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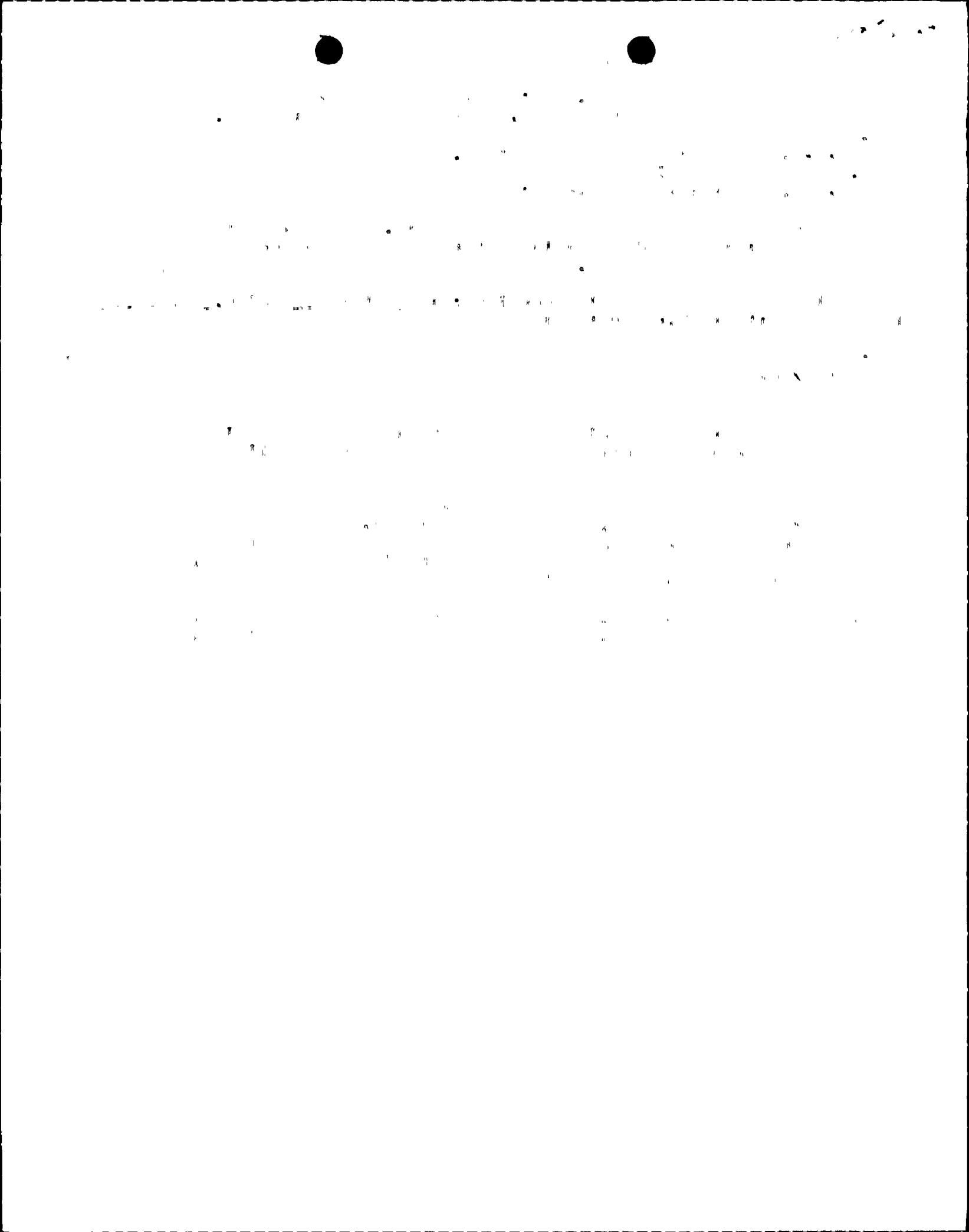
ACCESSION NBR:8501030079 DOC.DATE: 84/12/31 NOTARIZED: NO DOCKET #
 FACIL:50-389 St. Lucie Plant, Unit 2, Florida Power & Light Co. 05000389
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 WILLIAMS,J.W. Florida Power & Light Co.
 RECIP.NAME RECIPIENT AFFILIATION
 EISENHUT,D.G. Division of Licensing

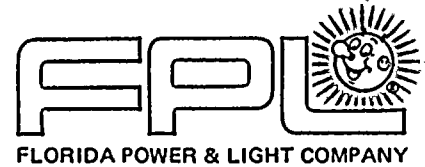
SUBJECT: Forwards Rev 4 to fire hazard analysis, Submittal of formal disposition of all deviations through Rev 4 by second wk of Jan 1985 requested.

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NOTES: *Revised 1/16/85 J.W.* 05000389
 OL:04/06/83

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DEC 31 1984

L-84-389

Office of Nuclear Reactor Regulation
Attention: Mr. Darrel G. Eisenhut, Director
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Eisenhut:

RE: ST. LUCIE UNIT 2
DOCKET NO. 50-389
FIRE PROTECTION

Attached is Revision 4 to the Fire Hazard Analysis for St. Lucie Unit 2. Please replace the previous pages 20, 44, and 47 with the revised pages attached. All additions and changes are identified by revision bars in the margins.

The Nuclear Regulatory Commission audit is presently scheduled for February, 1985. Resolution of these deviations will be an integral part of the audit. Florida Power & Light requests that the Nuclear Regulatory Commission provide formal disposition of all the deviations thru Revision 4 requests by the second week in January, 1985.

