LICENSE AUTHORITY FILE COPY

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

August 27, 1984

DO NOT REMOVE
Posted
Amdt. 100
to DPR-41
(See Correction letter
of 12-13-84)

Docket Nos. 50-250
and 50-251

Mr. J. W. Williams, Jr., Vice President
Nuclear Energy Department
Florida Power and Light Company
Post Office Box 14000
Juno Beach, Florida 33408

Dear Mr. Williams:

The Commission has issued the enclosed Amendment No. 106 to Facility Operating License No. DPR-31 and Amendment No. 100 to Facility Operating License No. DPR-41 for the Turkey Point Plant Units Nos. 3 and 4, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated December 29, 1982.

These amendments revise the Technical Specifications by adding additional Limiting Conditions of Operation for Purge Isolation; setpoints for High Containment Radioactivity; surveillance requirements for Turbine Trip, including basis; and requirements for reporting power operated relief valve and safety valve challenges and failures.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular monthly Federal Register notice.

Sincerely,

Daniel G. McDonald Jr.

Daniel G. McDonald, Jr., Project Manager
Operating Reactors Branch #1
Division of Licensing

Enclosures:
1. Amendment No. 106 to DPR-31
2. Amendment No. 100 to DPR-41
3. Safety Evaluation
4. Technical Evaluation Report

cc: w/enclosures
See next page

J. W. Williams, Jr.
Florida Power and Light Company

Turkey Point Plants
Units 3 and 4

cc: Harold F. Reis, Equire
Lowenstein, Newman, Reis and Axelrad
1025 Connecticut Avenue, N.W.
Suite 1214
Washington, DC 20036

Bureau of Intergovernmental Relations
660 Apalachee Parkway
Tallahassee, Florida 33130

Norman A. Coll, Esquire
Steel, Hector and Davis
1400 Southeast First National
Bank Building
Miami, Florida 33131

Mr. Ken N. Harris, Vice President
Turkey Point Nuclear Plant
Florida Power and Light Company
P.O. Box 013100
Miami, Florida 33101

Mr. M. R. Stierheim
County Manager of Metropolitan
Dade County
Miami, Florida 33130

Resident Inspector
Turkey Point Nuclear Generating Station
U.S. Nuclear Regulatory Commission
Post Office Box 57-1185
Miami, Florida 33257-1185

Regional Radiation Representative
EPA Region IV
345 Courtland Street, N.W.
Atlanta, GA 30308

Mr. Jack Shreve
Office of the Public Counsel
Room 4, Holland Building
Tallahassee, Florida 32304

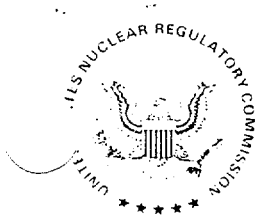
Administrator
Department of Environmental
Regulation
Power Plant Siting Section
State of Florida
2600 Blair Stone Road
Tallahassee, Florida 32301

James P. O'Reilly
Regional Administrator, Region II
U.S Nuclear Regulatory Commission
Suite 2900
101 Marietta Street
Atlanta, GA 30303

Martin H. Hodder, Esquire
1131 N.E. 86th Street
Miami, Florida 33138

Joette Lorion
7269 SW 54 Avenue
Miami, Florida 33143

Mr. Chris J. Baker, Plant Manager
Turkey Point Nuclear Plant
Florida Power and Light Company
P.O. Box 013100
Miami, Florida 33101



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT PLANT UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 106
License No. DPR-31

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Florida Power and Light Company (the licensee) dated December 29, 1982, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-31 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendix A and B, as revised through Amendment No.106 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

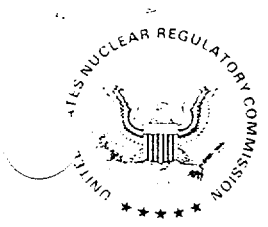
3. This license amendment is effective as of the date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 27, 1984



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-251

TURKEY POINT PLANT UNIT NO. 4

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 100
License No. DPR-41

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Florida Power and Light Company (the licensee) dated December 29, 1982, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-41 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendix A and B, as revised through Amendment No. 100 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective immediately and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical Specifications

Date of Issuance: August 27, 1984

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 106 FACILITY OPERATING LICENSE NO. DPR-31

AMENDMENT NO. 100 FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NO. 50-250 AND 50-251

Revise Appendix A as follows:

Remove Pages	Insert Pages
3.1.5	3.1.5
Table 3.5.3	Table 3.5.3
	Table 3.5.4 (cont.)
Table 4.1-1 Sheet 3	Table 4.1-1 Sheet 3
Table 4.1-1 Sheet 4	Table 4.1-1 Sheet 4
6-21	
B2.3-3	B2.3-3

e. After shutdown, corrective action shall be taken before operation is resumed.

F. Above 2% of rated power, two leak detection systems of different principles shall be operable, one of which is sensitive to radioactivity. The latter may be out of service for 48 hours provided 1) Two other systems are operable and 2) containment purge valves are maintained closed.

g. Reactor Coolant System leakage shall be limited to 1 gpm total primary-to-secondary leakage through all steam generators not isolated from the Reactor Coolant System and 500 gallons per day through any one steam generator not isolated from the Reactor Coolant system.

4. MAXIMUM REACTOR COOLANT ACTIVITY

The total specific activity of the reactor coolant due to nuclides with half-lives of more than 30 minutes, excluding tritium, shall not exceed 135/E* μCi/cc whenever the reactor is critical or average reactor coolant temperature is greater than 500F. The concentration of radioiodine in the reactor coolant shall be limited to 1.0 microcurie/gram during normal operation and to 30 microcuries/gram during power transients.

