TABLE 4.4-2

STEAM GENERATOR TUBE INSPECTION

1ST SAMPLE INSPECTION			2ND SAMPLE INSPECTION		3RD SAMPLE INSPECTION	
Sample Size	Result	Action Required	Result	Action Required	Result	Action Required
A minimum of S Tubes per S. G.	C-1	None	N/A	N/A	N/A	N/A
	C-2	Plug defective tubes and inspect additional 2S tubes in this S. G.	C-1	None	N/A	N/A
			C-2	Plug defective tubes and inspect additional 4S tubes in this S. G.	C-1	None
					C-2	Plug defective tubes
					C-3	Perform action for C-3 result of first sample
			C-3	Perform action for C-3 result of first sample	N/A	N/A
	C-3	Inspect all tubes in this S. G., plug defective tubes and inspect 2S tubes in each other S. G.* Prompt notification to NRC pursuant to specification 6.9.1	All other S. G.s are C-1	None	N/A	N/A
			Some S. G.s C-2 but no additional S. G. are C-3	Perform action for C-2 result of second sample	N/A	N/A
			Additional S. G. is C-3	Inspect all tubes in each S. G. and plug defective tubes. Prompt notification to NRC pursuant to specification 6.9.1	N/A	N/A

$S = 3\frac{N}{n}\%$ Where N is the number of steam generators in the unit, and n is the number of steam generators inspected during an inspection

* The requirement to inspect all tubes may be relaxed for Cycle 5 Refueling since an engineering evaluation has shown that the condition(s) has been adequately bounded by inspection.

SAFETY EVALUATION

Re: St. Lucie Unit 1
Operating License DPR-67
Proposed Change to Technical Specifications -
Steam Generator Tube Inspection Requirements

I. INTRODUCTION

During the Fall 1981 scheduled unit outage, the planned Eddy Current Testing (ECT) inspection program on Steam Generator "B" was temporarily delayed, so that a leaking tube(s), detected during plant operation could be located and evaluated. The leaking tube (L144 R10) was found by helium leak test methods, and was located in an area which is not part of our normal planned inspections. A cluster of fifteen (15) tubes around the leaking tube was examined by ECT and two tubes were found defective (exceeding the 40% plugging limit of the Tech Spec). These inspection results put us into a potential category C-3 classification per Table 4-4-2. Subsequently, we increased our sample size (minimum of 3%) by inspecting all tubes (308) in Rows 8 through 12 and found forty (40) defective tubes. These inspection results put us into Category C-3.

