

- g. One diesel generator may be inoperable for a period not exceeding 7 days provided the engineered safety features associated with the operable diesel are operable and were tested within their required surveillance test intervals. The other diesel generator shall be started to ensure operability within 24 hours before or after entry into this LCO and every 72 hours thereafter. This LCO shall not be allowed in conjunction with e. or f. above.
- h. One of the four connected safety-related station batteries may be inoperable for a period not exceeding 24 hours provided four battery chargers remain operable with one charger carrying the DC loads of each main DC distribution bus.
- i. If an operating safety-related inverter is rendered inoperable and the associated loads transfer to a non-safety-related power source, the loads shall be transferred back to an operable safety-related inverter within 8 hours or be in hot shutdown within an additional 6 hours and cold shutdown within 44 hours of inverter inoperability.
- j. One of the four connected battery chargers may be inoperable for a period not to exceed 2 hours. If an operable battery charger is not connected to the affected DC distribution bus within 2 hours, the operating unit(s) shall be sequentially placed in hot shutdown within the following 6 hours and 9 hours respectively, and placed in cold shutdown within the following 36 hours.

Basis

This two unit plant has four 345 KV transmission line interconnections. A 20 MW gas turbine generator and two 2850 KW diesel generators are installed at the plant. All of these energy sources will be utilized to provide depth and reliability of service to the Engineered Safeguards equipment through redundant station auxiliary power supply systems.

The electrical system equipment is arranged so that no single contingency can inactivate enough safeguards equipment to jeopardize the plant safety. The 480-volt equipment is arranged on 4 buses per unit. The 4160-volt equipment is supplied from 6 buses per unit.

Two separate outside sources can serve either unit's low voltage station auxiliary transformer. One is a direct feed from the unit's high voltage station auxiliary transformer and the second is from the other unit's high

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The Point Beach DC electrical system has been modified so that each of the four main DC distribution buses, which are shared between the two units, has its own power supplies consisting of a safety-related station battery (D05, D06, D105, D106) and a battery charger. In addition to these bus-specific power supplies, a swing safety-related battery (D305) is installed which is capable of being connected to any one of the four main DC distribution buses. Swing battery chargers are also provided. Under normal circumstances, one battery and one battery charger are connected in each main DC distribution bus. The battery charger normally shall be in service on each battery so that the batteries will always be at full charge in anticipation of a loss-of-AC power incident. However, one of the four connected battery chargers may be inoperable for up to two hours to allow the transfer to a standby battery charger or return the inoperable battery charger to service. The 2-hour outage time is based on Regulatory Guide 1.93 and reflects a reasonable time to assess plant status and either connect an operable battery charger to the affected bus or prepare to effect an orderly and safe shutdown of the operating unit(s). Under unusual circumstances, two of the five safety-related batteries may be out of service for a limited period of time provided one of the two out-of-service batteries is returned to service within the time periods specified in Specification 15.3.7.B.1.h. These limiting conditions for operation ensure that adequate DC power will always be available for starting the emergency generators and other emergency uses.

The support systems necessary to be operable to ensure the operability of the emergency diesel generators (EDGs) are the EDG starting air system, EDG fuel oil system, EDG ventilation system, and EDG DC control power.

The EDG starting air system is considered operable when 1) all three starting air bottles in each bank are operable, 2) the starting air banks can be maintained at a minimum pressure of 165 psig, 3) the air bank crossconnect valve is shut unless bank pressures are being equalized and an operator is stationed at the valve during pressure equalization, and 4) all four starting air motors and their associated valves and relays are operable.

The EDG fuel oil system is considered operable when 1) 11,000 gal. of fuel oil is initially available in the emergency fuel tank to the diesel generators [Because the EDGs consume approximately 205 gallons of fuel per hour when fully loaded, the 11,000 gallon fuel supply in the emergency fuel tank provides sufficient fuel to operate one EDG at design load for more than 48 hours.], 2) the EDG day tank and associated motor-operated fill valve are operable, 3) at least one of the two base-mounted sump tank fuel oil transfer pumps is operable, and 4) the fuel oil transfer pump associated with the EDG is operable. However, both fuel oil