



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 105 TO FACILITY OPERATING LICENSE NO. DPR-31
AND AMENDMENT NO. 99 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

I. Background

By letters, dated September 12, 1983 and October 26, 1983 Florida Power and Light Company filed requests with the Nuclear Regulatory Commission to amend their Operating Licenses by deleting Environmental Technical Specifications 2.1, 2.1.1, 2.1.2, 2.1.3, 2.2.1, 2.2.2 and 4.1.1.2, Environmental Protection Limits and Groundwater Monitoring Program.

Specifications 2.1, 2.1.1, 2.1.2, 2.1.3, 2.2.1 and 2.2.2 were included in the licenses initially to provide assurance that the aquatic environment would be protected from impacts due to condenser cooling water system discharges. The Commission now defers to procedures administered by the U. S. Environmental Protection Agency (EPA) under the Federal Clean Water Act to protect the aquatic environment.

Specification 4.1.1.2 required monitoring of wells and surface points for temperature, water level and conductivity (salinity). The purpose of the program was to determine the long-term effects of operating a salt water cooling system on the adjacent groundwater regime. The South Florida Water Management District (SFWMD) and the U.S. Geological Survey were to determine the adequacy of the schedule and the continued need for the monitoring.

II. Discussion

The basis for requesting the deletion of the environmental protection limits which were established for protection from impact due to condenser cooling water system discharges is that these aquatic requirements are now under the jurisdiction of the U.S. Environmental Protection Agency as established by the Federal Water Pollution Control Act Amendments of 1972. Therefore, water quality conditions in existing reactor operating licenses should be removed as a matter of law where the licensee holds, as Florida Power and Light Company does, an effective National Pollutant Discharge Elimination System (NPDES) permit. As noted in licensee's submittals, both the currently valid NPDES permit and the Public Noticed Permit contain the requirement for compliance with all applicable provisions of the Consent Final Judgment, Civil Action 70-328-CA, dated September 10, 1971. This Final Judgment was issued by U.S. District Judge C. Clyde Atkins of the Southern District of Florida.

By letter dated April 12, 1983, Florida Power and Light Company has committed to provide the appropriate Regional Administrator and the Director, Office of Nuclear Reactor Regulations with a copy of any final changes of the NPDES permit and any permit violations requiring notification to the permitting agency at the time the correspondence is transmitted to or received from the permitting agency.

In relation to the Groundwater Program, Florida Power & Light Company (FP&L) has initiated the Turkey Point Groundwater Monitoring and Interceptor Ditch Programs in compliance with a legal Agreement between

FP&L and the South Florida Water Management District (SFWMD) dated February 2, 1972. The programs consist of two separate but related projects. These are:

1. The Groundwater Monitoring Program, and;
2. The Interceptor Ditch System Program.

The purpose of the Groundwater Monitoring Program was to monitor the impacts of the cooling canal system on the underlying aquifer and water resources in the area and on the SFWMD's facilities and operations. The Interceptor Ditch Program was established to control inland seepage of cooling canal water.

According to an August 1, 1983 Dames & Moore Report (Reference 1), the groundwater monitoring program results collected over the past eleven years have shown two significant features:

1. Construction and operation of the cooling canal system has not resulted in any significant landward migration of the saltwater wedge into the potable sections of the Biscayne aquifer.
2. Operation of the Interceptor Ditch has served to protect the potable section of the Biscayne aquifer from saltwater intrusion.

The general conclusion has been that construction of the cooling canal system has had the localized effect of moving the shoreline of Biscayne Bay to the western edge of the system. Thus, the top of the saltwater wedge has moved to the western edge of the cooling canal system. Some slight landward movement of the toe of the saltwater wedge has been observed through the brackish sections of the aquifer. However, water quality of the potable zone has not been affected. Saltwater wedge movement has been seasonal in response to variations in rainfall and water levels.

With the relocation of the top of the wedge to the western edge of the canal system, the Interceptor Ditch operation has prevented any seasonal inland movement of saltwater into the upper, potable portion of the Biscayne aquifer. The saline ground water is intercepted by the ditch and returned to the cooling canal system during the dry season when natural freshwater hydraulic gradients are low and the potential for some intrusion exists. In summary, the ground water monitoring program results have shown over the past eleven years that the cooling canal system has not caused any significant saltwater intrusion. The seasonal potential for saltwater intrusion is effectively controlled by the Interceptor Ditch operation.

The revised ground water monitoring program is designed to allow a continued monitoring of the saltwater wedge. Well pairs L-3/G-21⁽¹⁾ and L-5/G-28⁽¹⁾ lie along two lines oriented perpendicular to the western edge of the cooling canal system. These lines are therefore perpendicular to the saltwater wedge and can effectively monitor any significant inland movement of the wedge and detect any adverse changes in the Biscayne aquifer or deterioration of the licensee's water systems. If, at any time, SFWMD determines that the FP&L water system is not performing its design function, then FP&L will make operational and/or engineering changes as necessary to satisfy SFWMD's judgements in regard to the protection of the Biscayne aquifer.