If the limit above is not satisfied, the reactor shall be shutdown and cooled to 500°F or less within 6 hours.

*E is the average of beta and gamma energy (Mev) per disintergration of the specific activity.

TABLE 3.5-3

INSTRUMENT OPERATING CONDITIONS FOR ISOLATION FUNCTIONS

NO.	FUNCTIONAL UNIT	1 MIN. OPERABLE CHANNELS	2 MIN. DEGREE OF REDUNDANCY	3 OPERATOR ACTION IF CONDITIONS OF COLUMN 1 OR 2 CANNOT BE MET
1.	CONTAINMENT ISOLATION			
1.1	Manual	2	*	Cold Shutdown
1.2	Safety Injection	See Item No. 1 of Table 3.5-2		Cold Shutdown
1.3	High Containment Pressure	See Item 2.1 of Table 3.5-2		Cold Shutdown
2.	STEAM LINE ISOLATION			
2.1	High Steam Flow in 2/3 Lines and 2/3 Low T_{avg} or 2/3 Low Steam Pressure	See Item 1.5 in Table 3.5-2		Cold Shutdown
	High Containment Pressure	See Item No. 2.1 of Table 3.5-2		Cold Shutdown
2.3	Manual	1/line		Hot Shutdown
3.	FEEDWATER LINE ISOLATION			
3.1	Safety Injection	See Item No. 1 of Table 3.5-2		Cold Shutdown
4.	PURGE ISOLATION			
4.1	Containment High Radioactivity	1 **	0	***

* Must actuate two push buttons simultaneously

** Either particulate or gaseous

*** With Tavg at or above 200°F, and with less than the minimum operable channels, operations may continue provided the containment purge valves are maintained closed.

TABLE 3.5-4 (Contd.)

NO.	FUNCTIONAL UNIT	CHANNEL ACTION	SET POINT
10.	Containment Radioactivity - High	Close Purge valves**	Particulate (R-11) $\leq 6.1 \times 10^5$ CPM** Gaseous (R-12) See Note 1 **
11.	Turbine Auto-stop Oil Pressure - Low	1) Turbine Trip 2) Reactor Trip above P-7	$<$45 psig
12.	Turbine Stop Valves	1) Turbine Trip 2) Reactor Trip above P-7	Both valves closed

NOTE 1 R-12 Setpoint = $\frac{(3.2 \times 10^4)}{(F)}$ CPM, where F = $\frac{\text{Actual Purge Flow}}{\text{Design Purge Flow}}$ (35,000 CFM)

Set point may vary according to current plant conditions provided that release rate does not exceed allowable limits specified on TS.3.9.2.b.

** With Tavg at or above 200° F, these setpoints could be higher provided that the purge valves are maintained closed. A purge may be initiated if either setpoint is higher than the allowable value, if the other setpoint is at or below its allowable value.

TABLE 4.1-1 SHEET 3

	Channel Description	Check	Calibrate	Test	Remarks
23.	Environmental Radiological Monitors	N.A.	A(1)	M(1)	(1) Flow
24.	Logic Channels	N.A.	N.A.	M[1]	
25.	Emer. Portable Survey Instruments	N.A.	A	M	
26.	Seismograph	N.A.	N.A.	Q	Make trace. Test battery (change semi-annually)
27.	Auxiliary Feedwater Flow Rate	M[1]	R	N.A.	
28.	RCS Subcooling Margin Monitor	M[1]	R	N.A.	
29.	PORV Position Indicator (Primary Detector)	M[1]	N.A	R	Check consists of monitoring indicated position and verifying by observation of related parameters
30.	PORV Block Valve Position Indicator	M[1]	N.A	R	
31.	Safety Valve Position Indicator	M[1]	R	N.A.	
32.	Loss of Voltage (both 4kv busses)	N.A.	N.A.	R	For AFW actuation at power only
33.	Trip of both Main Feedwater Pump Breakers	N.A.	N.A.	R	For AFW actuation at power only
34.	Turbine Trip (Auto-Stop Oil Pressure Switches)	N.A.	R.	N.A.	

TABLE 4.1-1 SHEET 4

* Using moveable in-core detector system.
** Frequency only
*** Effluent monitors only and R-11 & R-12. Calibration for effluent monitors shall be as specified in 3.9.

S - Each Shift
D - Daily
W - Weekly
D/W - Every Two Weeks
M - Monthly
Q - Quarterly
P - Prior to each startup if not done previous week
R - Each Refueling Shutdown
A - Annually
N.A. - Not appliable
† - N.A. during cold or refueling shutdowns. The specified tests, however, shall be performed within one surveillance interval prior to startup.
†† - N.A. during cold or refueling shutdowns. The specified tests, however, shall be performed within one surveillance interval prior to heatup above 200F.

NOTE: This item is intended to provide for reporting of potentially generic problems.

(10) Failure of the pressurizer PORVs or safety valves.

b. Thirty Day Written Reports The reportable occurrences discussed below shall be the subject of written reports to the Director of the appropriate Regional Office within thirty days of occurrence of the event. The written report shall include, as a minimum, a completed copy of a licensee event report form. Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

(1) Reactor protection system or engineered safety feature instrument settings which are found to be less conservative than those established by the technical specifications but which do not prevent the fulfillment of the functional requirements of affected systems.

(2) Conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation.

Note: Routine surveillance testing, instrument calibration, or preventative maintenance which require system configurations as described in items 2.b(1) and 2.b(2) need not be reported except where test results themselves reveal a degraded mode as described above.

