# 1C ABWR Station Blackout Considerations

The information in this appendix of the reference ABWR DCD, including all subsections and tables, is incorporated by reference with the following departures and supplement.

STD DEP Admin (pages 1C-2 and 1C-3)

The plant medium voltage electrical system alternate design description was provided in ABWR Licensing Topical Report NEDO-33335, "Advanced Boiling Water Reactor (ABWR) Plant Medium Voltage Electrical System Design," dated May 18, 2007. This information is incorporated by reference.

## 1C.4 COL License Information

### 1C.4.1 Station Blackout Procedures

The following site-specific supplement addresses COL License Information Item 1.13.

The station blackout procedure(s) will be developed per the schedule and description provided in ABWR Licensing Topical Report NEDO-33297, "Advanced Boiling Water Reactor (ABWR) Procedures Development Plan," dated January 19, 2007. (COM 1C-1)

## Table 1C-1 ABWR Design Compliance with 10CFR50.63 Regulations

| Requirements | Compliance |
|---|---|
| (2) Alternate AC source: The alternate AC power source(s), as defined in § 50.2, will constitute acceptable capability to withstand station blackout provided an analysis is performed which demonstrates that the plant has this capability from onset of the station blackout until the alternate AC source(s) and required shutdown equipment are started and lined up to operate. The time required for startup and alignment of the alternate AC power source(s) and this equipment shall be demonstrated by test. Alternate AC source(s) serving a multiple unit site where onsite emergency AC source are not shared between units must have, as a minimum, the capacity and capability for coping with a station blackout in any of the units. At sites where onsite emergency AC sources are shared between units, the alternate AC source(s) must have the capacity and capability as required to ensure that all units can be brought to and maintained in safe shutdown (non-DBA) as defined in § 50.2. If the alternate AC source(s) meets the above requirements and can be demonstrated by test to be available to power the shutdown buses within 10 minutes of the onset of station blackout, then no coping analysis is required. | ~~The ABWR design is a single unit plant arrangement design.~~<br>**On site emergency AC sources are not shared between units.** |

## Table 1C-2 ABWR Design Compliance with RG 1.155

| Requirements | Compliance |
|---|---|
| **Appendix B—Guidance Regarding Systems/Components** | |
| ~~*Water Source (Existing Condensate Storage Tank or Alternate)*~~ Instrument Air (Compressed Air System) | SBO Recovery with AAC Power Source |