

CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9902120166 DOC.DATE: 99/02/04 NOTARIZED: NO
 FACIL: 50-389 St. Lucie Plant, Unit 2, Florida Power & Light Co.
 AUTH.NAME: PLUNKETT, T.F. AUTHOR AFFILIATION: Florida Power & Light Co.
 RECIP.NAME: RECIPIENT AFFILIATION: Records Management Branch (Document Control Desk)

DOCKET #
05000389

SUBJECT: Forwards response to violations noted in insp rept
 50-389/98-11. Corrective actions: addl procedural guidance
 developed for ECCS containment sump insps for Units 1 & 2.
 Mode 1 walkdown of Unit 1 also performed.

DISTRIBUTION CODE: IE01D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 6
 TITLE: General (50 Dkt) - Insp Rept/Notice of Violation Response

NOTES:

	RECIPIENT ID CODE/NAME	COPIES L TTR ENCL	RECIPIENT ID CODE/NAME	COPIES L TTR ENCL
	PD2-3 PD	1 1	GLEAVES, W	1 1
INTERNAL:	ACRS	2 2	AEOD/SPD/RAB	1 1
	AEOD/TTC	1 1	DEDRO	1 1
	FILE CENTER	1 1	NRR/DRCH/HOHB	1 1
	NRR/DRPM/PECB	1 1	NRR/DRPM/PERB	1 1
	NUDOCS-ABSTRACT	1 1	OE DIR	1 1
	OGC/HDS3	1 1	RGN2 FILE 01	1 1
EXTERNAL:	LITCO BRYCE, J H	1 1	NOAC	1 1
	NRC PDR	1 1	NUDOCS FULLTEXT	1 1

NOTE TO ALL "RIDS" RECIPIENTS:
 PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LISTS
 OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL
 DESK (DCD) ON EXTENSION 415-2083

TOTAL NUMBER OF COPIES REQUIRED: L TTR 19 ENCL 19

C
A
T
E
G
O
R
Y
1
D
C
C
U
M
E
N
T



Florida Power & Light Company, P. O. Box 14000, Juno Beach, FL 33408-0420

February 4, 1999

L-99-028
10 CFR 2.201

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

Re: St. Lucie Unit 2
Docket No. 50-389
Reply to a Notice of Violation
NRC Inspection Report 98-11

Florida Power and Light Company (FPL) has reviewed the subject Notice of Violation and, pursuant to 10 CFR § 2.201, the response to the violation is attached.

As discussed in the violation response, the Unit 2 Spring 1997 refueling outage sump screen repair and disposition activities failed to adequately consider the generic implications of the identified discrepancies. St. Lucie site personnel are being trained to reinforce the requirements of the St. Lucie corrective action program.

Please contact us with questions on the enclosed violation response.