(3) Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in reactor protection systems or enginered safety feature systems.

(4) Abnormal degradation of systems other than those specified in item 2.a(3) above designed to contain radioactive material resulting from the fission process.

Note: Sealed sources or calibration sources are not included under this item. Leakage of valve packing or gaskets within the limits for identified leakage set forth in technical specifications need not be reported under this item.

Reactor Trip Interlocks

Specified reactor trips are by passed at low power where they are not required for protection and would otherwise interfere with normal operation. The prescribed set points above which these trips are made functional assures their availability in the power range where needed.

An automatic reactor trip will occur if any pump is lost above 55% power which will prevent the minimum value of the DNBR from going below the applicable design limit during normal and anticipated transient operations when only two loops are in service,(9) and the overtemperature ΔT trip setpoint is adjusted to the value specified for three loop operation.

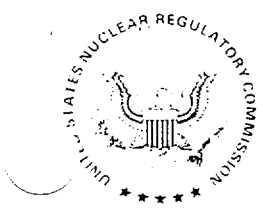
A turbine trip initiates a reactor trip. On decreasing power, the turbine trip is automatically blocked by P-7; and on increasing power reinstated automatically by P-7.

Reset of reactor trip interlocks will be done under strict administrative control.

References

(1) FSAR 14.1.1
(2) FSAR 14.1.2
(3) FSAR 14.1
(4) FSAR 7.2, 7.3
(5) FSAR 3.2.1
(6) FSAR 14.3.1
(7) FSAR 14 (page 14-3 and 14.1.9)
(8) FSAR 14.1.11
(9) FSAR 14.1.9
(10) WCAP-8074

Correction letter of 12-13-84



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 106 TO FACILITY OPERATING LICENSE NO. DPR-31

AND AMENDMENT NO. 100 TO FACILITY OPERATING LICENSE NO. DPR-41

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT UNIT NOS. 3 AND 4

DOCKET NOS. 50-250 AND 50-251

Introduction and Background

In November 1980, the staff issued NUREG-0737, "Clarificaton of TMI Action Plan Requirements", which included all TMI Action Plan items approved by the Commission for implementation at nuclear power reactors. NUREG-0737 identifies those items for which Technical Specifications were scheduled for implementation by December 31, 1981. The staff provided guidance on the scope of Technical Specifications for all of these items in Generic Letter 82-16. Generic Letter 82-16 was issued to all Pressurized Water Reactor (PWR) licensees on September 20, 1982. In this Generic Letter, the staff requested licensees to:

1. review their facility's Technical Specifications to determine if they were consistent with the guidance provided in the Generic Letter, and

2. submit an application for a license amendment where deviations or absence of Technical Specifications were found.

By letter dated December 29, 1982, Florida Power and Light Company (the licensee) responded to Generic Letter 82-16 by submitting Technical Specification change requests for Turkey Point Units 3 and 4. This evaluation covers the following TMI Action Plan items:

1. STA Training (I.A.1.1.3)
2. Limit Overtime (I.A.1.3)
3. Short Term Auxiliary Feedwater (AFW) Evaluation (II.E.1.1)
4. Safety Grade AFW Initiation and Flow Indication (II.E.1.2)
5. H_2 Penetrations (II.E.4.1)
6. Containment Pressure Setpoint (II.E.4.2.5)
7. Containment Purge Valve (II.E.4.2.6)
8. Radiation Signal on Purge Valve (II.E.4.2.7)
9. Upgrade B&W AFW System (II.K.2.8)
10. Safety Grade Anticipatory Reactor Trip (II.K.2.10)
11. Thermal Mechanical Report (II.K.2.13)

12. Report Safety Valve and Relief Valve Failures and Challenges (II.K.3.3)
13. Anticipatory Trip on Turbine Trip (II.K.3.12)

Evaluation

The Nuclear Regulatory Commission has acquired technical assistance in evaluating to licensee's response to Generic Letter 82-16. The technical assistance was provided by Idaho National Engineering Laboratory (EG&G). The results of their evaluation are documented in a Technical Evaluation Report (TER), EGG-EA-6436 dated December 1983, and is attached to this Safety Evaluation.

We have reviewed the EG&G report and concur with the findings with the exception of the following:

Item 7 - Containment Purge Valves (II.E.4.2.6) - The licensee, in their response to GL 82-16, states that no action is required for this item although the licensee provides no supporting explanation for this position. The EG&G review determines accurately that this item is not included in the Technical Specifications (TS) and hence, concludes that further licensing action to amend the TS is required. Our review indicates no further licensing action is required at this time based on an NRR review described in a November 12, 1982 letter from S.A. Varga of the NRC to R.E. Uhrig of Florida Power and Light Company (FP&L). This review determined that the FP&L containment purge valves meet the NRC Staff Interim Position of October 23, 1979, by a limited open position. In the enclosed Safety Evaluation to this letter, NRC found the FP&L commitment to the 1979 Interim Position to be acceptable. At such time as the valves are closed permanently, a TS change will be required. At this time, however, we conclude that the NUREG-0737 requirements for Item II.E.4.2.6 have been met and no further licensing action is required.

Item 8 - Radiation Signal on Purge Valve (II.E.4.2.7) - The licensee's proposed Technical Specifications changes on Tables 3.5-3, 3.5-4 and 4.1-1 (Sheet 4) are consistent with the guidance provided in Generic Letter 82-16 with the exception of daily surveillance in lieu of a check each shift. The daily requirement is consistent with the existing TS. The licensee is in the process of converting their TS to the Standard Technical Specification format for Westinghouse reactors. An integrated assessment of all LCOs, surveillances, operability requirements and other restrictions will be performed and justificiation provided for deviations. The proposed TS meet the intent of Generic Letter 82-16 and are consistent with the existing TS. We conclude that the TS for Item II.E.4.2.7 are acceptable.