III. Safety Evaluation

The amendments delete the non-radiological monitoring programs related to Environmental Protection Limits and Groundwater Monitoring. The amendments will not change any current safety limitations related to the

operation of the plants. The safety limits are necessary to reasonably protect the integrity of certain physical barriers which guard against the uncontrolled release of radioactivity. In addition, the amendments do not request modification of design features relating to materials of construction or geometric arrangements which could have an effect on safety. Moreover, radiological monitoring programs are not affected by these amendments.

IV. Environmental Considerations

The portion of the amendments deleting Technical Specification 4.1.1.2 is addressed in a separate environmental assessment prepared pursuant to 10 CFR Part 51. The portion of the amendments deleting Technical Specifications 2.1, 2.1.1, 2.1.2, 2.1.3, 2.2.1 and 2.2.2 are deleting water quality requirements subject to the provisions of the Federal Water Pollution Control Act. Accordingly, this portion of the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(17). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in conjunction with the deletion of the water quality requirements.

V. Safety 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 24, 1984

Principal Contributors:

R. Samworth
G. Staley
D. McDonald



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

October 10, 1984

MEMORANDUM FOR: T. W. Bishop, Director
Division of Reactor Projects & Safety
Region V

FROM: Darrell G. Eisenhut, Director
Division of Licensing

SUBJECT: EXEMPTION OF SNUBBERS FROM SURVEILLANCE REQUIREMENTS

By your memorandum of May 14, 1984 you requested that certain matters pertaining to functional testing of snubbers be clarified or that acceptable Model Technical Specifications be developed which reconcile ALARA and operational safety considerations. The Model Technical Specifications enclosed with Generic Letter dated November 20, 1980 have not been modified to provide explicit guidance in balancing ALARA and operational safety considerations and we have not developed explicit guidance for evaluating requests for exemptions from functional testing. However, in the following discussion we have attempted to provide you with background and information that will be of value to you in your review activities.

The Model Technical Specifications enclosed with Generic Letter dated November 20, 1980 were developed to allow in-place testing of snubbers using equipment that had become available in the market place, and thus avoid damage to snubbers during removal for testing. The sampling requirements of the Model Technical Specifications were developed to provide a confidence level of 95% that 90% to 100% of the plant specific snubbers will be operable within acceptance limits. Although, limits or goals for limiting overall integrated radiological exposures were not explicitly considered in the development of the Model Technical Specifications, many licensees have since determined that use of in-situ test equipment reduces the overall integrated exposures.

We do not intend to use the exemption provision on page 3/4 7-24 of the Model Technical Specifications as a means to deliberately effect widespread approval of requirements less stringent than the basic requirements set forth. In fact, we have received no requests for exemptions of the magnitude (63 requests) made by the licensee in Region V as cited in your memorandum of May 14, 1984. We have granted exemptions (only for a limited period of time) for a limited number of large snubbers greater than 50,000 lbs. such as reactor coolant pump or steam generator snubbers to provide time for the development of testing programs for large snubbers. However, even in the case of these large snubbers, licensees have in most cases provided a basis that the functional test program will be developed well within the qualified service life of the snubbers. Additionally, we believe that the experience gained by the functional testing performed in

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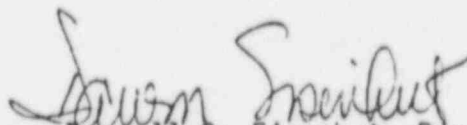
October 10, 1984

response to the November 20, 1980 Generic Letter is such as to support a need for caution in granting exemptions from the functional testing requirements of the Model Technical Specifications. Specifically, some snubbers not previously subject to functional testing when tested under the November 20, 1980 requirements have been found inoperable. Although a summary of those experiences is not available, we would note that snubber failures have been reported in LERs and in Part 21 Reports.

In the interim, any licensee that chooses to develop a plant specific basis for reduction of functional test surveillance or elimination of snubbers, should submit its proposal and request a review of it. If a licensee chooses to develop plant specific bases for elimination or reduction of functional test surveillance tests, acceptability of such proposals would depend on (1) demonstration that confidence level of the Model Technical Specifications exists for the proposal, or (2) achievement of that confidence level is not a necessary condition to limit accident consequences to those shown in the accident analyses of the FSAR, or (3) that the increased accident consequences are small relative to the benefits of the reduction in occupational exposure.

Alternatively, the licensees may choose to consider the forthcoming recommendations of the NRC Piping Review Committee which are expected to be submitted later this year. This report is expected to provide the NRC with integrated recommendations for changes in existing requirements in all areas related to piping design. Implementation of these new guidelines is expected to result in a substantial reduction in the number of snubbers required for certain piping systems.