Very truly yours,

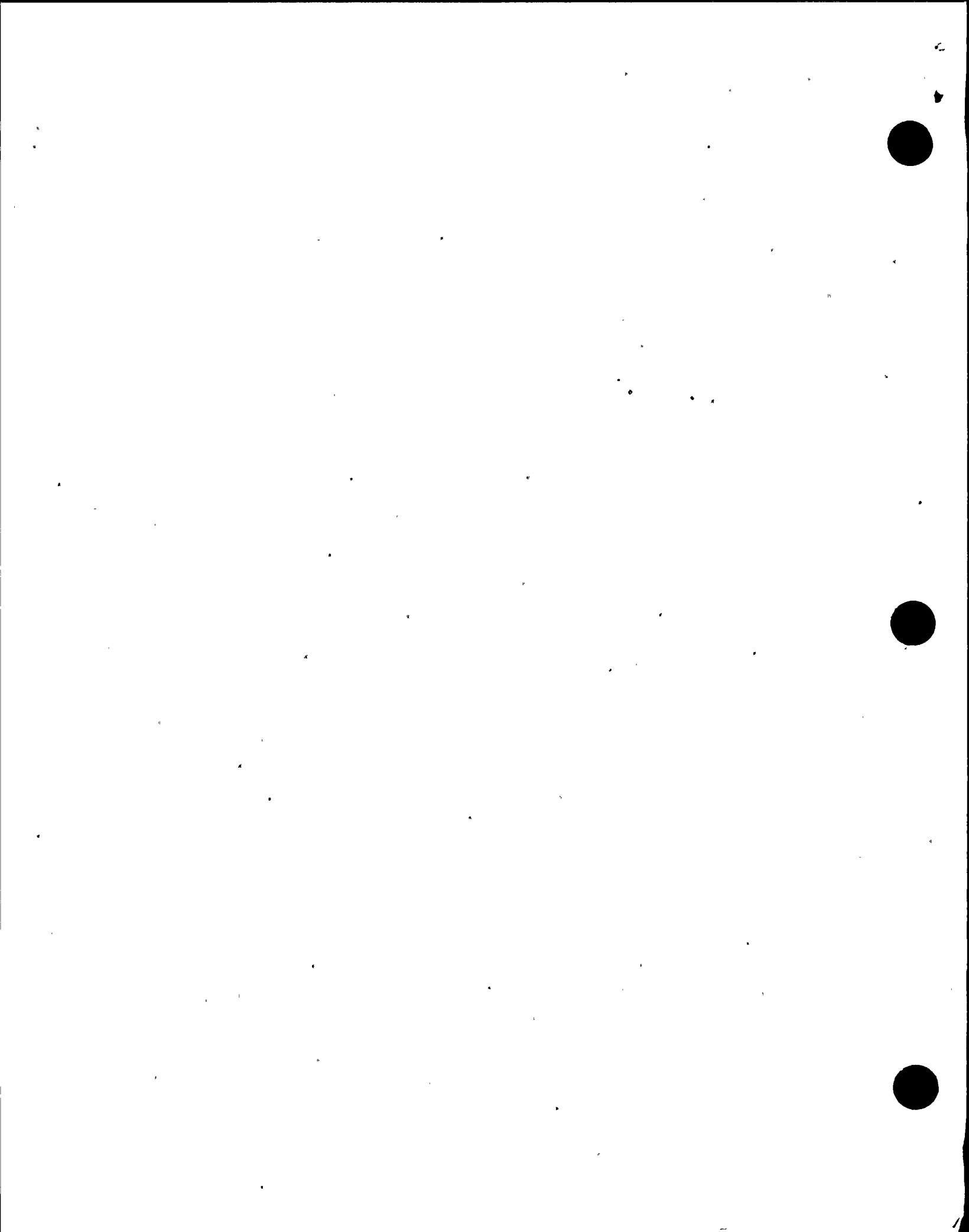
Thomas F. Plunkett
President
Nuclear Division
TFP/JAS/EJW

Attachment

cc: Regional Administrator, USNRC, Region II
Senior Resident Inspector, USNRC, St. Lucie Plant

9902120166 990204
PDR ADDCK 05000389
P PDR

1/1
II (2)



VIOLATION

Part 50 of Title 10 of the Code of Federal Regulations (10 CFR 50), Appendix B, Criterion XVI requires that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected.

Contrary to the above, as of November 15, 1998, conditions adverse to quality were not promptly identified and corrected involving the Unit 2 emergency core cooling systems (ECCS) containment sump. Specifically, in May 1997, corrective actions were implemented to address gaps and openings in the ECCS containment sump screens in excess of design requirements described in the Updated Final Safety Analysis Report. However, as evidenced by the identification of approximately 100 additional discrepancies in November 1998, the corrective actions in May 1997 were not effective in identifying and correcting the deficiencies, and the sump was not restored to design requirements.

This is a Severity IV Level violation (Supplement 1).

RESPONSE

1. Agreement with (or Denial of) the Violation

FPL concurs with the violation.