Item 12 - Reporting of Safety and Relief Valve Failures and Challanges (II.K.3.3) - The proposed Technical Specification changes to Page 6-21 did not include challenges due to an administrative error. This typographical error has been corrected. The proposed TS are consistent with our guidance provided in Generic Letter 82-16 and are acceptable for Item II.K.3.3.

Item 13 - Anticipatory Trip on Turbine Trip (II.K.3.12) - The proposed Technical Specification changes to Table 4.1-1 Sheet 3 and B2.3-3 are consistent with our guidance provided in Generic Letter 82-16 and are acceptable for Item II.K.3.12.

Summary of Technical Specification Requirements

Item 1 - STA Training Training (I.A.1.1.3) Open

STA training requirements are under consideration by the Commission. Further guidance will be provided pending the decision on the requirements by the Commission.

Item 2 - Limit Overtime (I.A.1.3) Open

On June 15, 1982 we transmitted to licensees of operating plants a revised version of the Commission's Policy Statement on nuclear power plant staff working hours. In the same letter we also transmitted revised pages of NUREG-0737 (Item I.A.1.3). The administrative section of the technical specifications should be revised to require procedures that follow the policy statement guidelines. An acceptable specification would be "the amount of overtime worked by plant staff members performing safety-related functions must be limited in accordance with the NRC Policy Statement on working hours (Generic Letter No. 82-12)."

Item 3 - Short Term Auxiliary Feedwater (AFW) System Evaluation (II.E.1.1) Complete

Item 4 - Safety Grade AFW Initiation and Flow Indication (II.E.1.2) Complete

Item 5 - H_2 Penetrations (II.E.4.1) Complete

Item 6 - Containment Pressure Setpoint (II.E.4.2.5) Complete

Item 7 - Containment Purge Valve (II.E.4.2.6) Complete

Item 8 - Radiation Signal on Purge Valve (II.E.4.2.7) Complete

Item 9, 10 & 11 - B and W Plants Only Not applicable

Item 12 - Reporting SV and RV Failures and Challanges (II.K.3.3) Complete

Item 13 - Anticipatory Trip on Turbine Trip (II.K.3.12) Complete

Environmental Consideration

These amendments involve changes in the installation or use of the facility components located within the restricted areas as defined in 10 CFR 20. The staff has determined that these amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: August 27, 1984

Principal Contributors:

