
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

APR1400 Design Certification

Korea Electric Power Corporation / Korea Hydro & Nuclear Power Co., LTD

Docket No. 52-046

RAI No.: 67-8019
SRP Section: 13.03 – Emergency Planning
Application Section: 13.03
Date of RAI Issue: 07/10/2015

Question No. 13.03-1

The TSC is within the Control Room Envelope. However, the backup power supplies to the plant computer, Safety Parameter Display System (SPDS), and TSC displays and lighting are not explicitly provided such that the design for the TSC to continuously assess the impacts of a release of radioactive materials to the environment can be evaluated. The applicant should provide the description of the backup power supplies to the plant computer systems, SPDS, and TSC SPDS displays and lighting so that the staff can determine that the application meets the requirements in Appendix E to 10 CFR Part 50 and the application conforms to guidance provided above, or explain why it is not needed.

Response

The plant computer, Safety Parameter Display System (SPDS), and TSC displays and lighting are integrated into the TSC console.

For the TSC console, two (2) independent single phase, 120V, 60Hz AC sources (a normal power source and an alternate power source) are provided from the onsite ac power system. At least one of the power sources is supplied from an ungrounded uninterruptible power supply (UPS), which is used as the normal power source. In case power is not available from the normal power source, the TSC console load is automatically transferred to the alternate power source without interruption.

Impact on DCD

There is no impact on the DCD.

Impact on PRA

There is no impact on the PRA.

Impact on Technical Specifications

There is no impact on the Technical Specifications.

Impact on Technical/Topical/Environmental Reports

There is no impact on any Technical, Topical, or Environmental Reports.