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DOCKET NUMBER: 50-251

FILE NUMBER:

TO: MR G LEAR.....

FROM: A FLORIDA POWER & LIGHT CO
MIAMI, FLA.....
R E UHRIG.....

DATE OF DOCUMENT: 5-10-76

DATE RECEIVED: 5-17-76

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INPUT FORM

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DESCRIPTION
LTR REF OUR 4-7-76 LTR.....TRANS THE FOLLOWING.....

ENCLOSURE
APPENDIX "A" CONTAINS ADD'L INFO REGARDING RESPONSE TO OUR LTR.....
APPENDIX "B" CONTAINS INFO ON THEIR PLANNED CYCLE 3 STARTUP TEST PROGRAM.....

ACKNOWLEDGED
DO NOT REMOVE

PLANT NAME: TURKEY POINT #3

SAFETY	FOR ACTION/INFORMATION	ENVIRO 5-18-76 RKB
ASSIGNED AD :		ASSIGNED AD :
✓ BRANCH CHIEF :	LEAR	BRANCH CHIEF :
PROJECT MANAGER:		PROJECT MANAGER :
✓ LIC. ASST. :	PARRISH	LIC. ASST. :

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GOSSICK & STAFF	ENGINEERING	IPPOLITO	
MIPC	MACCARY		SITE TECH
CASE	KNIGHT	OPERATING REACTORS	GAMMILL
HANAUER	SIHWEIL	STELLO	STEPP
HARLESS	PAWLICKI		HULMAN
		OPERATING TECH	
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P. COLLINS	NOVAK	✓ BAER	BUNCH
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SKOVHOLT	SALTZMAN	ANALYSIS	
	RUTBERG	DENTON & MULLER	

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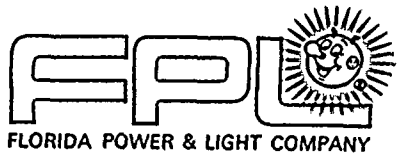
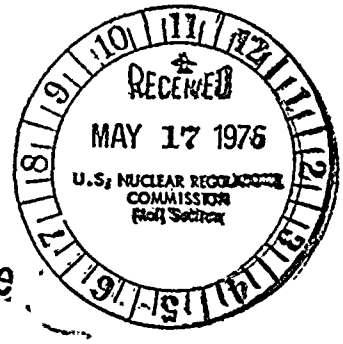


May 10, 1976

L-76-185

Director of Nuclear Reactor Regulation
Attention: Mr. George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555



Regulatory Docket File

Dear Mr. Lear:

Re: Turkey Point Unit 4
Docket No. 50-251
Additional Reload Information

In response to requests from the Nuclear Regulatory Commission Staff, Florida Power and Light Company is submitting the information contained in the appendices to this letter.

Appendix A contains additional information regarding your previous questions of April 7, 1976. Appendix B contains information on our planned Cycle 3 startup test program.

Very truly yours,

J. A. De Mastry
for

Robert E. Uhrig
Vice President

MAS/cpc

Attachments

cc: Mr. Norman C. Moseley
Jack R. Newman, Esquire

4963

APPENDIX A

The information below supplements FPL letter L-76-169 of April 21, 1976 which was submitted in response to an April 7 letter from George Lear. The numbers correspond to the questions in the April 7 letter.

6. Emergency Operating Procedure 20003 (Loss of Reactor Coolant) contains instructions on changing the status of valves 862A&B and 864A&B. The procedure will be revised to include instructions on designating specific personnel for restoring power to the valve operators.

When approaching the Refueling Water Storage Tank low level alarm setpoint, the Nuclear Operator will be sent to stand by the "C" Motor Control Center. The Nuclear Turbine Operator will be sent to stand by the "B" Motor Control Center. If either of these operators is not available, another operator may be substituted. When the RWST low level alarm is reached, the designated operators will unlock and close the circuit breakers specified in the procedure.

It is anticipated that the recirculation phase will begin 30 minutes to 2 hours after LOCA initiation depending on whether the break size is large or small.

APPENDIX B

1.0 Physics Startup Tests to be Performed for Cycle 3 Reload

1.1 Rod Worth Measurements

Total rod worth is measured to verify adequate reactivity for control and determine that sufficient shutdown margin, including actual uncertainties, exists within the limits of the steam break analysis assumptions.

Acceptance criteria for total measured rod worth is $\pm$20% of design.

1.2 Temperature Coefficient

The moderator temperature coefficient is measured and the acceptance criteria is that it must be zero or negative and within the limits assumed in the analysis for reduction in feedwater enthalpy..

1.3 Power Distribution Measurement

Prior to operation above 35% power, a flux map is taken to verify power distribution and peaking factors. Values for maximum $F_{\Delta H}$ and F_Q must be less than those specified in the Technical Specifications to ensure that the assumptions used in the analysis for establishing DNB Margin, Linear Heat Rate, and thermal margins remain valid during operation.

1.4 Hot Zero Power Boron Concentration, All Rods Out

The HZP, ARO boron concentration is measured to provide indication of overall available reactivity for the cycle and must be within $\pm$ 100 ppm of the design value.

2.0 Detail Bank Worth Measurements

2.1 Rod worth is measured by starting with all rods out and then inserting each bank into the core. The individual banks are inserted in small increments and the boron concentration is varied to maintain criticality. Reactivity of the rods is measured in terms of rod height changes as calculated and recorded by a reactivity computer.

The maximum uncertainty expected from this measurement technique is $\pm$10% which includes uncertainties for reactivity computer error and errors in data reduction.

APPENDIX B (Continued)

2.0 Detail Bank Worth Measurements (Continued)

2.1 (Continued)

The maximum uncertainty expected in the design values is ±10% which is due primarily to inability to model the exact core conditions during the test period.

Therefore, the total maximum expected deviation from design is expected to be within ±20%.

For deviations greater than this, the test program is halted and all data is reevaluated, the design values are reverified and a shutdown margin is calculated using the actual deviation to determine if safe operation may continue.

3.0 Schedule for Submitting Summary Report of Physics Tests

The startup physics summary report is submitted to the NRC within 30 effective full power days of test completion.