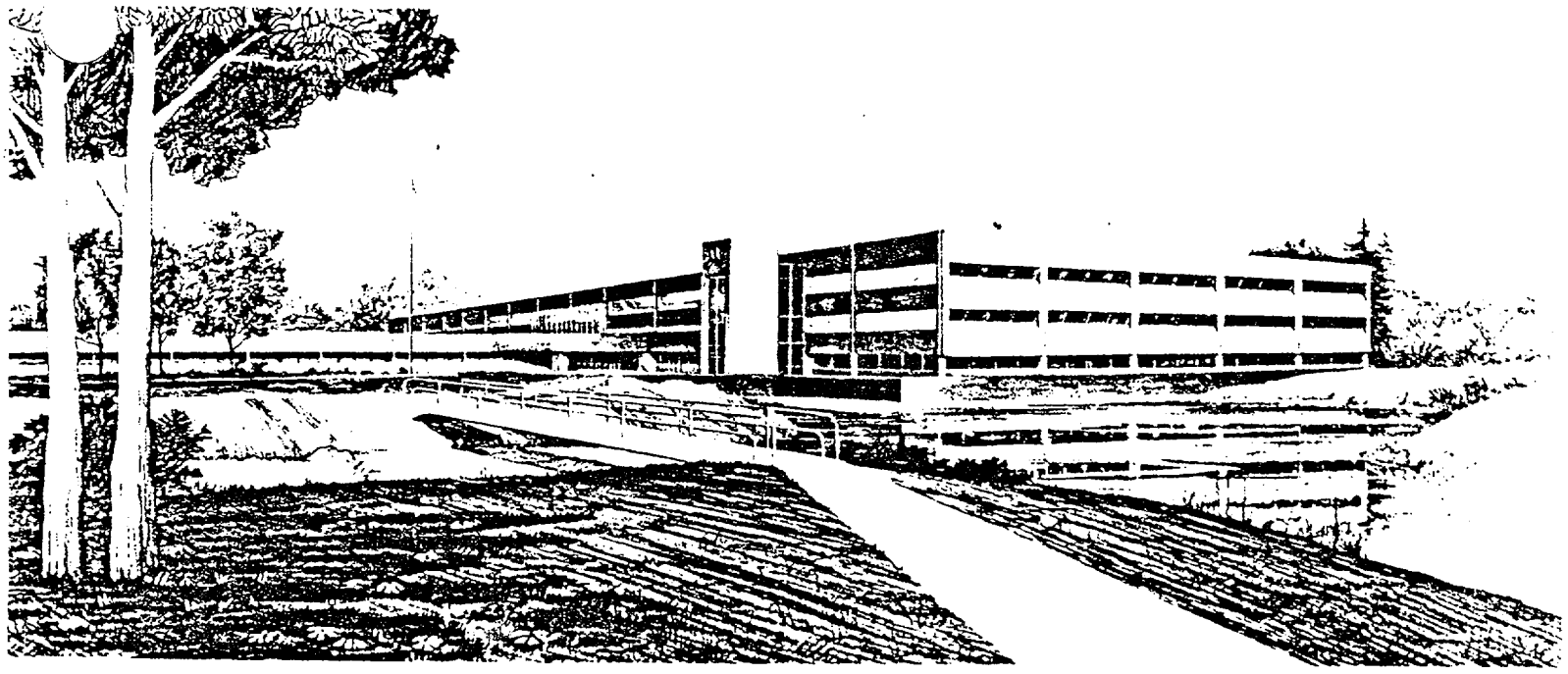
W. Rankin
D. McDonald

EGG-EA-6436
DECEMBER 1983

CONFORMANCE TO NRR GENERIC LETTER 82-16
TURKEY POINT PLANT UNIT NOS 3 AND 4

R. VanderBeek

Idaho National Engineering Laboratory
Operated by the U.S. Department of Energy



This is an informal report intended for use as a preliminary or working document

Prepared for the
U. S. NUCLEAR REGULATORY COMMISSION
Under DOE Contract No. DE-AC07-76ID01570
FIN No. A6600

EG&G Idaho

CONFORMANCE TO NRR GENERIC LETTER 82-16
TURKEY POINT PLANT UNIT NOS 3 AND 4

R. VanderBeek

Published December 1983

EG&G Idaho, Inc.
Idaho Falls, Idaho 83415

Prepared for the
U.S. Nuclear Regulatory Commission
Atlanta, Georgia 30303
Under DOE Contract No. DE-AC07-76ID01570
FIN No. A6600

ABSTRACT

This EG&G Idaho, Inc., report evaluates the submittal provided by Florida Power and Light Company for Turkey Point Plant Unit Nos. 3 and 4. The submittal is in response to Generic Letter No. 82-16, "NUREG-0737 Technical Specifications (TS)". Applicable sections of the plants' TS are evaluated to determine compliance to the guidelines established in the generic letter.

FOREWORD

This report is supplied as part of the "Technical Assistance for Operating Reactors Licensing Actions" being conducted for the U.S. Nuclear Regulatory Commission Region II by EG&G Idaho, Inc., NRC Licensing Support Section.

The U.S. Nuclear Regulatory Commission Funded the work under authorization B&R 92-19-20-10, FIN No. A6600.

Docket Nos. 50-250 and 50-251
TAC Nos. 49766 and 49767

CONTENTS

CONFORMANCE TO NRR GENERIC LETTER 82-16
TURKEY POINT PLANT UNIT NOS 3 AND 4

1. INTRODUCTION

On September 20, 1982, Generic Letter 82-16[1] was issued by D. G. Eisenhut, Director of Licensing, Office of Nuclear Reactor Regulation (NRR), to all pressurized power reactor licensees. This letter identified a number of items required by NUREG-0737[2] to be implemented in the licensee's Technical Specifications (TS) by December 31, 1981. Each licensee was requested to review his facility's TS, to address areas of compliance, and to identify deviations or absence of a specification for the items identified in the generic letter within 90 days of receipt of the letter.

The Florida Power and Light Company (FPL), the licensee for Turkey Point Plant Unit Nos. 3 and 4, provided a response to the generic letter on December 29, 1982.[3]

This report provides an evaluation of the licensee's TS and Nuclear Regulatory Commission (NRC) correspondence with the licensee pertaining to those items identified in the generic letter.

2. REVIEW REQUIREMENTS

The review consists of evaluating the licensee's response, currently approved TS, and other NRR approvals against the criteria set forth in Generic Letter 82-16. The NUREG-0737 items and the criteria established are as follows:

2.1 STA Training (I.A.1.1.3)

The licensee is to address within his TS that a shift technical advisor (STA) to the shift supervisor is provided. In addition, the qualifications, training, and on-duty requirements for the STA should be stated.

2.2 Shift Manning-Overtime Limits (I.A.1.3.1)

The licensee is to provide changes to his TS providing overtime administrative procedure and staffing requirements. The following guidelines were established for the licensee by the NRC.

"a. An individual should not be permitted to work more than 16 hours straight (excluding shift turnover time).

b. An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any seven day period (all excluding shift turnover time).

c. A break of at least eight hours should be allowed between work periods (including shift turnover time).

d. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Recognizing that very unusual circumstances may arise requiring deviation from the above guidelines, such deviation shall be authorized by the plant manager or his deputy, or higher levels of management. The paramount consideration in such authorization shall be that significant reductions in the effectiveness of operating personnel would be highly unlikely.

In addition, procedures are encouraged that would allow licensed operators at the controls to be periodically relieved and assigned to other duties away from the control board during their tour of duty."

2.3 Short Term Auxiliary Feedwater System (AFWS) Evaluation (II.E.1.1)

The objective of this item is to improve the reliability and performance of the auxiliary feedwater (AFW) system. TS depend on the results of the licensee's evaluation and the staff review, and are being developed separately for each plant. The limiting conditions of operation (LCO's) and surveillance requirements for the AFW system should be similar to other safety-related systems.[1]

2.4 Safety Grade AFW Initiation and Flow Indication (II.E.1.2)

The AFW system automatic initiation system was to have been control grade by June 1, 1980, and safety grade by July 1, 1981; the AFW system flow indication was to have been control grade by January 1, 1980, and safety grade by July 1, 1981.[1]

2.5 Dedicated Hydrogen Penetrations (II.E.4.1)

Plants that use external recombiners or purge systems for post-accident combustible gas control of the containment atmosphere should provide containment penetrations dedicated to that service. In satisfying this item, some plants may have to add some additional piping and valves. If so, these valves should be subjected to the requirements of Appendix J of 10CFR 50, and the TS should be modified accordingly.[1]

