

APPENDIX 8A

ELECTRIC POWER - INTERFACES

8A.2 OFFSITE POWER SYSTEM

1. 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.
2. 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.
4. 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 1E 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.