



JUN 27 2002

L-2002-116
10 CFR 50.4
10 CFR 50.54 (f)

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

RE: St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
NRC Bulletin 2002-01 Response Supplement 1
Reactor Pressure Vessel Head Degradation and Reactor
Coolant Pressure Boundary Integrity

On March 18, 2002, the NRC issued Bulletin (NRCB) 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity." On April 2, 2002, Florida Power & Light Company (FPL) supplied the requested 15-day and 60-day responses for St. Lucie Units 1 and 2 and Turkey Point Units 3 and 4, and the 30-day response for Turkey Point Unit 3. On May 14, 2002, the NRC staff conducted a conference call with FPL representatives to discuss the FPL NRCB 2002-01 response at which time additional requests for information were made.

The NRC requested FPL to docket the supplemental information provided to the NRC during the conference call under 10 CFR 50.54(f).

The attached information is provided pursuant to the requirements of Section 182a of the Atomic Energy Act of 1954, as amended, and 10 CFR 50.54(f).

Very truly yours,

Rajiv S. Kundalkar
Vice President
Nuclear Engineering

Attachment

A095

St. Lucie Units 1 and 2 and Turkey Point Units 3 and 4
Docket Nos. 50-335, 50-389, 50-250, and 50-251
L-2002-116 Page 2

STATE OF FLORIDA)
) ss.
COUNTY OF PALM BEACH)

Rajiv S. Kundalkar being first duly sworn, deposes and says:

That he is Vice President, Nuclear Engineering, for the Nuclear Division of Florida Power & Light Company, the Licensee herein;

That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information and belief, and that he is authorized to execute the document on behalf of said Licensee.


Rajiv S. Kundalkar

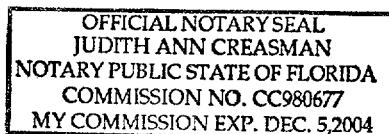
STATE OF FLORIDA

COUNTY OF PALM BEACH

Sworn to and subscribed before me

this 27th day of June, 2002
by Rajiv S. Kundalkar, who is personally known to me.


Name of Notary Public - State of Florida



(Print, type or stamp Commissioned Name of Notary Public)

Bulletin 2002-01 Response Supplement for St. Lucie Units 1 and 2

NRC Question 1: Clarify whether or not the bare metal of the reactor pressure vessel (RPV) head was cleaned following the 1978 leakage event at St. Lucie Unit 1.

FPL Response to NRC Question 1: There is no documentation that the bare metal of the RPV head was cleaned following the 1978 event. The spray down of containment occurred while the reactor was in cold shutdown during a maintenance outage. Since it was not a refueling outage, the missile shield was likely installed, so there was no direct path for the containment spray to reach the RPV head. Also, since the plant was at cold shutdown, there was no concentrating mechanism for the weak concentration of boric acid contained in the spray water and therefore no significant deposits would have been left on the RPV head.

NRC Question 2.a.: Discuss your basis for concluding that the debris located on the St. Lucie Unit 1 RPV flange in 1996 was not a result of corrosion of the RPV base metal.

FPL Response to NRC Question 2.a.: The RPV head flange area was cleaned after the event and the debris did not return indicating that the debris was from a one time event. At the start of the 1996 refueling outage, a "water bag" being used for crane load testing broke and spilled several hundred gallons of non borated water over the area, which may have contributed to the light rust and debris later noted on the RPV flange surface. In a subsequent outage (October 1997) the flange surface was abrasively cleaned and painted to provide a clean surface free of rust particles. In the outages that followed the abrasive cleaning, there has been no reoccurrence of debris.

NRC Question 2.b.: Had there been any indications of clogged containment filters as described in NRC Information Notice 2002-13, "Possible Indicators of Ongoing Reactor Pressure Vessel Head Degradation."

FPL Response to NRC Question 2.b.: There is no record of containment air filter clogging at the St. Lucie or Turkey Point plants. In addition, the St. Lucie Plant chemistry supervisor (previously the Turkey Point Plant chemistry supervisor) and the corporate radiological services supervisor were interviewed regarding the repeated clogging of containment filters identified in the NRC Information Notice 2002-13. These individuals have a significant amount of experience at both sites and were not aware of any similar event of clogging of containment air filters having occurred at either FPL site.

NRC Question 3: Clarify whether or not the visual inspections performed at St. Lucie Unit 1 will include 100% of the general surface area of the RPV head (i.e., in addition to the nozzle inspections).

