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Docket No. 50-251

Dr. Robert E. Uhrig
Vice President
Florida Power & Light Company
Advanced Systems & Technology
P. O. Box 529100
Miami, Florida 33152



Dear Mr. Uhrig:

During our meeting of February 24, 1982, with the Westinghouse Owners Group and the three Westinghouse NSS Owners, who received our August 21, 1981 letter concerning pressurized thermal shock (PTS), it was requested that we provide a formal request for any additional information which would be desired regarding the PTS issue. The enclosure identifies the requested additional information. We request the information be submitted by April 30, 1982.

The reporting and/or recordkeeping requirements of this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

~~Original signed by~~

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

Enclosure:
Request for Additional
Information

cc w/enclosure:
See next page

8203260291 820316
PDR ADCK 05000251 PDR

*See previous white for concurrences.

OFFICE	ORB#4:DL	C-ORB#4:DL	ORB#1:DL	AD:ORB:DL	D:DST	C-ORB#1:DL	
SURNAME	GVissing;cf	JStolz*	*MGrotenhuis	Novak	SHanauer*	SVarga*	
DATE	3/10/82	3/5/82	3/5/82	3/5	3/10/82	3/5/82	



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Vice President
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P. O. Box 529100
Miami, Florida 33152

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During our meeting of February 24, 1982, with the Westinghouse Owners Group and the three Westinghouse NSS Owners, who received our August 21, 1981 letter concerning pressurized thermal shock (PTS), it was requested that we provide a formal request for any additional information which would be desired regarding the PTS issue. The enclosure identifies the requested additional information. We request the information be submitted by March 31, 1982.

The reporting and/or recordkeeping requirements of this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

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

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OFFICE	ORB#4:DL	C-ORB#4:DL	ORB#1:DL	C-ORB#1:DL	AD:OR:DL	D:DST	
SUBNAME	GVising;cf	JStolz*	MGrotenhuis*	SVarga*	TNovak	SHanauer	
DATE	3/ /82	3/5/82	3/5/82	3/5/82	3/ /82	3/10/82	



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 ORB#1 Rdg Gray File
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 AEOD

Dr. Robert E. Uhrig
 Vice President
 Florida Power & Light Company
 Advanced Systems & Technology
 P. O. Box 529100
 Miami, Florida 33152

Dear Dr. Uhrig:

During our meeting with the Westinghouse Owners Group and the three Westinghouse NSS Owners, who received our August 21, 1981 letter concerning pressurized thermal shock (PTS) on February 24, 1982 it was requested that we provide a formal request for any additional information which would be desired regarding the PTS issue. The enclosure identifies the requested additional information. We request the information be submitted by March 31, 1982.

Sincerely,

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

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OFFICE ▶	ORB #4 : DL GVissing/cb	C-ORB #4 : DL JStorzi	ORB #4 : DL MGrotenhuis	C-ORB #1 : DL SVarga	D: DST SHanauer	AD-OR: DL TNovak	
SURNAME ▶							
DATE ▶	3/5/82	3/5/82	3/5/82	3/5/82	3/ /82	3/ /82	



The following information was obtained from the records of the
 Department of the Interior, Bureau of Land Management, on
 the subject of the above-captioned tract of land.
 The tract of land described in the above-captioned
 instrument is situated in the County of [County Name],
 State of [State Name], and is more particularly
 described in the above-captioned instrument.
 The tract of land is situated in the [Section] of
 the [Township] of the [Range] of the [Meridian],
 and is more particularly described in the above-
 captioned instrument.

This document is a true and correct copy of the
 original as the same appears in the records of the
 Department of the Interior, Bureau of Land Management.
 Witness my hand and the seal of the Department of the
 Interior, at Washington, D. C., this [Date] day of
 [Month], 19[Year].

(S)
 [Signature]

DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 WASHINGTON, D. C.

Robert E. Uhrig
Florida Power and Light Company

cc: Mr. Robert Lowenstein, Esquire
Lowenstein, Newman, Reis and Axelrad
1025 Connecticut Avenue, N.W.
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Washington, D. C. 20036

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Atlanta, Georgia 30303

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Miami, Florida 33199

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Resident Inspector
Turkey Point Nuclear Generating Station
U. S. Nuclear Regulatory Commission
Post Office Box 1207
Homestead, Florida 33030



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REQUEST FOR ADDITIONAL INFORMATION
CONCERNING
PRESSURIZED THERMAL SHOCK

AND

REGARDING THE "150 DAY" RESPONSE TO NRC LETTER DATED AUGUST 21, 1981

FOR

TURKEY POINT 4

DOCKET NO. 50-251

1. Provide the following information related to fluence determination:
 - (A) Plant specific information which would allow determination of the pressure vessel fluence. Such information should contain as built core and pressure vessel dimensions, regional material composition and neutron source for a two-dimensional (R-0) and (R-Z) neutron transport solution, and
 - (B) Plant specific values of the pressure vessel fluence and its estimated uncertainty.
2. Concerning Operator Action
 - (A) In your evaluation, the actions described do not provide the operator with clear direction for dealing with conflicting concerns that need to be evaluated when considering the operation of HPI and the charging flow as it relates to vessel integrity and maintaining core cooling. Provide an evaluation of the need and effectiveness of procedure modifications to clearly identify the concerns in the emergency operating procedures themselves. This should be done in contrast of depending upon upgrading operator training alone.
 - (b) Provide a formal commitment to upgrade operator understanding of Pressurized Thermal Shock to the reactor pressure vessel.
3. Concerning Input Data and Assumptions
 - 3.0 Provide a description of the models or data used for:
 - (a) Heat sources (or sinks),
 - (b) Decay heat,
 - (c) ECC and feedwater temperatures (enthalpies) and flow rates,
 - (d) Primary and secondary relief capacities,
 - (e) Empirical correlation coefficients used for PTS evaluations,
 - (f) Operator Actions,
 - (g) Initial conditions:

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- 3.2 Provide a list of all transients or accidents by class (for example: excessive feedwater, operating transients which result from multiple failures including control system failures and/or operator error, steam line break and small break LOCA) which could lead to inside vessel fluid temperatures of 300 F or lower. Provide any Failure Modes and Effects Analyses (FMEAs) of control systems currently available or reference any such analyses already submitted. Estimate the frequency of occurrence of these events and provide the basis for the estimates. Discuss the assumptions made regarding reactor operator actions.

For a given initiating event, potential multiple and consequences failures need to be considered to identify those transients which could lead to a PTS problem.

- 3.3 Identify all potential PTS events which have occurred at your facility. Include a designation of the operator actions and identify potential additional failures (including operator) which could have resulted in a more severe event.

4. Concerning a Review of Operating History.

Review your operating history at your plant and identify events which have resulted in exceeding the cooldown rate of 100°F/hr. as well as those events which could have exceeded the cooldown rate limit if not mitigated by plant controls or operator actions.

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