June 26, 1996

DISTRIBUTION
See attached sheet

Mr. T. F. Plunkett
President - Nuclear Division
Florida Power and Light Company
P.O. Box 14000
Juno Beach, Florida 33408-0420

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - GENERIC LETTER 95-07, "PRESSURE LOCKING AND THERMAL BINDING OF SAFETY-RELATED POWER-OPERATED GATE VALVES," TURKEY POINT UNITS 3 AND 4 (TAC NOS. M93531 AND M93532)

Dear Mr. Plunkett:

On August 17, 1995, the NRC issued Generic Letter (GL) 95-07, "Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves," to request that licensees take actions to ensure that safety-related power-operated gate valves that are susceptible to pressure locking or thermal binding are capable of performing their safety functions. You responded to GL 95-07 by letters dated October 11, 1995 and February 9, 1996.

The NRC staff is reviewing and evaluating your responses to GL 95-07. Additional information, as discussed in the enclosure, is requested in order for the staff to complete its review. We request that you respond within 30 days of the receipt of this letter.

The information requested by this letter is within the scope of the overall burden estimated in Generic Letter 95-07, "Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves," which was a maximum of 75 hours per response. This request is covered by Office of Management and Budget Clearance Number 3150-0011, which expires July 31, 1997.

Sincerely,
Original signed by
Richard P. Croteau, Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-250 and 50-251

Enclosure: As Stated

cc w/enclosure: See next page
Document Name: G:TURKEY\TP93531.RAI

OFFICE	LA:PDII-3	PM:PDII-3	D:PDII-3	
NAME	BClayton	RCroteau	FHebdon	
DATE	6/25/96	6/25/96	6/26/96	
COPY	Yes/No	Yes/No	Yes/No	

OFFICIAL RECORD COPY

1/1
DF01

NRC FILE CENTER COPY

REQUEST FOR ADDITIONAL INFORMATION
TURKEY POINT UNITS 3 AND 4, RESPONSE TO GENERIC LETTER 95-07, "PRESSURE LOCKING AND THERMAL BINDING OF SAFETY-RELATED POWER-OPERATED GATE VALVES"

1. The licensee's submittal discusses the susceptibility of valves MOV-3/4-744A/B, Low Head Safety Injection Isolation, and MOV-3/4-535&536, PORV Block Valves, to depressurization induced (hydraulic effects) pressure locking. The licensee's submittal discusses the valve manufacturer's design experience and testing results. The NRC staff believes that more detailed information is required to provide assurance of the capability of these valves to perform their safety functions. Please provide calculations, analysis, and/or testing, that has been performed to demonstrate the actuators' capability to overcome these potential depressurization induced pressure locking scenarios.

2. The licensee's submittal discusses the susceptibility of valves MOV-3/4-535&536, PORV Block Valves, to thermal binding. The licensee's submittal states that, following the closure of a PORV block valve to isolate a leaking PORV, the evaluation determined that significant cooling of the PORV block valve would not occur due to the close proximity of the PORV block valves to the pressurizer. The NRC staff believes that more detailed information is required to provide assurance that these valves are not susceptible to thermal binding. Please address the potential susceptibility of these valves to thermal binding in a case where they are closed to isolate a leaking PORV and, following plant cooldown, are required to open for low temperature overpressure protection.

3. In Attachment 1 to GL 95-07, the NRC staff requested that licensees include consideration of the potential for gate valves to undergo pressure locking or thermal binding during surveillance testing. During workshops on GL 95-07 in each Region, the NRC staff stated that, if closing a safety-related power-operated gate valve for test or surveillance defeats the capability of the safety system or train, the licensee should perform one of the following within the scope of GL 95-07:

1. Verify that the valve is not susceptible to pressure locking or thermal binding while closed,
2. Follow plant technical specifications for the train/system while the valve is closed,
3. Demonstrate that the actuator has sufficient capacity to overcome these phenomena, or
4. Make appropriate hardware and/or procedural modifications to prevent pressure locking and thermal binding.

The staff stated that normally open, safety-related power-operated gate valves which are closed for test or surveillance but must return to the open position should be evaluated within the scope of GL 95-07. Please discuss if valves which meet this criterion were included in your review, and how potential pressure locking or thermal binding concerns were addressed.

4. Through review of operational experience feedback, the staff is aware of instances where licensees have completed design or procedural modifications to preclude pressure locking or thermal binding which may have had an adverse impact on plant safety due to incomplete or incorrect evaluation of the potential effects of these modifications. Please describe evaluations and training for plant personnel that have been conducted for each design or procedural modification completed to address potential pressure locking or thermal binding concerns.

Distribution
Docket File
PUBLIC
PDII-3 Reading
R. Hernon
EMEB

280131