CONSUMERS POWER COMPANY

PALISADES PLANT - DOCKET 50-255 - LICENSE DPR-20 PROPOSED TECHNICAL SPECIFICATIONS CHANGE REQUEST

PROPOSED PAGES

8303220298 830314 PDR ADOCK 05000255 PDR

4.7 EMERGENCY POWER SYSTEM PERIODIC TESTS (Contd)

- b. Every three months, the specific gravity of each cell, the temperature reading of every fifth cell, the height of electrolyte, and the amount of water added shall be measured and recorded.
- c. At least once per 18 months, during shutdown, by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status all of the actual emergency loads for 2 hours when the battery is subjected to a battery service test.
- d. At least once per 60 months, during shutdown, by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed subsequent to the satisfactory completion of the required battery service test.

4.7.3 Emergency Lighting

The correct functioning of the emergency lighting system shall be verified at least once each year. The 1981 verification may be deferred until the end of the 1981 refueling outage.

Basis

The emergency power system provides power requirements for the engineered safety features in the event of a DBA. Each of the two diesel generators is capable of supplying minimum required safeguards equipment from independent buses. (1, 2) This redundancy is a factor in establishing testing intervals. The monthly tests specified above will demonstrate operability and load capacity of the diesel generator. The fuel supply and various controls are continuously monitored and alarmed for abnormal conditions. Starting on complete loss of off-site power will be verified by simulated loss-of-power tests at approximately yearly intervals (during refueling shutdowns). Considering system redundancy, the specified testing intervals for the station batteries should be adequate to detect and correct any malfunction before it can result in system malfunction. Batteries will deteriorate with time, but precipitous failure is extremely unlikely. The surveillance specified for every month and every three months is that which has been demonstrated over the years to provide an indication of a cell becoming unserviceable long before it fails. The surveillance specified for every 18 months and for every

4.7 EMERGENCY POWER SYSTEM PERIODIC TESTS (Contd)

Basis (Contd)

60 months will provide an adequate demonstration of battery capacity. The battery service test will verify that the battery capacity is adequate to deliver the design requirements of its connected emergency dc load. The battery performance test will verify that the battery capacity is at least 80% of the manufacturer's rating. Results of this test reflect all factors including maintenance that determine battery capability.

References

- (1) FSAR, Section 8.4.1.
- (2) FSAR, Section 8.5.2.2.