APPENDIX BA

ELECTRIC POWER - INTERFACES

8A.2 OFFSITE POWER SYSTEM

- Electrical power from the power grid to the plant site shall be supplied by two physically independent circuits designed and located so as to minimize the likelihood of simultaneous failure.
- Each of these independent circuits shall have the capability to safely shutdown the unit. The first preferred circuit shall be connected via a main transformer and unit auxiliary transformer, and shall have the capacity to supply the startup and all the auxiliary loads (both group 1 and group 2) simultaneously.
- 3. The second preferred power circuit shall supply power to the standby transformer and shall have the capacity to supply all the safety-related loads and all the auxiliary loads (both group 1 and group 2) simultaneously. In addition, an ESF transformer will be provided to supply Class 1E busses only. This will require independent connection to the offsite source.
- The loss of the nuclear unit or the most critical unit on the grid shall not result in the loss of offsite power to the Class IE busses.
- 5. The switchyard power circuit breaker control shall be designed with duplicate and redundant systems, i.e., two independent battery systems, two trip coils per breaker, and two independent protective relay schemes.

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