

REGULATOR INFORMATION DISTRIBUTION SYSTEM (RIDS)

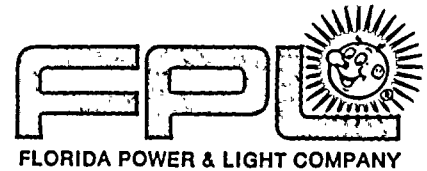
ACCESSION NBR: 8001020627 DOC. DATE: 79/12/26 NOTARIZED: NO DOCKET #
 FACIL: 50-250 Turkey Point Plant, Unit 3, Florida Power and Light C 05000250
 50-251 Turkey Point Plant, Unit 4, Florida Power and Light C 05000251
 AUTH. NAME: UHRIG, R. E. AUTHOR AFFILIATION: Florida Power & Light Co.
 RECIP. NAME: DENTON, H. R. RECIPIENT AFFILIATION: Office of Nuclear Reactor Regulation
 SCHWENCER, A. Operating Reactors Branch 1

SUBJECT: Forwards response to NRC 790918 request for info re steam generator waterhammer. Add info available in util 780103 ltr.

DISTRIBUTION CODE: A012S COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 6
 TITLE: Steam Generator Feedwater Flow Instability (Water Hammer)

NOTES: _____

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	12 I & E	2	2	14 TA/EDO	1	1
	16 ENGR BR	2	2	18 PLANT SYS BR	2	2
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	24 REAC SAFT BR	1	1	25 EEB	1	1
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	28 ACRS	16	16			



December 26, 1979
L-79-336

Office of Nuclear Reactor Regulation
Attention: Mr. A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Schwencer:

Re: Turkey Point Units 3 & 4
Docket Nos. 50-250 & 50-251
Waterhammer

We have reviewed your letter of September 18, 1979 on the subject of steam generator waterhammer, and our response is attached. Additional information on waterhammer can be found in our letter L-78-6 of January 3, 1978.

Very truly yours,

Robert E. Uhrig
Vice President
Advanced Systems & Technology

REU/MAS/ms

Attachments (2)

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

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ATTACHMENT 1

Re: Turkey Point Units 3 & 4
Docket Nos. 50-250 & 50-251
Waterhammer

The following information is numbered to correspond to the NRC Request for Information dated September 18, 1979 (potential for steam generator waterhammer at PWRs with feedings that discharge from the bottom):

Item 1.1

Strip charts of steam generator water level, feedwater flow, and steam flow from representative reactor trip events are provided in Attachment 2. The charts show the behavior of steam generator water level as the result of a reactor trip from power levels greater than 30% of full power.

Item 1.2

Please refer to the following references for the number and causes of reactor trips, including loss of feedwater events, during the operational history of Turkey Point Units 3 and 4:

- (1) Semiannual Operating Report 1, March 26, 1973
- (2) Semiannual Operating Report 2, August 24, 1973
- (3) Semiannual Operating Report 3, February 25, 1974
- (4) Semiannual Operating Report 4, August 27, 1974
- (5) Semiannual Operating Report 5, February 20, 1975
- (6) Semiannual Operating Report 6, August 28, 1975
- (7) Semiannual Operating Report 7, February 27, 1976
- (8) 1976 Annual Operating Report, March 1, 1977
- (9) Startup Report, May 3, 1974
- (10) Monthly Operating Status Reports, issued monthly for the period January 1, 1974 to the present

Item 1.3

Information on loss-of-offsite-power events at Turkey Point Units 3 & 4:

April 3, 1973 -System disturbance initiated by trip of Turkey Point Unit 3. The trip was caused by a spurious signal on one channel of nuclear instrumentation while a second channel was out-of-service for calibration.

April 4, 1973 -System disturbance initiated by trip of Turkey Point Unit 3. The trip was caused by a spurious signal on one channel of steam generator level comparator instrumentation while a second channel was out-of-service for maintenance.

May 16, 1977 - Systemwide disturbance reported to the NRC in letter L-77-228 of July 20, 1977 from R. E. Uhrig (FPL) to V. Stello (NRC).

April 4, 1979 - Loss of transmission lines. Flashovers were caused by the combination of an accumulation of salt and dust on insulators caused by a period of extremely dry weather and strong winds, followed by an increase in the humidity level.

Items 2 & 3

Administrative controls to limit auxiliary feedwater flow were not developed specifically for the purpose of reducing the probability of waterhammer. However, current operating practice dictates that the operator manually control auxiliary feedwater flow. Additionally, a Special Instruction was issued subsequent to events at TMI-2 which commits the third on-shift Nuclear Control Center Operator to maintaining steam generator level during periods when auxiliary feedwater is being supplied as a result of a transient or accident.

