



UNITED STATES  
 NUCLEAR REGULATORY COMMISSION  
 REGION II  
 101 MARIETTA ST., N.W., SUITE 3100  
 ATLANTA, GEORGIA 30303

Report No. 50-335/79-17

Licensee: Florida Power and Light Company  
 9250 West Flagler Street  
 Miami, Florida 33101

Facility Name: St. Lucie Plant Unit 1

Inspection at St. Lucie Plant near Ft. Pierce, Florida

Inspectors: <u><i>A. L. Cunningham</i></u>	<u>8/23/79</u>
A. L. Cunningham	Date Signed
<u><i>D. L. Andrews</i></u>	<u>8/23/79</u>
D. L. Andrews	Date Signed
Approved by: <u><i>J. W. Hufham</i></u>	<u>8/24/79</u>
for J. W. Hufham, Section Chief, FF&MS Branch	Date Signed

SUMMARY

Inspection on August 7 - 10, 1979

Areas Inspected

This routine, unannounced inspection involved 30 inspector-hours onsite in the areas of nonradiological environmental protection including review of annual QA Audit; circulating water system temperature limitations; circulating water system chemical monitoring and surveillance program; special environmental conditions; review of LER's, review of previous inspection findings.

Results

Of the 7 areas inspected, no apparent items of noncompliance or deviations were identified.

## DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*C. M. Wethy, Plant Manager
- \*N. G. Roos, Quality Assurance Engineer
- \*D. A. Moore, Chemistry Supervisor
- \*J. W. Brown, Quality Assurance Applications Manager
- \*A. W. Baily, Quality Assurance Operations Supervisor

#### Other Organizations

- D. L. Webster, Quality Assurance Section Manager, Applied Biology, Inc.
- J. O'Hara, Scientific Director, Applied Biology, Inc.
- R. M. Gallagher, Field Project Manager, Applied Biology, Inc.

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on August 9, 1979, with those persons indicated in Paragraph 1 above.

### 3. Licensee Action on Previous Inspection Findings

(Closed) Noncompliance (50-335/78-11-01): Routine reporting. Review of Annual Environmental Monitoring Reports for the periods ending December 31, 1977, and December 31, 1978, disclosed that biological surveillance results for the November - December periods were appropriately logged for the following parameters: phytoplankton, zooplankton, benthos, and fish larvae. This finding was discussed with a licensee representative.

### 4. Unresolved Items

Unresolved items were not identified during this inspection.

### 5. Environmental Program Audit

- a. Appendix B Technical Specification 5.3.4 requires periodic audits concerning implementation of the Environmental Technical Specifications as provided for in the licensee's Quality Assurance Manual. Inspection included a detailed review of Quality Assurance Audit Report No. QAA-LEP-78-1 dated August 10, 1978. The audit was conducted during the period May 31, 1978 thru August 8, 1978. One unsatisfactory condition was disclosed, viz, clarification of ETS 3.1.B.3 which required analysis of selected nutrients accompanying other water quality chemical parameters (temperature, salinity, DO, turbidity) determined during routine surveillance of all biological conditions

assigned in ETS 3.1.B. Response to the finding was that selected nutrient analyses was applicable solely to phytoplankton samples since that aquatic entity was dependent upon nutrients in the water. Inspection disclosed that appropriate corrective action was implemented. Amendment No. 29 to facility operating license for St. Lucie Unit No. 1 included the licensee's requested change in ETS 3.1.B.e confining selected nutrient analyses to phytoplankton samples only. There were no questions regarding this item.

- b. Biological monitoring, surveillance, and associated water chemistry parameters defined in Sections 3.1.B and 4.1 of Appendix B to St. Lucie Unit 1 facility license are conducted by a licensee contractor. The inspectors reviewed and discussed the contractor's quality assurance and analytical quality control practices applicable to St. Lucie biological program. Inspection disclosed that the contractor conducted a quality assurance program which addressed the following: (1) verification, evaluation and documentation of field biological and chemical data; (2) collection, cataloguing and storage of monitoring and surveillance data; (3) management of analysis and correlation of monitoring and surveillance data and results; (4) quality audit of inhouse and field office activities; (5) development of quality assurance procedure; (6) surveillance and monitoring program report preparation and production. Inspection disclosed that the quality assurance program employed appeared to assure implementation of biological monitoring and surveillance consistent with the requirements defined in Appendix B Technical Specifications cited above.

## 6. Biological Surveillance

Appendix B. Technical Specification 3.1.B requires determination of effects of plant operation on planktonic, nektonic, and benthic populations in the Atlantic Ocean near the plant circulating water discharge. Inspection included a detailed review of field records, data and reports compiled by a licensee contractor during the period July, 1978 - July 1979 for the following biological parameters: benthic organisms, phytoplankton and zooplankton, macrophytes, nekton, and migratory sea turtles. Inspection disclosed that all surveillance commitments and associated synoptic water quality analyses, including nutrient analyses of plankton samples, were implemented as required. There were no questions regarding this item.

## 7. Chemical and Thermal Monitoring

Records, data, and reports of the thermal and chemical monitoring defined in Appendix B Technical Specifications 2.1, 2.2 and 3.1.A respectively, were reviewed for the period July 1978 through July 30, 1979. Inspection disclosed that the referenced monitoring conditions were implemented, as required. Plant cooling water thermal limits which were exceeded, but within the exceptions defined in ETS 2.0.2 were reported as Licensee Event Reports (LER). No other incidents were disclosed involving assigned thermal or chemical limits which constituted violation of such limits. There were no questions regarding this item.

8. Review of LER's

- a. The inspector reviewed environmental protection LER's for the periods ending December 31, 1978, and July 30, 1979, respectively. During the period ending December 31, 1978, nine LER's were submitted by the licensee (B-78-01 through B-78-09). Five of these reports involved  $\Delta T$  excursions consistent with thermal exceptions defined in ETS 2.0.2. Three incidents involved surface temperature limits of the plant cooling water discharge mixing zone defined in ETS-2.1.1. One report addressed severed mooring of the plant ocean water intake thermograph. These reports and respective corrective actions were discussed with licensee representatives. All of the above cited events were closed out.
  
- b. LER's for the period ending July 30, 1979, were reviewed and discussed with licensee representatives. Two events were reported. One report (B-79-01) involved severed mooring to the plant ocean intake thermograph. The final report (B-79-02) involved surface temperature of the plant discharge mixing zone. The reports and respective corrective actions were discussed with licensee representatives and formally closed out at the exit interview.