FPL Response to NRC Question 3: FPL committed to perform inspections in response to NRCB 2001-01 (FPL Letters L-2001-198, dated September 4, 2001 and L-2001-247 dated

November 1, 2001). The St. Lucie Unit 1 inspection is planned to include 100% of the general area around the intersection of the 78 RPV head penetrations and is scheduled for the October 2002 refueling outage. The inspection will be performed by gaining access to the head under the close fitting metal encased insulation inside the RPV shroud. The insulation outside the shroud will also be removed during RPV stud detensioning and as a result this area is also viewed. In the process of performing these inspections it is estimated that greater than 90% of the RPV head surface will be viewed and any evidence of boric acid accumulation or boric acid wastage will be documented in the corrective action program.

FPL will set up a conference call with the NRC to discuss the results of the St. Lucie Unit 1 RPV inspection prior to startup from the fall 2002 refueling outage.

NRC Question 4: Discuss your plans for submitting the information requested in response to item 1.D. for St. Lucie Unit 2.

FPL Response to NRC Question 4: FPL stated in the NRCB 2002-01 response that subsequent inspections will be based on guidance being developed by the American Society of Mechanical Engineers (ASME) and the Electric Power Research Institute Material Reliability Program (EPRI-MRP). Since that guidance is still being developed, FPL has nothing to add to the original response to item 1.D. When these guidelines are complete, FPL will evaluate the options and plans to follow those recommendations.

NRC Question 5: For St. Lucie Unit 2, clarify whether or not the 100% inspections performed in response to Bulletin 2001-01, in December 2001 included an inspection of 100% of the general surface area of the reactor pressure vessel (RPV) head. Include a description of any deposits that were located and whether or not these deposits obscured a significant (greater than 1 sq. inch) region of the RPV head.

FPL Response to NRC Question 5: In December of 2001, the NRCB 2001-01 inspection of the St. Lucie Unit 2 RPV head penetrations was performed. The inspection scope included 100% of the general area around the intersection of the 102 RPV head penetrations. In the process of performing these inspections a large portion of the RPV head (>90%) was viewed and any evidence of boric acid accumulation or boric acid wastage would have been documented in the corrective action program. Each time the video probe was inserted under the head insulation (inside the shroud) a video recorder was documenting the event including the movement from the entry into the shroud to the penetration of interest. Following completion of the inspection, the area directly below the access holes that were cut into the head cooling shroud were examined for foreign material (i.e. metal chips, etc) and vacuumed. The insulation outside the shroud area was removed during RPV stud detensioning and as a result this area was also viewed.

There were no deposits that excluded viewing of the head area of interest. There was some small loose debris that was easily moved from the area of interest with air.

Bulletin 2002-01 Response Supplement for Turkey Point Units 3 and 4

NRC Question 1: *For Turkey Point Units 3 and 4, clarify whether or not the 100% inspections performed in response to NRCB 2001-01 included an inspection of 100% of the general surface area of the reactor pressure vessel (RPV) head. Discuss whether or not the inspections identified any deposits on the RPV head, and if any significant regions of the RPV head (> 1 square inch) were obscured by deposits.*

FPL Response to NRC Question 1: The examinations at Turkey Point Units 3 and 4 included 100% of the general area around the intersection of the 66 RPV head penetrations. An overview was provided using a video camera, and a crawler with video probe was used for the detailed nozzle-by-nozzle inspection. In the process of performing these inspections, all of the RPV head insulation inside the head cooling shroud was removed and the shroud was raised/removed. The insulation outside the shroud area was also removed during RPV stud detensioning. As a result, essentially the entire surface of the head was available for inspection and no significant regions of the head were obscured by deposits. After the inspection of the Turkey Point Unit 4 RPV head penetrations in March of 2002, the general area was vacuumed to remove any loose insulation debris.

NRC Question 2: *For Turkey Point Units 3 and 4, discuss your plans for submitting the information requested in response to item 1.D. (schedule, plans, and basis for future inspections of the RPV head and penetration nozzles including method, scope, frequency, qualification requirements, and acceptance criteria).*

FPL Response to NRC Question 2: FPL stated in the NRCB 2002-01 response that subsequent inspections will be based on guidance being developed by the American Society of Mechanical Engineers (ASME) and the Electric Power Research Institute Material Reliability Program (EPRI-MRP). Since that guidance is still being developed, FPL has nothing to add to the original response to item 1.D. When these guidelines are complete, FPL will evaluate the options and plans to follow those recommendations.