2.6 Containment Pressure Setpoint (II.E.4.2.5)

The containment pressure setpoint that initiates containment isolation must be reduced to the minimum compatible with normal operating conditions. Most plants provided justification for not changing their setpoint and the NRC has approved their justification by separate correspondence. The remaining plants must submit a change to the TS with

the lower containment pressure setpoint and provide justification if this setpoint is more than 1 psi above maximum expected containment pressure during normal operation.[1]

2.7 Containment Purge Valves (II.E.4.2.6)

Model TS were sent separately to each plant as part of the overall containment purge review. These TS include the requirement that the containment purge valves be locked closed except for safety related activities, verified closed at least every 31 days, and be subjected to leakage rate limits.[1]

2.8 Radiation Signal on Purge Valves (II.E.4.2.7)

The containment purge valves must close promptly to reduce the amount of radiation released outside containment following a release of radioactive materials to containment. TS should include the requirement that at least one radiation monitor that automatically closes the purge valves upon sensing high radiation in the containment atmosphere be operable at all times except cold shutdowns and refueling outages. If not operable, either the plant should begin proceeding to cold shutdown within 24 hours or the purge valves should be closed within 24 hours. Model TS were provided in Standard Technical Specifications format for those plants that are using safety-grade components to satisfy the requirement.[1]

2.9 Upgrade Babcock and Wilcox (B&W) AFWS (II.K.2.8)

Additional long-term AFWS modifications were to be performed in conjunction with Generic Letter 82-16 Items 3 and 4 (items 2.3 and 2.4 above). The TS implemented for Items 3 and 4 will also address the upgrade of the B&W AFWS; therefore no separate TS would be required for this item for the B&W Plants.

2.10 B&W Safety-Grade Anticipatory Reactor Trip (II.K.2.10)

Safety-Grade turbine trip equipment initiating a reactor trip was to be implemented by the B&W designed plants as part of the TMI lessons learned.

The licensee is to implement in the TS the trip setpoint, number of channels, trip conditions, minimal channels required for operation, applicable operating modes, actions to be taken, surveillance required and any other requirements for safety-grade equipment.

2.11 B&W Thermal-Mechanical Report (II.K.2.13)

Licensees of B&W operating reactors were required to submit, by January 1, 1981, an analysis of the thermal-mechanical conditions in the reactor vessel during recovery from small breaks with an extended loss of all feedwater. TS, if required, will be determined following NRC staff review.[1]

2.12 Reporting Safety and Relief Valve Failures and Challenges (II.K.3.3)

NUREG-0660 stated that safety and relief valve failures be reported promptly and challenges be reported annually. The sections of the TS that discuss reporting requirements should be accordingly changed. The NRC has noted that an acceptable alternative would be to report challenges monthly.[1]

2.13 Anticipatory Trip on Turbine Trip (II.K.3.12)

Licensees with Westinghouse-designed operating plants have confirmed that their plants have an anticipatory reactor trip upon turbine trip. Many of these plants already have this trip in the TS. For those that do not, the anticipatory trip should be added to the TS.[1]

For the Turkey Point Plant Unit 3, and 4, the above Items 2.9, 2.10, and 2.11 are not being evaluated. Being a Westinghouse design, Items 2.9 and 2.10 are not applicable for Turkey Point Plant Unit 3 and 4. For Item 2.11, FPL's Thermal-Mechanical Report is being handled as an active Three Mile Island (TMI) action item under TAC number 46910 and 46911.

3. EVALUATION

The evaluations of Generic Letter 82-16 Items are as follows:

3.1 STA Training (I.A.1.1.3)

The licensee has stated in his response for Turkey Point Plant Units 3 and 4 that Section 6.3.1 of the TS adequately addresses this requirement. Section 6.3.1 of the TS[5] specifies, "the Shift Technical Advisor who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design and in the response and analysis of the plant for transients and accidents." The retraining and replacement training program for the facility staff is stated in Section 6.4.1 of the TS. Table 6.2-1 of the TS designates the minimum shift crew composition but fails to designate for which modes of operation the STA is required. It also notes that the STA can be filled by one of the two SRO's required for the minimum shift crew. The exact training for STA is not in the TS.

In a letter from the NRC to the licensee, dated January 8, 1982,[6] the NRC states, that from their review, the STA training program is acceptable for Turkey Point Plant, Units 3 and 4. Until further guidance is issued by the Commission, no further licensing action is required.

3.2 Shift Manning-Overtime Limits (I.A.1.3.1)

The licensee has stated in his response for Turkey Point Plant Units 3 and 4, that the position on the overtime restrictions of Generic Letter No. 82-12 is stated in their letter L-82-436, dated October 1982. It is FPL's position that overtime restrictions are adequately enforced by administrative procedures and that no amendment to the TS is required. The TS does not contain any shift-manning overtime limitation requirements.

In a letter from the NRC to the licensee, dated October 20, 1981,[7] the NRC states that from their review of the FPL policy on overtime restrictions for the Turkey Point Plant, the policy is in agreement with

NUREG-0737. On June 30, 1983, a notegram from D. C. Fischer, Lead Manager on the main topic I.A.1.3[8] was sent to the operating reactor project manager for Turkey Point Plant Units 3 and 4 requesting that the TAC number be closed out for Item I.A.1.3.1 for these plants. Although NRR has provided acceptance in allowing the licensee to control overtime limitations administratively, it is recommended that this issue be re-examined by NRR under a review separate from Generic Letter 82-16. The basis for this recommendation is that administrative procedures can be changed by the licensee without NRC guidance or approval. Therefore, there is no controlling factor as with the TS and if overtime limitations are not included within the TS, non-compliance to NUREG-0737 Item I.A.1.3.1 can continue to exist.

