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FACIL: 50-335
AUTH.NAME AUTHOR AFFILIATION
UHRIG,R.E. Florida Power & Light Co.
RECIP.NAME RECIPIENT AFFILIATION
REID,R.W. Operating Reactors Branch 4

SUBJECT: rwards requested info re fire door evaluations & ventilation sys designs.Concurs w/providing three hour fire rated protection between diesel generator rooms.

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FLORIDA POWER & LIGHT COMPANY

August 24, 1979
L-79-235

Office of Nuclear Reactor Regulation
Attention: R. W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Reid:

Re: St. Lucie Unit 1
Docket No. 50-335
Fire Protection

The attached information is submitted in response to NRC concerns regarding fire door evaluations and ventilation system designs.

Very truly yours,

Robert E. Uhrig
Vice President
Advanced Systems & Technology

REU/MAS/paf

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

A006
1/1

RE-EVALUATION OF COMPARTMENT COMBUSTIBLE LOADINGS FOR ST. LUCIE UNIT NO. 1 SHUTDOWN RELATED FIRE AREAS

Per your request and as supplement to our past responses on fire door ratings (SRP-24) and ventilation system design (questions 9, 17, 18, 19 and 20), we have re-evaluated the compartment combustible loadings for shutdown related fire areas as provided in our Fire Protection Reevaluation report.

A summary of these fire area combustible loadings is provided in the attached table. All compartment fire areas with the exception of the diesel generator areas (areas 6 and 7), have very low fire loads. As further noted by column three of the attached table, the predominant combustible in the non-diesel generator fire areas is typically paint coatings. These extremely low fire loads are the result of St. Lucie Unit 1 design and plant operating philosophy, e.g. non-combustible construction materials, cable fire protective coatings and disallowance of combustible materials storage in plant shutdown related areas.

Based on these extremely low fire loads in the non-diesel generator areas and the detailed design basis fire evaluations provided in the Fire Protection Reevaluation reports, upgrading or installation of fire doors and/or fire dampers, beyond those currently installed or commited to be installed, would not result in any additional benefit to nuclear safety or to the health and safety of the public.

Based on our evaluation of the diesel generator rooms we concur with providing three hour fire rated protection between the diesel generator rooms by upgrading the existing door assembly or augmenting the current door assembly with a three hour fire rated barrier.

PSL1 SHUTDOWN RELATED FIRE AREA COMPARTMENT COMBUSTIBLE LOADINGS WITH AND WITHOUT PAINT COATINGS

FIRE AREA (NO.)	FIRE LOAD (BTU/FT^2)	FIRE LOAD WITHOUT PAINT (BTU/FT^2)
6*	71,296	71,296
7*	71,296	71,296
27	7,020	227
31	3,758	470
32	3,741	117
33	3,792	221
34	4,921	1,676
35	4,569	1,454
38**	10,126	6,271
39	4,010	220
40	16,200	1,332
47	4,420	921
49	4,383	90
56	1,334	1,334
70	5,011	1,474
71	1,860	1,860
75**	12,836	8,720
76**	12,232	8,318
78	68	0

* Diesel Generators 1A and 1B are respectively located in areas 6 and 7.
** Charging pumps 1A, 1B and 1C are respectively located in areas 38,75 and 76.