Florida Power & Light Company, 6501 S. Ocean Drive, Jensen Beach, FL 34957

June 25, 2004

L-2004-140
10 CFR 50.4

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

RE: St. Lucie Unit 2
Docket No. 50-389
Request for Additional Information
SL2-14 Steam Generator Tube Inspection Reports

Attached is the Florida Power & Light Company (FPL) response to the NRC request for additional information (RAI) dated April 20, 2004. The RAI was generated by the NRC based on the staff's review of St. Lucie Unit 2 steam generator (SG) inspection reports that FPL submitted after the spring 2003 refueling outage (SL2-14).

Following the spring 2003 SG inspection, FPL submitted a 15-day SG tube plugging report, a SG condition monitoring report, and a 12-month SG tube inspection special report. The SG tube plugging report, required by Technical Specification (TS) 4.4.5.5.a, was submitted by FPL letter L-2003-132 dated May 26, 2003. The Nuclear Energy Institute (NEI) 97-06 SG condition monitoring report was submitted by FPL letter L-2003-180 dated July 21, 2003. The 12-month SG tube inspection special report, required by TS 4.4.5.5.b, was submitted by FPL letter L-2003-252 dated November 21, 2003.

Please contact George Madden at 772-467-7155 if there are any questions about this submittal.

Very truly yours,

William Jefferson, Jr.
Vice President
St. Lucie Plant

WJ/GRM

Attachment

A047

REQUEST FOR ADDITIONAL INFORMATION
ST. LUCIE UNIT 2
REVIEW OF STEAM GENERATOR REPORTS RELATED TO
SPRING 2003 STEAM GENERATOR INSPECTION

NRC Request 1:

Were cracks detected in any wear scars located in the U-bend region? If so, please describe the inspection findings in detail (e.g., tube identifier, flaw location, etc.). In addition, describe the corrective actions taken (e.g., inspection scope expansion, etc.) and the basis for these corrective actions.

FPL Response 1:

No cracks were detected in any of the wear scars located in the U-bend region. The inspection consisted of a 20 percent sample of the wear scars at vertical and diagonal supports in the U-bend region with rotating probe techniques. Two cracks were detected at the hot leg diagonal support in steam generator 2B, and it was determined that these cracks were not associated with wear scars. However, rotating probe inspections were conservatively expanded to all remaining wear scars at the hot leg diagonal support in this steam generator. No additional cracks were detected in the expanded inspection.

NRC Request 2:

Are wear scars, located in other regions of the steam generators (e.g., tube support plates and eggcrates) inspected with a rotating probe to determine whether cracking is present at the same location? If not, how are cracks in wear scars differentiated from wear scars in these locations?

NRC Response 2:

Yes. Rotating probe techniques are used to inspect all wear scars in other regions of the steam generators (e.g., tube support plates and eggcrates) to determine if cracking is present at the same location.

NRC Request 3:

Were any cracks detected in dings greater than 5 volts? If so, describe the inspection findings in detail (e.g., tube identifier, ding location, ding size, and method of flaw detection [bobbin and/or rotating probe]). In addition, describe the corrective actions taken (e.g., inspection scope expansion, etc.) and the basis for these corrective actions.

FPL Response 3:

No cracks were detected in dings greater than 5 volts in this inspection.

NRC Request 4:

Single axial indications were detected in steam generator 2B near the diagonal bars on the hot leg (DHB) (e.g., DHB + 2.09 and DHB + 1.63). Please discuss these indications in more detail, including, identifying whether they are located in the freespan, how they were detected (i.e., bobbin and/or rotating probe), the severity of these indications, whether axial flaws near a DHB has previously been identified at St. Lucie 2, other relevant details (if any) and whether an inspection scope expansion was necessary.

FPL Response 4:

These two indications are located in Row 48 Column 68 and Row 26 Column 22. They were initially detected by bobbin probe inspection and confirmed by rotating probe inspection. The indications are located at the contact point and within the bounds of the hot leg diagonal support near the top edge (i.e., not in the freespan). Both indications were reported as single axial indications. Row 26 Column 22 contained the more severe indication with a maximum through-wall depth of 33%, a maximum length of 0.41 inches and maximum amplitude of 0.26 volts by rotating probe inspection (+Point^{TM}). An inspection scope expansion was considered necessary because both crack and wear scar indications were reported at contacts with the hot leg diagonal support in steam generator 2B. Rotating probe inspections were expanded to include all remaining wear scars reported by the bobbin technique at the hot leg diagonal support in this steam generator. No additional cracks were reported at this support location in the expanded inspection.