3.3 Short Term Auxiliary Feedwater System (AFWS) Evaluation (II.E.1.1)

The licensee has stated in his response for Turkey Point Plant Units 3 and 4, that there is no action required for this item.

In Amendment No. 89 to Facility Operating License No. DPR-31 and Amendment No. 83[9] to Facility Operating License No. DPR-41 for the Turkey Point Plant Unit Nos. 3 and 4, the TS were changed to conform with the Commissions Bulletins and Orders Task Force review regarding Auxiliary Feedwater Pump requirements following the Three Mile Island Accident. Upon transmittal of these Amendments, the NRC closed out NUREG-0737 Item II.E.1.1 as being completed. The TS have been changed. No further licensing action is required.

3.4 Safety Grade Auxiliary Feedwater (AFW) Initiation and Flow Indication (II.E.1.2)

The licensee has stated in his response for Turkey Point Plant Units 3 and 4, that there is no action required for this item.

In Amendment No. 89 to Facility Operating License No. DPR-31 and Amendment No. 83[9] to Facility Operating License No. DPR-41 for the Turkey Point Plant Units No. 3 and 4, the TS were changed to conform with the Commissions Bulletins and Orders Task Force review regarding Auxiliary Feedwater Pump requirements following the Three Mile Island Accident. Upon transmittal of these Amendments, the NRC closed out NUREG-0737 Item II.E.1.2 as being completed. The TS have been changed.

On September 15, 1982,[10] a letter from the NRC to FPL included an evaluation report on the safety grade automatic initiation and flow indication for the Auxiliary Feedwater Systems for Turkey Point Plant Units 3 and 4. The NRC concluded that the automatic initiation and flow indication portions of the AFWS comply with the long term safety grade requirements and are acceptable. No further licensing action is required.

3.5 Dedicated Hydrogen Penetrations (II.E.4.1)

The licensee has stated in his response for Turkey Point Plant Units 3 and 4, that TS Section 4.4.3 adequately addresses this item.

In a letter from the NRC to FPL, dated April 7, 1980,[11] the NRC concluded that the licensee is in full compliance for the Dedicated Hydrogen Penetrations issue addressed in the TMI Lessons Learned Category "A" items. The letter also states that the evaluation does not address the TS necessary to ensure the limiting conditions for operation and the long-term operability surveillance requirements for the systems modified during the Category "A" review. A review of TS Section 4.4.3 indicates that containment isolations valves shall be tested in accordance with 10 CFR 50, Appendix J, (Type C tests). This complies with the requirement of Generic Letter 82-16. In a letter from the NRC to the licensee, dated March 26, 1982,[12] the NRC states that from their reviews, the requirements of Clarification Item No. II.E.4.1 of NUREG-0737 have been met in an acceptable manner for Turkey Point Plant, Units 3 and 4. No further licensing action is required.

3.9 Upgrade Babcock and Wilcox (B&W) AFWS (II.K.2.8)

Turkey Point Plant Units 3 and 4 are a Westinghouse design and, therefore, the requirements of this item are not applicable. No licensing action is required.

3.10 B&W Safety-Grade Anticipatory Reactor Trip (II.K.2.10)

Turkey Point Plant Units 3 and 4 are a Westinghouse design and, therefore, the requirements of this item are not applicable. The anticipatory trip is evaluated under NUREG-0737 item II.K.3.3 for the Westinghouse design. No licensing action is required.

3.11 B&W Thermal-Mechanical Report (II.K.2.13)

Turkey Point Plant Units 3 and 4 are a Westinghouse design and, therefore, the requirements of this item are not applicable. It has been noted that there is a Thermal-Mechanical Report for Turkey Point Plant Units 3 and 4 identified as an active TMI action item under TAC Numbers 46910 and 46911. No licensing action is required by Generic Letter 82-16 for this item.

3.12 Reporting Safety and Relief Valve Failures and Challenges (II.K.3.3)

The licensee has stated in his response for Turkey Point Plant Units 3 and 4, that FPL is committed to reporting failures of pressurizer power operated relief valves or safety valves in their annual report. It is FPL's position that reporting of these items is adequately controlled by their administrative procedures and a change to the TS is unwarranted.

Review of TS Section 6.9.2 on reportable occurrences concludes that the section does not specifically reference or require that safety and relief valve failures and challenges be reported. Reporting of these

failures is dependent entirely on administrative procedures. Unless a recent submittal change has been submitted by FPL or an acceptance of their policy has been issued by the NRC, further licensing action is required.

3.13 Anticipatory Trip on Turbine Trip (II.K.3.12)

The licensee has stated in his response for Turkey Point Plant Units 3 and 4, that the operating conditions for the instrumentation is adequately covered in Table 3.5-1 and the surveillance requirements for the Turbine Stop Valves are adequately covered in Table 4.1-2 of the TS.

In a letter from the NRC to the licensee dated August 20, 1981,[13] pertaining to the compliance of the licensee to NUREG-0737 Item II.K.3.12, the NRC completed a review acknowledging that Turkey Point Plant Units 3 and 4 have an anticipatory reactor trip in conformance with Item II.K.3.12. This item was considered resolved. The information referred to by the licensee in his response is included in the TS. No further licensing action is required.

4. CONCLUSIONS

Based on our review, we find the licensee conforms to those issues addressed in Generic Letter 82-16 on TS, except for those identified as follows:

1. Section 3.1 STA Training--Until further guidance is provided, no further licensing action can be taken to determine whether the exact training program for the STA is required to be in the TS.