2. Reason for the Violation

The failure of the corrective actions performed in May 1997 to effectively identify and correct deficiencies, and to restore the ECCS containment sump to design requirements, is primarily the result of inadequate consideration of generic implications of the documented deficiencies (i.e., consideration of the potential for deficiencies in all areas of the Unit 2 sump screens).

In May 1997, near the end of the Spring 1997 Unit 2 refueling outage (SL2-10), the NRC Resident Inspector noted discrepancies in the construction of the ECCS containment sump screen. These discrepancies involved gaps between the divider screen and the outer vertical screen, and between the divider screen and the concrete wall. Condition Report 97-1102 was written to document these discrepancies, and Plant Change/Modification (PC/M) 97-037 was written for the implementation of required repairs. FPL performed additional inspections of the divider screen, and noted additional discrepancies. During the implementation of

the required repairs, other minor gaps were noted in the divider screen and in the horizontal screen at the top of the sump; these gaps were also documented in Condition Report 97-1102 and repaired pursuant to PC/M 97-037.

During this period, FPL efforts were focused on the repair of the gaps noted at the divider screen and the horizontal screen. The areas of concern noted by the NRC Resident dealt with gaps between the divider screen and the outer screen, and between the divider screen and the concrete wall (i.e., discrepancies that would allow the passage of debris from one side of the sump to the other side, thus potentially affecting both ECCS trains). Additional inspections performed by FPL during the SL2-10 refueling outage to address generic concerns for Unit 2 were originally limited to the divider screen; after discrepancies were observed in the horizontal screens, the scope of inspections was increased to include the horizontal screens. A commitment was made (and fulfilled) to prepare guidelines for inspection of the sump screens for both Units 1 and 2 during future outages. However, St. Lucie did not recognize that the scope of generic concerns to be addressed during the SL2-10 outage should have been expanded to include the vertical outer screens, to provide complete assurance (a) that all sump screen deficiencies were identified and corrected and (b) that the design requirements for the ECCS containment sump were satisfied.