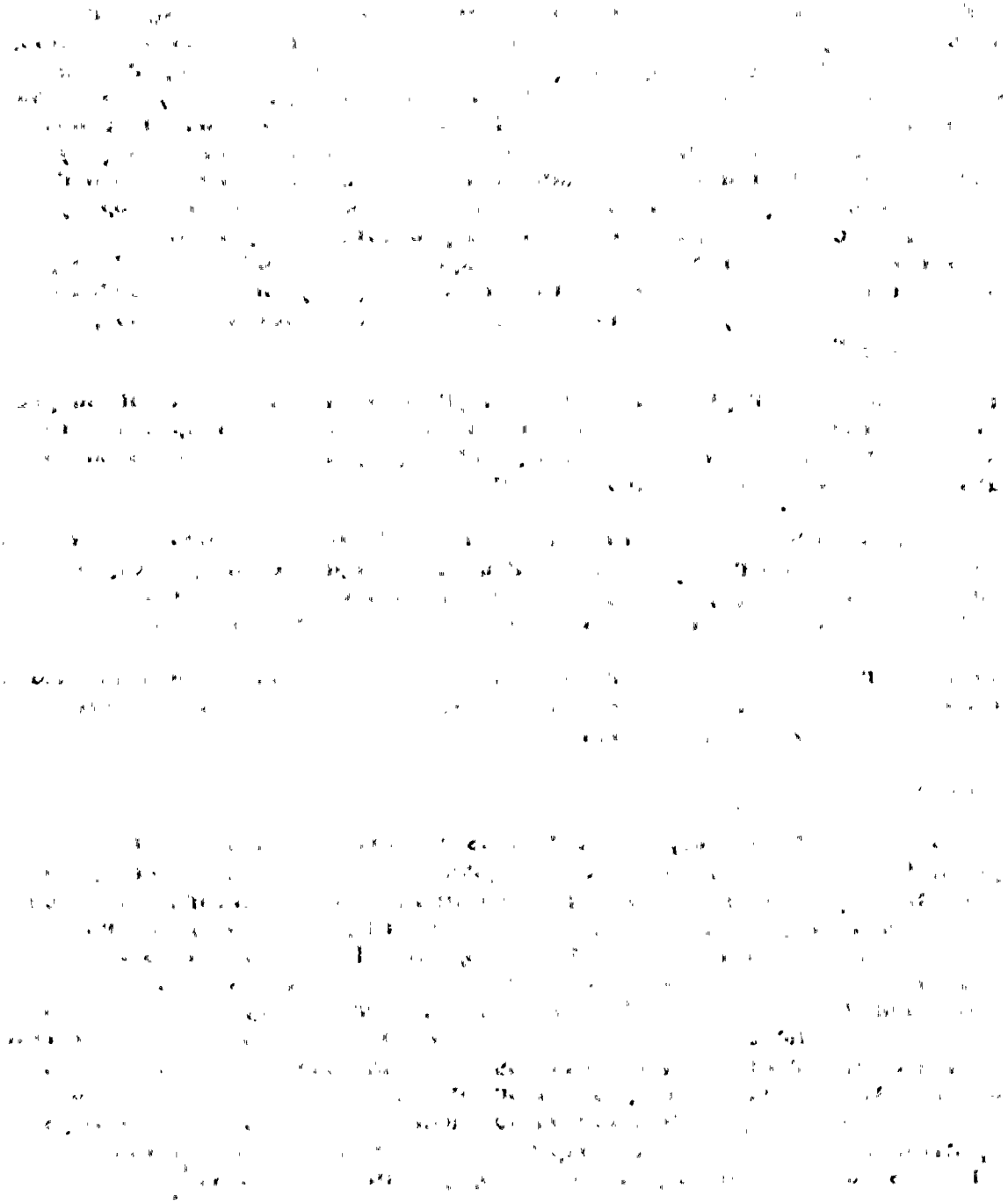
In addition to our planned outage ECT program, we increased our sample size (minimum 6%) in the "A" Steam Generator and began inspection in Rows 8 through 12. We found twenty-three (23) defective tubes which also put this generator into Category C-3,

Based upon these findings in the steam generators, FPL continued with a comprehensive program in both generators, designed to completely locate and bound the area(s) of degradation. In total, 24 defective tubes were found in S/G A and 42 defective tubes were found in S/G B.

NOTE: In four previous steam generator inspections, St. Lucie 1 has not had a recordable indication. Additionally, steam generator denting, first detected in 1978, remains minimal.

II. EVALUATION

The steam generator inspection results identified a new or more probably, a previously undetected degradation mechanism occurring in both steam generators. Extensive examinations were performed in both generators. Approximately 2282 tubes were inspected in S/G A and approximately 3228 were inspected in S/G B. The examinations were continued well beyond the actual areas of degradation such that the condition was shown to be localized and conservatively bounded by the inspections. Areas which may have been remotely suspect due to similar design considerations, were also inspected and shown to be void of the condition. The actual inspection program was described to the NRC staff via an oral presentation on November 9, 1981. Tube sheet maps specifically describing the inspections and results were included in the presentation, and copies are being provided to the NRC.



III. CONCLUSION

The comprehensive inspections performed in both steam generators at St. Lucie Unit 1 demonstrated that the detected condition was indeed localized and conservatively bounded by inspection. The inspection areas selected, the various types of inspections performed, and the large number of tubes inspected, give a very high confidence level that the generators are free of any undetected tube problems. This meets the intent of the Technical Specifications, and additional inspections would not produce useful information and would only increase inspection costs, nuclear unit "down time", and man-rem exposure. Therefore, Florida Power and Light Company has concluded that this Technical Specification revision does not reduce any safety margins and presents no significant risk to the health and safety of the public.

STATE OF FLORIDA)
) ss.
COUNTY OF DADE)

E. A. Adomat, being first duly sworn, deposes and says:

That he is Executive Vice President of Florida Power & Light Company, the Licensee herein;

That he has executed the foregoing document; that the statements made in this said 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

E. A. Adomat

E. A. Adomat

Subscribed and sworn to before me this

10 day of November, 1981

Cheryl L. Fredricks

NOTARY PUBLIC, in and for the County of Dade, State of Florida

My commission expires: Notary Public, State of Florida at Large My Commission Expires October 30, 1983 Bonded thru Maynard Bonding Agency