We trust that this discussion will provide you with general guidance and perspective that is appropriate for your review responsibilities. We are reconsidering the overall Technical Specification issue and will factor this concern into that reconsideration.


Darrell G. Eisenhut, Director
Division of Licensing

October 10, 1984

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original signed by
Darrell G. Eisenhower

Darrell G. Eisenhower, Director
 Division of Licensing

DISTRIBUTION: BLUE TICKET 584

<u>Docket File</u>	NRC PDR
L PDR	SSPB Reading
C. Moon	D. Brinkman
DEisenhut/FMiraglia	M. Jambor #584
D. Crutchfield/Lee	P. Hungerbuhler w/original ticket
E. Jordan	J. Taylor

*See previous concurrence sheet

SSPB:DL*	SSPB:DL*	SSPB:DL*	RAB*	MEB*	ORB#3*	AD/SA:DL*	D:DL
CMoon:ls	DBrinkman	CThomas	FCongel	RBosnak	JMiller	DCrutchfield	DEisenhut
9/17/84	9/10/84	9/11/84	9/12/84	9/18/84	9/19/84	9/20/84	(10/10/84)

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If in the interim, any licensee chooses to develop a plant specific basis for reduction of functional test surveillance or elimination of snubbers, and if needed, we recommend that the Region request review assistance from the Division of Licensing. If a licensee chooses to develop plant specific bases for elimination or reduction of functional test surveillance tests, acceptability of such proposals would depend on (1) demonstration that confidence level of the Model Technical Specifications exists for the proposal, or (2) achievement of that confidence level is not a necessary condition to limit accident consequences to those shown in the accident analyses of the FSAR, or (3) that the increased accident consequences are small relative to the benefits of the reduction in occupational exposure.

Alternatively, the licensees may choose to consider the forthcoming recommendations of the NRC Piping Review Committee which are expected to be submitted later this year. This report is expected to provide the NRC with integrated recommendations for changes in existing requirements in all areas related to piping design. Implementation of these new guidelines is expected to result in a substantial reduction in the number of snubbers required for certain piping systems.

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Darrell G. Eisenhut, Director
Division of Licensing

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SSPB:DL*	SSPB:DL*	SSPB:DL*	RAB*	MEB*	ORB#3*	AD/SA:DL*	D:DL
CMoon:ls	DBrinkman	CThomas	FCongel	RBosnak	JMiller	DCrutchfield	DEisenhut
9/17/84	9/18/84	9/18/84	9/18/84	9/18/84	9/19/84	9/20/84	1/84

*PREVIOUSLY CONCURRED

SSPB-DL CMoon:Ys 07/07/84	SSPB-DL DBrigham 9/10/84	SSPB-DL CThomas 9/11/84	RAB IV EConnel 9/12/84	MEB RBosnak 9/18/84	ORE JM Miller for 9/19/84	AD DCrutchfield 9/20/84	D:DL DEisenhut 1/84
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

October 12, 1984

Docket Nos. 50-280
and 50-281

Mr. W. L. Stewart
Vice President - Nuclear Operations
Virginia Electric and Power Company
Post Office Box 26666
Richmond, Virginia 23261

Dear Mr. Stewart:

The Commission has issued the enclosed Amendment No. 99 to Facility Operating License No. DPR-32 and Amendment No. 98 to Facility Operating License No. DPR-37 for the Surry Power Station, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated January 12, 1983, as supplemented April 3, 1984.

These amendments revise the Technical Specifications to address the availability of charging pump capability from the non-operating unit during one-unit operation.

These Technical Specifications were proposed as a result of NRC Fire Protection Safety Evaluation dated September 19, 1979, where we found that the installation of a cross-connect between the charging systems of the two units would provide an improvement to fire protection at Surry. Our letter dated November 24, 1980, further requested the licensee to provide these Technical Specifications. We have reviewed the proposed Technical Specifications and conclude that they address the requirement to have the charging pump of the non-operating unit available during one-unit operation, and is, therefore, acceptable.

These amendments involve a change in the installation or use of the facilities 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.

We have concluded, based on the considerations discussed above, that:
(1) there is reasonable assurance that the health and safety of the

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Mr. W. L. Stewart

- 2 -

October 12, 1984

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.

A Notice of Issuance will be included in the Commission's next regular monthly Federal Register notice.

Sincerely,

Joseph D. Neighbors

Joseph D. Neighbors, Project Manager
Operating Reactors Branch #1
Division of Licensing

Enclosures:

1. Amendment No. 99 to DPR-32
2. Amendment No. 98 to DPR-37
3. Safety Evaluation

cc: w/enclosures
See next page

Mr. W. L. Stewart
Virginia Electric and Power Company

Surry Power Station
Units 1 and 2

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