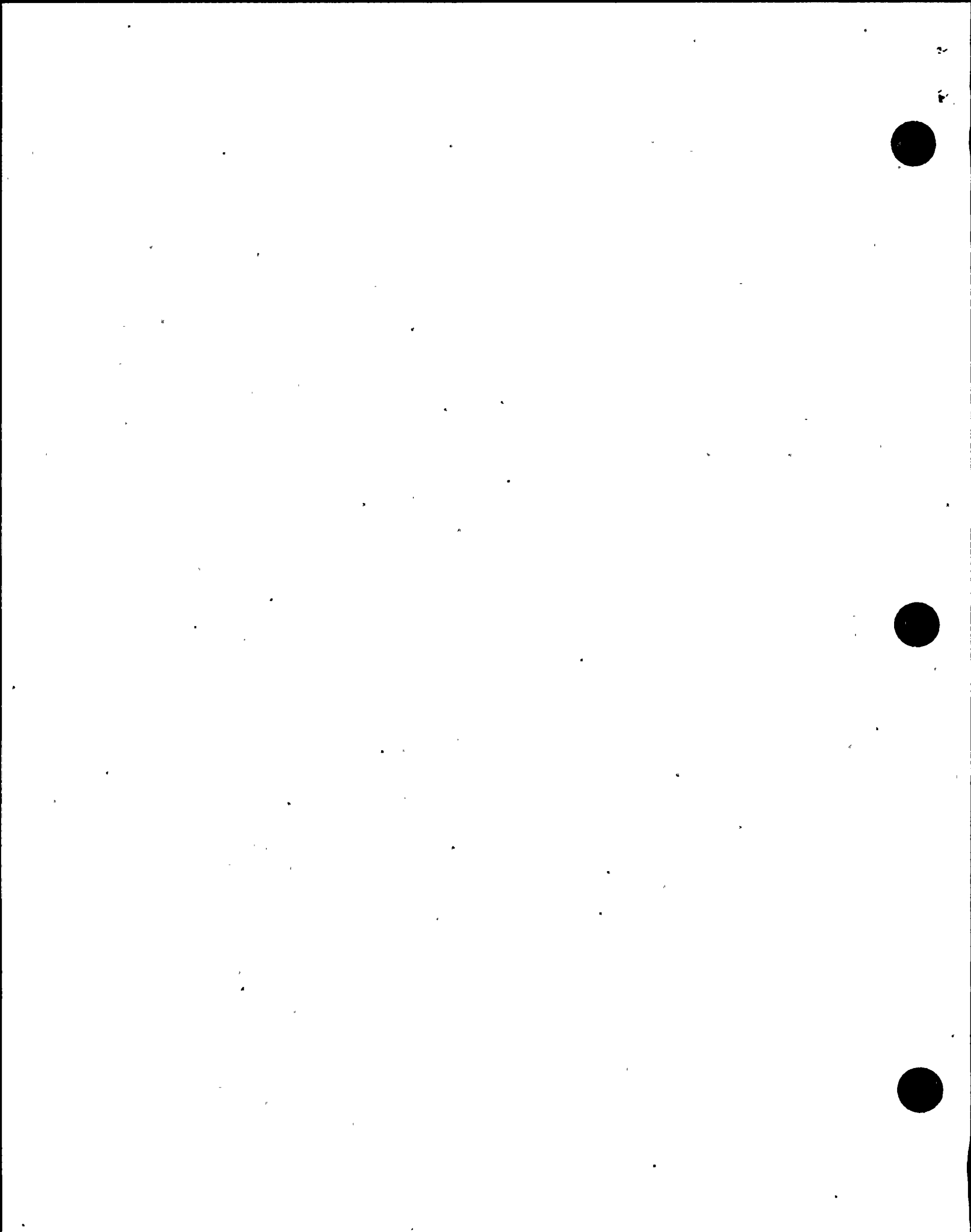
The gaps in the divider screen were discovered during the Spring 1997 Mode 4 containment closeout walkdown. The implicit awareness by personnel of the schedule for unit re-start (inherent during refueling outages) was a factor in the narrow focus of corrective action which failed to identify the need for additional inspections to be performed to address generic concerns.

During the disposition of these discrepancies, generic implications for Unit 1 were considered. Since the design of the Unit 1 screens has a completely different configuration than Unit 2 (with no divider screen), FPL determined that no immediate actions were required for Unit 1. A subsequent Mode 1 power entry was performed as described below in corrective action 3.b. Detailed inspections and repairs of the Unit 1 screens were performed during the Fall 1997 Unit 1 refueling outage (SL1-15).

Based on these facts, FPL has determined that the reason for this violation (ineffective corrective actions) was the fact that insufficient attention and consideration were given to generic concerns (i.e., the potential for discrepancies in the vertical outer screens and the horizontal screens) subsequent to the discovery of gaps in the divider screen.