Your cooperation in this effort would be greatly appreciated.

Should you have any questions regarding this submittal, please advise.

Very truly yours,

J.W. Williams, Jr.
Group Vice President
Nuclear Energy Department

JWW/SJR/mp
Attachment

cc: J.P. O'Reilly, Region II
Harold F. Reis, Esquire

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F PDR

Evaluation H4

- 1) Ionization type smoke detection is provided (as shown on Drawings 2998-G-413) and an automatic suppression system is provided in fire zones 39 and 51E.
- 2) Portable fire extinguishers and a fire standpipe system with hose stations are available for use in the area.
- 3) See Evaluation A4, items 4 through 7.

Conclusion H4

See Conclusion A4.

Deviation H5

A deviation is requested from Section III-G.2.a of Appendix R for mechanical penetrations to the containment from the RAB fire zones 25 (Containment Purge), 39 (RAB HVAC Equipment Room) because no penetration fire seals are provided. All of the penetrations are sealed air tight, however they do not constitute a typical fire rated assembly.

Evaluation H5

1. Portable fire extinguishers and a fire standpipe system with hose stations are available for use in this area.
2. Ionization type smoke detection system is provided as shown on Drawings 2998-G-413.
3. All mechanical penetrations are sealed air tight and penetrate a 36 inch thick concrete shell from the RAB into the containment. This seal has been air tested at $-.25''$ wg. Between the 36 inch concrete shell and the steel containment, there is an annulus of 48 inches which the penetrations pass through. The annulus has negligible combustible loading. At the Reactor Containment Building side, there is a $3 \frac{5}{8}$ inch thick reinforced steel containment (reinforced $3 \frac{5}{8}$ inches for penetrations purposes). The penetrations pass through this steel containment, sealed air tight and tested at approximately 44 psid.
4. Six general types of piping penetration assemblies are provided. The penetration assemblies consist of a containment vessel penetration nozzle, a process pipe, a Shield Building penetration sleeve and a shield building bellows seal. In the case of cold penetrations the containment vessel penetration nozzle is an integral part of the process pipe. In the case of hot and semi-hot penetrations, a multiple flued head is provided as an integral part of the process pipe. A guard pipe, which encloses the process pipe and directs any fluid released back into the containment, is welded to the flued head. For hot penetrations an expansion joint metal bellows is welded to the flued head and the containment vessel penetration nozzle to accommodate thermal movements. The containment vessel penetration nozzles are designed to meet the requirements for Class MC vessels under ASME Code, Section III.

R3

FIRE AREA "O"

This Fire Area includes fire zones 19 (RAB East Hallway and Miscellaneous Equipment Area at elevation 19.50'), 20 (RAB East-West Common Hallway at elevation 19.50'), and 17 below the solid floor at elevation 12.08' (Boric Acid Make-up Pump Room) as shown on the attached drawings. Parameters descriptive of the fire area, including physical description, safe shutdown capability, fire hazard analysis and fire protection are outlined in the attached matrix. Essential equipment within this fire area is shown in the attached essential equipment list.

The following deviations to Appendix R to 10CFR50 are requested:

Deviation 01

A deviation is requested from fire section III-G.2.a of Appendix R for penetrations 2, 3, 12, 13, 14 and 17 through the barrier between Fire Areas "L" and "O" because no fire dampers are provided in the ventilation ducts.

Evaluation 01 - See Evaluation L2

Conclusion 01 - See Conclusion L2

Deviation 03

A deviation is requested from Section III-G.2.a of Appendix R for the hatch at Column RAC/2-RA4 because a steel hatch cover of 1/4 inch minimum thickness is being provided at elevation 19.50 feet.

Evaluation 03 - See Evaluation H1

Conclusion 03 - See Conclusion H1

Deviation 04

A deviation is requested from Section III-G.2.a of Appendix R for the hatch at Column RAJ/2-RA5 because a steel hatch cover of 1/4 inch minimum thickness is being provided at elevation 19.50 feet.

Evaluation 04 - See Evaluation I3

Conclusion 04 - See Conclusion I3

Conclusion 07

Based on our evaluation the installation of additional automatic fire suppression in the fire area would not augment or materially enhance the safety of the plant. Therefore, we conclude, this is an acceptable deviation from Appendix R to 10 CFR 50, Section III-G.2.c.

Deviation 08

A deviation is requested from Section III-G.2.a of Appendix R for watertight doors RA 4, 5 and 6 because the fire rating of the custom manufactured doors is not Underwriters Laboratory listed.

Evaluation 08

See Evaluation J3

Conclusion 08

See Conclusion J3

Deviation 09

A deviation is requested from Section III-G.2.a of Appendix R because fire retardant coatings are not provided for the structural steel supporting the steel conduits which are wrapped to provide separation in accordance with Appendix R.

Evaluation 09

- 1) Ionization type smoke detection is provided as shown on Drawings 2998-G-413.
- 2) An automatic suppression system is provided in fire zones 19 and 20.
- 3) Portable fire extinguishers and a fire standpipe system with hose stations are available for use in the area.
- 3) See Evaluation A4, items 4 through .

Conclusion 09

See Conclusion A4.

Deviation 010

A deviation is requested from Section III-G.2.a of Appendix R because no fire damper is provided in the ventilation duct located in the east wall of the charging pump cubicle access corridor.

Evaluation 010 - See Evaluation N4

Conclusion 010 - See Conclusion N4

R3

