

REGULATORY INFORMATION DISTRIBUTION (RIDS)

may

ACCESSION NBR: 8307280237 DOC. DATE: 83/07/22 NOTARIZED: NO  
 FACIL: 50-389 St. Lucie Plant, Unit 2, Florida Power & Light Co.  
 AUTH. NAME: UHRIG, R.E. AUTHOR AFFILIATION: Florida Power & Light Co.  
 RECIP. NAME: EISENHUT, D.G. RECIPIENT AFFILIATION: Division of Licensing

DOCKET # 05000389

SUBJECT: Forwards Rev 2 to 820814 evaluation supporting requests for exemption to Section III-G to App R to 10CFR50 re fire areas H, I & O.

DISTRIBUTION CODE: B002S COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 6  
 TITLE: Licensing Submittal: Fire Protection

NOTES:

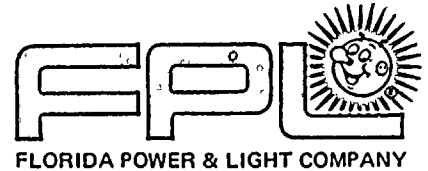
	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	LIC BR #3 BC	1 1	NERSES, V. 01	1 1
INTERNAL:	ELD/HDS2	1 0	IE FILE 07	1 1
	NRR/DE/CEB 06	2 2	NRR/DSI/ASB	1 1
	<u>REG FILE</u> 04	1 1	RGN2	1 1
EXTERNAL:	ACRS 10	6 6	LPDR 03	1 1
	NRC PDR 02	1 1	NSIC 05	1 1
	NTIS 1	1 1		

U.S. DEPT. OF JUSTICE  
FEDERAL BUREAU OF INVESTIGATION

MEMORANDUM FOR THE DIRECTOR  
SUBJECT: [Illegible]

DATE: [Illegible]  
BY: [Illegible]

NO.	NAME	ADDRESS	DATE	REMARKS
1	[Illegible]	[Illegible]	[Illegible]	[Illegible]
2	[Illegible]	[Illegible]	[Illegible]	[Illegible]
3	[Illegible]	[Illegible]	[Illegible]	[Illegible]
4	[Illegible]	[Illegible]	[Illegible]	[Illegible]
5	[Illegible]	[Illegible]	[Illegible]	[Illegible]



July 22, 1983  
L-83-425

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

Dear Mr. Eisenhut:

Re: St. Lucie Unit No. 2  
Docket No. 50-389  
Fire Protection

Please find enclosed Revision 2 to the St. Lucie Unit 2 evaluation supporting requests for exemption to Section III-G to Appendix R to 10 CFR 50. This package addresses three new deviations for fire areas H, I, and O. The original evaluation was submitted on August 14, 1982 (FP&L Letter L-82-282 Uhrig to Eisenhut).

Should you have any questions concerning the contents of this letter, please do not hesitate to contact us.

Very truly yours,

Robert E. Uhrig  
Vice President  
Advanced Systems and Technology

REU/RJS/PPC/mp  
Attachment

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

*13002*  
*1/1*

8307280237 830722  
PDR ADOCK 05000389  
PDR

- 4) The B train cable traverses the section of fire zone 39 northeast of Column RAD/2-RA3 alone (the redundant counterpart no longer routed in parallel), enclosed in a fire barrier of two hour fire resistance rating.
- 5) The section of fire zone 39 northeast of Column RAD/2-RA3 is separated from the adjacent portion of fire zone 39 by a full height concrete wall. While the wall is not considered a 3 hour rated fire barrier it provides a considerable deterrent to fire conflagration from the adjacent portion of fire zone 39.

#### Conclusion H3

Based on our evaluation, the enclosure of the single cable essential for safe shutdown in the section of fire zone 39 northeast of Column RAD/2-RA3 within a barrier of two hour fire resistance rating provides adequate separation of redundant trains essential for safe shutdown. The installation of fire detection and an automatic fire suppression system northeast of Column RAD/2-RA3 would not augment or materially enhance the safety of the plant. Therefore, we conclude, this is an acceptable deviation to Appendix R to 10CFR50, Section III-G.2.c.

#### Deviation H4

A deviation is requested from Section III-G.2.c of Appendix R because Fire Area H does not have fire detection or automatic fire suppression throughout. Automatic suppression is provided as follows:

- Zone 39 (Elev 43.0') - from Column Line RAH to RAD and from Column Line 2RA3 south approximately 12 ft to the north wall of zones 40 and 50.
- Zone 51 East (Elev 19.5') - from Column Line RAH to RAA and from Column Line 2RA3 south approximately 12 ft to the north wall of zones 40, 17 and 51.

#### Evaluation H4

- 1) Essential cables enclosed in a fire barrier having a minimum fire resistance rating of one hour are located in zones provided with automatic suppression systems. (Exception - Fire Zone 39, northeast of Column RAD/2-RA3 - see Deviation H3).
- 2) The Fire Area has ionization smoke detection where cable and cable tray concentration is significant which provides early notification of any fire condition.
- 3) Standpipe hose stations equipped with 100 ft of hose are strategically located to permit hose stream application in any portion of the fire area.
- 4) Portable fire extinguishers are provided throughout the fire area.

- 5) Heavy concentrations of cable in zones 51 east of Column Line RAH and the corridor portion of 39 are provided with automatic suppression systems.
- 6) Fire Area H is divided into several rooms by full height concrete walls. While the walls are not considered 3 hour rated fire barriers they provide considerable deterrent to fire conflagration from adjacent portions of the fire area.

