FLORIDA POWER CORPORATION
CRYSTAL RIVER UNIT 3
DOCKET NO. 50-302/LICENSE NO. DPR-72
REQUEST NO. 121, REVISION 1

AUXILIARY BUILDING VENTILATION SYSTEM

LICENSE DOCUMENT INVOLVED: Technical Specifications (Appendix A)

PORTION: 3.7.8.1 Auxiliary Building Ventilation Exhaust System

DESCRIPTION OF REQUEST:

Add on ACTION statement to Specification 3.7.8.1 requiring a plant shutdown if inoperable pairs of exhaust fans or filter systems cannot be restored to operable within 7 hours.

Specifically add the following ACTION statement:

b. With more than one pair of exhaust fans or more than one filter system inoperable, restore one inoperable pair of fans or systems to OPERABLE status within 7 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours."

Additionally, add footnote 2 which stated:

"The cumulative downtime, excluding surveillance testing, of the total Auxiliary Building ventilation system shall be limited to 7 hours during any and all 30 day periods."

REASON FOR REQUEST:

Florida Power Corporation requests this change to allow a sufficient length of time for maintenance and/or repair of exhaust fans and filter units. Currently, if maintenance must be performed on all fans or all filter systems during POWER OPERATION, the restrictions of Specification 3.0.3 apply. Within 1 hour actions must be taken to place the unit in HOT STANDBY within 6 hours. This is not enough time to perform maintenance, test the systems and return the system to OPERABLE status.

EVALUATION OF REQUEST:

The purpose of the Auxiliary Building Ventilation Exhaust System is to:

1) Provide suitable ambient conditions in the Auxiliary Building during all MODES of OPERATION.

2) Mitigate the unfavorable conditions in the Auxillary Building following an accident.

3) Mitigate the consequences of an accident by filtering the release.

The accidents for which the Auxiliary Building Ventilation System was assumed to operate include the Fuel Handling Accident (FSAR Section 14.2.2.3.1), Failure of Small Lines Carrying Primary Coolant Outside the Reactor Building (FSAR Section 14.2.2.6), and the Waste Gas Tank Rupture (FSAR Section 14.2.2.8).

With the approval of this Technical Specification Change, the ability of this system to perform its safety functions will not be significantly degraded. For the brief amount of time allowed for inoperability (12 hours), suitable ambient conditions can be maintained in the building. To prevent an accident from occurring while this system is inoperable, Specification 3.9.12 requires that fuel movement be suspended.

If one of the accidents above was to occur while the Auxiliary Building Filters are inoperable the resultant doses are still well within 10 CFR 100 guidelines (300 Rem to the thyroid and 25 Rem whole body). The Fuel Handling Accident analysis does not assume any filtration, therefore, the integrated dose at the Exclusion Boundary remains 14 Rem to the thyroid and .19 Rem whole body. The analysis for the Failure of Small Lines assumes that airborne nuclides are filtered through the HEPA and charcoal filters (90% iodine removal efficiency), with an integrated dose of .115 Rem thyroid and .066 Rem whole body. Without taking credit for charcoal filtration the integrated dosage becomes 1.15 Rem thyroid and .068 Rem whole body. The Waste Gas Tank Rupture analysis indicates that integrated doses of 1.43 Rem thyroid and .92 Rem whole body would result. Without taking credit for charcoal filtration the doses become 14.3 Rem thyroid and .92 Rem whole body.

The current requirements to shutdown the reactor with the ventilation system shutdown does not decrease the likelihood or consequences of an Auxiliary Building accident. Thus deferring (from one hour to seven hours) an action that has a minimal gain will have little or no safety impact.