3. Corrective Steps Taken and Results Achieved

- a. Subsequent to the SL2-10 refueling outage, additional procedural guidance was developed for ECCS containment sump inspections for Units 1 and 2 to provide specific inspection requirements for gaps in the sump screen as well as for verification of sump area cleanliness. The procedural guidance is intended to ensure that the physical condition of the sump screens meets the design requirements. The required guidance was issued via Maintenance Surveillance Procedure MSP-68.01 ("Containment Sump Inspection") and PSL Nuclear Assurance Quality Control Technique Sheet 10.54 ("Unit 1 and Unit 2 Containment Sump Inspection").
- b. Subsequent to the SL2-10 refueling outage, a Mode 1 walkdown of Unit 1 was performed to inspect the accessible areas of the Unit 1 ECCS containment sump screens. Only the horizontal screen at the top of the sump could be inspected during this walkdown. Eight minor discrepant conditions were found; an engineering evaluation concluded that there were no operability concerns associated with these conditions. Two of these discrepancies were repaired immediately. The remaining six discrepancies were repaired during the next Unit 1 refueling outage (SL1-15); see paragraph c, below. These discrepancies, and the evaluation of the as-found condition, were documented in Condition Report No. 97-1465, Supplement 1.
- c. During the SL1-15 refueling outage (the first outage subsequent to the issuance of the procedural guidance discussed in paragraph a, above), the Unit 1 ECCS containment sump screens were inspected in detail in accordance with MSP-68.01 and Technique Sheet 10.54. No discrepancies were observed on the inner screens. Several discrepancies were documented with regard to the outer screens and the sump itself. These discrepancies were documented and evaluated in Condition Report No. 97-2225 and Plant Management Action Item No. 97-12-166. FPL concluded that there were no outstanding operability concerns or reportability issues. Required repairs to the sump screens were performed in accordance with PC/M 97-058.
- d. During the Fall 1998 Unit 2 refueling outage (SL2-11), a detailed, comprehensive inspection of the Unit 2 ECCS containment sump screens was performed in accordance with MSP-68.01 and Technique Sheet 10.54. This was the first Unit 2 outage subsequent to the issuance of the detailed procedural guidance discussed in paragraph a, above. A total of 101 discrepant conditions, along with a limited number of inaccessible areas, were identified during this inspection. These conditions were documented



and evaluated in Condition Report No. 98-1766 and 98-1766 (Supplements 1 and 2). The sump screen discrepancies which required repair were corrected in accordance with PC/M 98-029. All other identified sump screen discrepancies, including any potential deficiencies associated with the inaccessible sump screen areas, were dispositioned as an acceptable configuration. FPL concluded (a) that there were no operability concerns associated with the as-found condition (with the unit off line), and (b) that the evaluation for safety significance provided for the discrepancies discovered during the SL2-10 refueling outage bounded the newly discovered anomalies. FPL determined that the discrepancies were reportable under 10 CFR 50.73 as "a condition outside the design basis of the plant". FPL issued a revision to LER 50-389/97-02, in which the discrepancies were attributed to (a) a failure to properly implement the design requirements during original construction and (b) inadequate inspections.

4. **Corrective Steps to Avoid Future Violations**

- a. St. Lucie Unit 2 Technical Specification 4.5.2.e.2 requires a visual inspection of the containment sump at least once per 18 months for verification that the screens show no evidence of structural distress or corrosion. A similar inspection is required by Unit 1 Technical Specification 4.5.2.d.2. As discussed above, Maintenance Surveillance Procedure MSP-68.01 ("Containment Sump Inspection") and PSL Nuclear Assurance Quality Control Technique Sheet 10.54 ("Unit 1 and Unit 2 Containment Sump Inspection") have been issued to provide additional procedural guidance for ECCS containment sump inspections. These documents provide specific inspection requirements for gaps in the sump screens as well as for verification of sump area cleanliness. Satisfactory completion of these procedures will ensure that the physical condition of the sump screens meets the design requirements. Inspection personnel will utilize these documents during future refueling outages to satisfy the Technical Specification requirements.
- b. In order to provide assurance that the problem noted (inadequate consideration of generic concerns) will not recur, a Technical Alert addressing this concern has been issued to Engineering personnel. Formalized training for re-emphasis of existing procedural guidance will be provided as part of scheduled Engineering Support Personnel (ESP) training; this training will be completed by March 26, 1999.
- c. In order to provide assurance that future condition reports will not be approved without adequate consideration of generic concerns, a training

bulletin for re-emphasis of existing procedural guidance was issued to St. Lucie management personnel responsible for approving Condition Report dispositions.

- d. Future pre-outage Employee Communication meetings will re-emphasize management expectations concerning the need to thoroughly investigate outage discovery items, including the consideration of generic implications as part of the corrective action plan.

5. **Date of Full Compliance**

Full compliance was achieved on December 2, 1998, upon implementation of PC/M 98-029 which included modifications to the ECCS containment sump screens necessary to meet design requirements. This PC/M was completed prior to the Unit 2 startup following the SL2-11 refueling outage.