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SURVEILLANCE REQUIREMENTS (Continued)

e. At least once per 18 months by:

1. Verifying that the pressure drops across the combined HEPA filters and charcoal adsorber banks is < 4.15 inches Water Gauge while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

2. Verifying that on a containment isolation signal, the system automaticaly isolates the control room within 35 seconds and switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks.

3. Verifying that the system maintains the control room at a positive pressure of ≥ 1/8 inch W.G. relative to the outside atmosphere during system operation with ≤ 450 cfm outside air intake.

f. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove ≥ 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

g. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of 2000 cfm ± 10%.

3/4.3.3.7 FIRE DETECTION INSTRUMENTATION

OPERABILITY of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of fires will reduce the potential for damage to safety related equipment and is an integral element in the overall facility fire protection program.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABILITY.

3/4.3.3.8 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables during and following an accident. This capability is consistent with the recommendations of NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations."

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

for operations personnel during and following all credible accident conditions. The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rem or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criteria 10 of Appendix "A", 10 CFR 50.

3/4.7.8 ECCS AREA VENTILATION SYSTEM

The OPERABILITY of the ECCS area ventilation system ensures that radioactive materials leaking from the ECCS equipment following a LOCA are filtered prior to reaching the environment. The operation of this system and the resultant effect on offsite dosage calculations was assumed in the accident analyses.

3/4.7.9 SEALED SOURCE CONTAMINATION

The limitations on sealed source removable-contamination ensure that the total body or individual organ irradiation does not exceed allowable limits in the event of ingestion or inhalation of the probable leakage from tne source material. The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. Quantities of interest to this specification which are exempt from the leakage testing are consistent with the criteria of 10 CFR Parts 30.11-20 and 70.19. Leakage from sources excluded from the requirements of this specification is not likely to represent more than one maximum permissible body burden for total body irradiation if the source material is inhaled or ingested.

3/4.7.10 SNUBBERS

All snubbers are required to be OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubbers excluded from this inspection program are those installed on nonsafety-related systems and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system.

The visual inspection frequency is based on maintaining a constant level of snubber protection to systems. Therefore, the required inspection interval varies inversely with the observed snubber failures and is determined by the number of inoperable snubbers found during an inspection. Inspections performed

ATTACHMENT

RE: ST. LUCIE UNIT 1
DOCKET NO. 50-335
PROPOSED LICENSE AMENDMENT
CHLORIDE DETECTION SYSTEM
SAFETY EVALUATION

## EVALUATION OF CONSEQUENCES OF AN ACCIDENTAL FAILURE OF A 150-LB. CHLORINE CYLINDER ON THE HABITABILITY OF THE ST. LUCIE UNIT 1 CONTROL ROOM

Prior to the installation of the sodium hypochlorite generator, the source of chlorine used in the treatment of the plant circulating water was one-ton cylinders of liquified chlorine. These cylinders were stored at the chlorination facility located within the plant perimeter. In order to provide control room occupants protection against an accidental chlorine release, seismic Category 1 chlorine detectors were installed at the control room outside air intakes.

Although the main source of chlorine for which adequate protection was provided no longer exists, there remains a smaller quantity of chlorine stored offsite near the sewage treatment facility and the city water storage tanks. This chlorine, stored in 150-lb. cylinders, is the source used in the evaluation of the consequences of a postulated accidental release from a 150-lb. cylinder on the St. Lucie Unit 1 control room habitability.

In this evaluation it is assumed that 25 percent (38 lb.) of the closest 150-lb. cylinder contents is released instantaneously. The size and diffusion of the cloud are modeled based on the guidance given in Regulatory Guide 1.78. No credit is taken for the presence of the chlorine detectors and consequently, the normal air exchange between the outside environs and the control room continues.

The results of the evaluation show that the maximum chlorine concentration in the control room is 4.9 ppm whereas the R.G. 1.78 toxicity limit is 15 ppm. Given the conservative nature of the evaluation and the relatively small peak control room concentration, the 150-lb. chlorine cylinders do not constitute a source which would require having qualified detectors at the control room air intakes.

STATE OF FLORIDA )
) ss.
COUNTY OF DADE )

Robert E. Uhrig, being first duly sworn, deposes and says:

That he is Vice President of Florida Power & Light Company, the Licensee herein;

That he has executed the foregoing document; that the statements made in this said document are true and correct to the best of his knowledge, information, and belief, and that he is authorized to execute the document on behalf of said

Robert E. Uhrig

Subscribed and sworn to before me this

9th day of March, 1983

Cheryl L. Fredricks
NOTARY PUBLIC, in and for the County of Dade, State of Florida

My commission expires: Notary Public, State of Florida at Large My Commission Expires October 30, 1983 Bonded thru Maynard Bonding Agency