#### Conclusion H4

Based on our evaluation, the existing smoke detection, automatic suppression systems, early response with manual fire suppression equipment, and enclosure of identified cables in a barrier having a minimum of one hour fire resistance rating provides adequate protection. Further extension of the automatic suppression systems would not augment or materially enhance the safety of the plant. Therefore, we conclude, this is an acceptable deviation to Appendix R to 10 CFR 50, Section III-G.2.c.

Zone 20 (Elev -0.5') - between Column Lines RAG and RAL from the south wall of zones 15 and 16 extending south for 12 ft beyond Column Line 2RA3. Between Column Lines RAK and RAL extending north for 16 ft beyond Column Line 2RA3.

#### Evaluation 07

- 1) Essential cables enclosed in a fire barrier having a minimum fire resistance rating of one hour are located in zones provided with automatic suppression systems. (Exception - Fire Zone 20, Aerated Waste Storage Tank Room - see Deviation 05) (Exception - Fire Zone 19, Gas Decay Tank Cubicle - see Deviation 06).
- 2) The Fire Area has ionization smoke detection where cable and cable tray concentrations is significant which provides early notification of any fire condition.
- 3) Standpipe hose stations equipped with 100 ft of hose are strategically located to permit hose stream application in any portion of the fire area.
- 4) Portable fire extinguishers are provided throughout the fire area.
- 5) Heavy concentrations of cable in zones 19 and 20 are provided with automatic suppression systems.
- 6) Fire Area 0 is divided into several rooms by full height concrete walls. While the walls are not considered 3 hour rated fire barriers they provide considerable deterrent to fire conflagration from adjacent portions of the fire area.

#### Conclusion 07

Based on our evaluation, the existing smoke detection, automatic suppression systems, early response with manual fire suppression equipment, and enclosure of identified cables in a barrier having a minimum of one hour fire resistance rating provides adequate protection. Further extension of the automatic suppression systems would not augment or materially enhance the safety of the plant. Therefore, we conclude, this is an acceptable deviation to Appendix R to 10 CFR 50, Section III-G.2.c.

R2

R2

#### Deviation I4

A deviation is requested from Section III-G.2.c of Appendix R because Fire Area I does not have automatic fire suppression throughout. Automatic suppression is provided as follows:

Zone 51 (Elev 19.5') - throughout

Zone 23 (Elev 19.5') - throughout

#### Evaluation I4

- 1) Essential cables enclosed in a fire barrier having a minimum fire resistance rating of one hour are located in zones provided with automatic suppression systems.
- 2) The Fire Area has ionization smoke detection throughout which provides early notification of any fire condition.
- 3) Standpipe hose stations equipped with 100 ft of hose are strategically located to permit hose stream application in any portion of this fire area.
- 4) Portable fire extinguishers are provided throughout the fire area.
- 5) Heavy concentrations of cable in zones 51 and 23 are provided with automatic suppression systems.
- 6) Fire Area I is divided into several rooms by full height concrete walls. While the walls are not considered 3 hour rated fire barriers they provide considerable deterrent to fire conflagration from adjacent portions of the fire areas.

#### Conclusion I4

Based on our evaluation, the existing smoke detection, automatic suppression systems, early response with manual fire suppression equipment, and enclosure of identified cables in a barrier having a minimum of one hour fire resistance rating provides adequate protection. Further extension of the automatic suppression systems would not augment or materially enhance the safety of the plant. Therefore, we conclude, this is an acceptable deviation to Appendix R to 10 CFR 50, Section III-G.2.c.

R2

R2

#### Deviation 06

A deviation is requested from Section III-G.2.c of Appendix R for fire zone 19 (Gas Decay Tank Cubicle) because an automatic suppression system is not provided in the Gas Decay Tank Cubicle to protect the single conduit containing cables essential for safe shutdown which are enclosed in a fire barrier having a one hour fire resistance rating.

#### Evaluation 06

- 1) Ionization smoke detection is provided throughout fire zone 19.
- 2) The Gas Decay Tank Cubicle is lightly trafficked, thus reducing the probability of transient combustibles being introduced.
- 3) A single conduit containing cables essential for safe shutdown identified in the Gas Decay Tank Cubicle is being enclosed in a fire barrier having a one hour fire resistance rating.
- 4) Combustible load in the Gas Decay Tank Room is negligible.
- 5) A standpipe system hose station equipped with 100 feet of hose is located in fire zone 19 near the area.
- 6) Portable fire extinguishers are provided in fire zone 19.

#### Conclusion 06

Based on our evaluation, the existing smoke detection, negligible combustible load, early response with manual fire suppression equipment, and enclosure of the single cable identified in a barrier having a one hour fire resistance rating provides adequate protection. The installation of an automatic suppression system in the Gas Decay Tank Cubicle would not augment or materially enhance the safety of the plant since it would not reduce the time required for fire extinguishment. Therefore, we conclude, this is an acceptable deviation to Appendix R to 10CFR50, Section III-G.2.c.

#### Deviation 07

A deviation is requested from Section III-G.2.c. of Appendix R because Fire Area 0 does not have automatic fire suppression throughout. Automatic suppression is provided as follows:

Zone 19 (Elev -0.5') - between Column Lines RAB and RAG from the south wall of zones 16 and 18 extending south for 12 ft beyond Column Line 2RA3. Between Column Lines RAB and 8 ft east of Column Line RAC extending north of Column Line 2RA3 to the south wall of zone 24. Between stairway 2RA3 and Column Line RAC extending approximately 15 ft north of Column Line 2RA4. Between Column Line RAB and 8 ft east of Column Line RAC extending approximately 15 ft north of Column Line 2 RA4.





Handwritten text in the top right corner, possibly a signature or date.