ELECTRICAL POWER SYSTEMS

D. C. DISTRIBUTION - OPERATING

LIMITING CONDITION FOR OPERATION

3.8.2.3 The following D.C. bus trains shall be energized and OPERABLE:

TRAIN "A" consisting of 250/125 - volt D.C. bus No. 3A, 250/125 - volt D.C. battery bank No. 3A and two 50% capacity chargers.

TRAIN "B" consisting of 250/125 - volt D.C. bus No. 3B, 250/125 - volt D.C. battery bank No. 3B, and two 50% capacity chargers.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With one 250/125 - volt D.C. bus inoperable, restore the inoperable bus to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With one 250/125 - volt D.C. battery and/or a charger inoperable for reasons other than a decrease battery cell electrolyte in specific gravity of greater than 0.01 from the value observed in the previous quarterly test, restore the inoperable battery and/or charger to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

c. With one or more battery cells which show a decrease in electrolyte specific gravity greater than 0.01 from the value observed in the previous quarterly test, within 72 hours, perform an Engineering Evaluation to determine the reason(s) for the decrease, and perform appropriate corrective measures, if any, to restore the inoperable battery(ies) to OPERABLE status within the next 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.3.1 Each D.C. bus train shall be determined OPERABLE and energized at least once per 7 days by verifying correct breaker alignment and indicated power availability.

4.8.2.3.2 Each 250/125 - volt battery bank and charger shall be demonstrated OPERABLE:

a. At least once per 7 days by verifying that:

1. The electrolyte level of each pilot cell is between the minimum and maximum level indication marks.

BASES

The OPERABILITY of the A.C. and D.C. power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety related equipment required for 1) the safe shutdown of the facility and 2) the mitigation and control of accident conditions within the facility. The minimum specified independent and redundant A.C. and D.C. power sources and distribution systems satisfy the requirements of General Design Criterion 17 of Appendix "A" to 10 CFR 50.

The ACTION requirements specified for the levels of degradation of the power sources provide restriction upon continued facility operation commensurate with the level of degradation. The OPERABILITY of the power sources are consistent with the initial condition assumptions of the safety analyses and are based upon maintaining at least one of each of the onsite A.C. and D.C. power sources and associated distribution systems OPERABLE during accident conditions coincident with an assumed loss of offsite power and single failure of the other onsite A.C. source. The operating restrictions placed upon the batteries also recognize that basing the judgement of a cell's condition upon the measurement of electrolyte specific gravity may not be entirely appropriate. The specification allows time to determine whether true degradation or an artifact of measurement technique is the cause of a decrease in specific gravity and allows appropriate corrective measures to be taken following this determination.

The OPERABILITY of the minimum specified A.C. and D.C. power sources and associated distribution systems during shutdown and refueling ensures that 1) the facility can be maintained in the shutdown or refueling condition for extended time periods and 2) sufficient instrumentation and control capability is available for monitoring and maintaining the facility status.