2. Section 3.2 Shift Manning-Overtime Limits--Turkey Point Plant Units 3 and 4 TS do not contain shift-manning overtime limits, however, FPL's overtime limits policy was accepted by the NRC. However, it is recommended that this issue be re-examined by NRR under a review separate from Generic Letter 82-16.

3. Section 3.7 Containment Purge Valves--Turkey Point Plant Units 3 and 4 TS do not comply with Generic Letter 82-16 for this item.

4. Section 3.8 Radiation Signal on Purge Valves--Turkey Point Plant Units 3 and 4 TS do not comply with Generic Letter 82-16 for this item.

5. Section 3.11 Thermal Mechanical Report--The Thermal-Mechanical Report is being handled as an active Three Mile Island action item under TAC Number 46910 and 46911. Generic Letter 82-16 does not require any licensing action for this item.

6. Section 3.12 Reporting Safety and Relief Valve Failures and Challenges--Turkey Point Plant Units 3 and 4 TS do not comply with Generic Letter 82-16 for this item.

5. REFERENCES

1. D. G. Eisenhut, NRC letter to All Pressurized Power Reactor Licensees, "NUREG-0737 Technical Specifications (Generic Letter 82-16)," September 20, 1982.

2. NUREG-0737, Clarification of TMI Action Plan Requirements, published by the Division of Licensing, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, November 1980.

3. R. E. Uhrig, FPL letter to D. G. Eisenhut, Office of Nuclear Reactor Regulation, "Turkey Point Units 3 and 4, Docket No. 50-250-251, Proposed License Amendment NUREG-0737 Technical Specifications," December 29, 1982.

4. D. G. Eisenhut, NRC letter to All Licensees of Operating Plants, Applicants for an Operating License, and Holders of Construction Permits, "Nuclear Power Plant Staff Working Hours (Generic Letter No. 82-12)," June 15, 1982.

5. Turkey Point Plant Units 3 and 4 Technical Specifications, Appendix "A" to license No. DPR-31 and DPR-41 Amendment 87 and 81.

6. S. A. Varga, NRC letter to R. E. Uhrig, Florida Power and Light Company, "NUREG-0737 Item I.A.1.1 Shift Technical Advisor (STA)," January 8, 1982.

7. S. A. Varga, NRC letter to R. E. Uhrig, Florida Power and Light Company, "TMI Action Plant Items I.A.1.3, I.C.5, and I.C.6 as Described in NUREG-0737," October 20, 1981.

8. D. C. Fischer, Lead Project Manager for I.A.1.3, notegram to all operating reactor project managers, "TAC Closeout" June 30, 1983.

9. D. G. McDonald, NRC letter to R. E. Uhrig, Florida Power and Light Company, "Amendment No. 89 to Facility Operating License DPR-31 and Amendment No. 83 to Facility Operating License No. DPR-41," November 4, 1982.

10. S. A. Varga, NRC letter to R. E. Uhrig, Florida Power and Light Company, "TMI Action Plan Item II.E.1.2, Auxiliary (Emergency Feedwater Systems) Automatic Initiation and Flow Indication," September 15, 1982.

11. A. Schwencer, NRC letter to R. E. Uhrig, Florida Power and Light Company, "TMI Lessons Learned Category "A" Items on Turkey Point, Units 3 and 4," April 7, 1980.

12. S. A. Varga, NRC letter to R. E. Uhrig, Florida Power and Light Company, "NUREG-0737, Clarification of TMI Action Plan Requirements, Clarification Item II.E.4.1 Entitled Dedicated Hydrogen Penetrations," March 26, 1982.

13. S. A. Varga, NRC letter to R. E. Uhrig, Florida Power and Light Company, "NUREG-0737 Items II.K.3.9, II.K.3.10, and II.K.3.12," August 20, 1981.

NRC FORM 335 (11-81) U.S. NUCLEAR REGULATORY COMMISSION

BIBLIOGRAPHIC DATA SHEET

1. REPORT NUMBER (Assigned by DDC)
EGG-EA-6436

4. TITLE AND SUBTITLE
Conformance to NRR Generic Letter 82-16
Turkey Point Plant Unit Nos 3 and 4

2. (Leave blank)

3. RECIPIENT'S ACCESSION NO.

7 AUTHOR(S)
R. VanderBeek

5. DATE REPORT COMPLETED
MONTH: November YEAR: 1983

9 PERFORMING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code)
EG&G Idaho, Inc.
Idaho Falls, ID 83415

DATE REPORT ISSUED
MONTH: December YEAR: 1983

6 (Leave blank)

8 (Leave blank)

12 SPONSORING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code)
Division of Project and Resident Programs
Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street, Suite 2900
Atlanta, Georgia 30303

10 PROJECT TASK WORK UNIT NO

11 FIN NO
A6600

13 TYPE OF REPORT

PERIOD COVERED (Inclusive dates)

15 SUPPLEMENTARY NOTES

14 (Leave blank)

16. ABSTRACT (200 words or less)

This EG&G Idaho, Inc. report evaluates whether the designated Operating Reactor Plant has conformed to the requirements of the NRR Generic Letter No. 82-16, "NUREG-0737 Technical Specifications."

17 KEY WORDS AND DOCUMENT ANALYSIS

17a DESCRIPTORS

17b IDENTIFIERS OPEN-ENDED TERMS

18 AVAILABILITY STATEMENT
Unlimited

19 SECURITY CLASS (This report)
Unclassified

21 NO OF PAGES

20 SECURITY CLASS (This page)
Unclassified

22 PRICE
$