue risk to the health and safety of the public and there is reasonable assurance that adequate DC power will be available to mitigate any credible event that can occur during the 6-week period and, therefore, the proposed temporary battery supply arrangement for division 2 is acceptable.

3.0 CONCLUSION

The licensee has proposed a temporary battery supply arrangement for division 2, 125V DC system for a duration of 6 weeks. The staff has reviewed the licensee's submittal and has concluded that adequate basis for this duration has been provided. We believe that LaSalle Unit 1 can be operated safely without undue risk to the health and safety of the public and there is reasonable assurance that adequate DC power will be available to mitigate any credible event that can occur during the 6-week period and, therefore, the proposed temporary battery supply arrangement for division 2 is acceptable.

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Dated: February 4, 1991