Item 4

At present, the auxiliary feedwater pumps start automatically, but flow rate is manually controlled. Fully automatic flow initiation is planned for implementation in 1980 pursuant to our TMI-2 Lessons Learned commitments.

Item 5

Waterhammer damage is identified by visual observation.

Item 6

Waterhammer damage will be reported pursuant to the requirements of Technical Specification 6.9.2 (Reportable Occurrences).

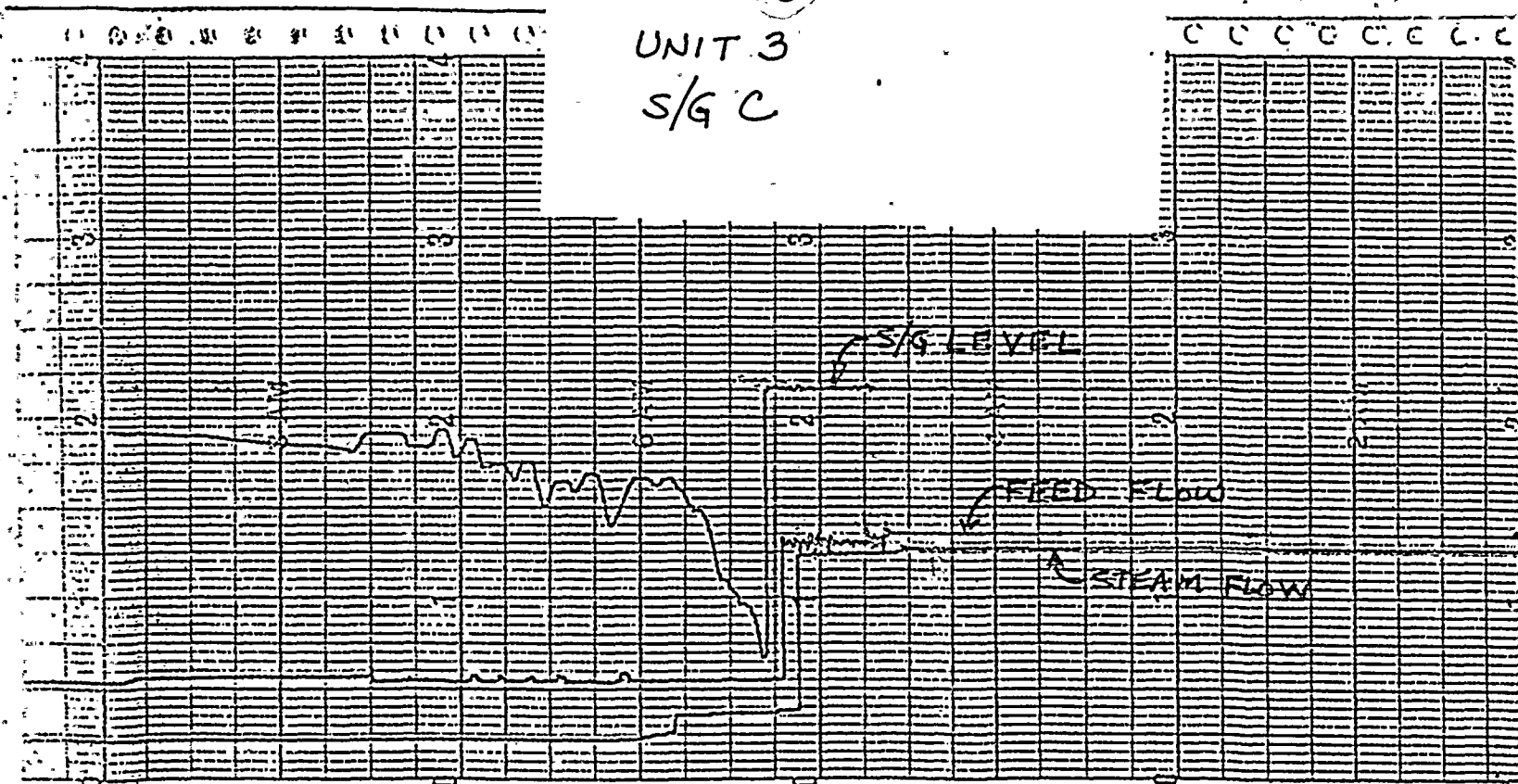
ATTACHMENT 2

Re: Turkey Point Units 3 & 4
Docket Nos. 50-250 & 50-251
Waterhammer

11-28-78

UNIT 3

S/G C



NO. 174586-8040021

8-3-79
UNIT 4
S/G C

