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Docket No.: 50-389

Dr. Robert E. Uhrig, Vice President
Advanced Systems & Technology
Florida Power & Light Company
P. O. Box 529100
Miami, Florida 33152

Dear Dr. Uhrig:

Subject: St. Lucie Plant, Unit 2 ER - Request for Additional Information

From the review of your submittal on the proposed additional intake pipeline by the Environmental Engineering Branch, we find that we need additional information. The specific information required is listed in the Enclosure.

Responses to the enclosed request should be submitted by January 29, 1982. If you cannot meet this date, please inform us within seven days after receipt of this letter of the date you plan to submit your responses.

Please contact Mr. Nerses (301-492-7318), St. Lucie 2 Project Manager, if you desire any discussion or clarification of the enclosed report.

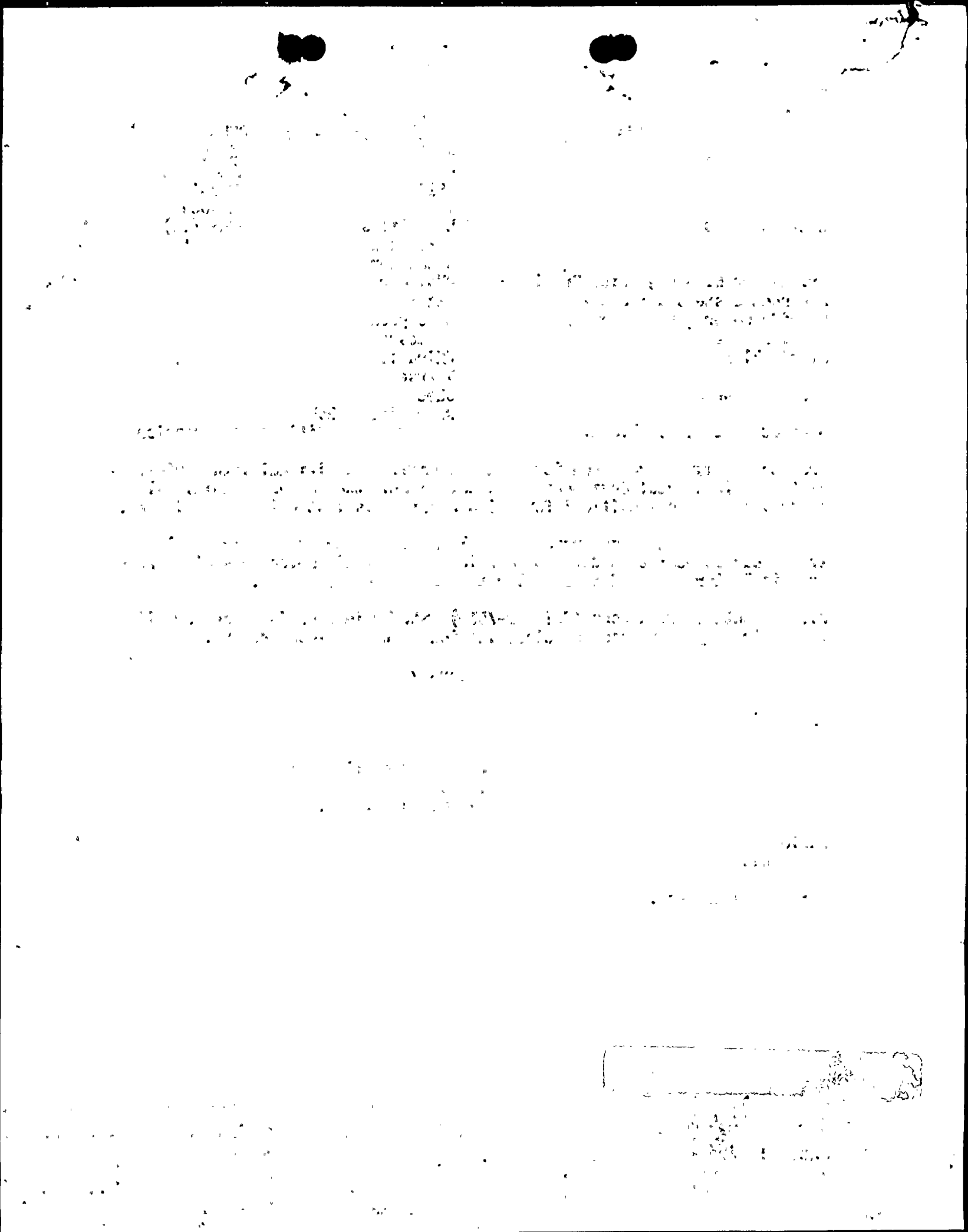
Sincerely,

Frank J. Miraglia, Chief
Licensing Branch No. 3
Division of Licensing

Enclosure:
As stated

cc: See next page.

OFFICE	DL:LB#3	DL:LB#3					
SURNAME	VNerses:jb	FJMiraglia					
DATE	1/15/82	1/18/82					



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7900 South A1A
Jensen Beach, Florida 33457

ST. LUCIE 2 ER OL

DOCKET NO. 50-389

ENVIRONMENTAL ENGINEERING BRANCH

REQUEST FOR ADDITIONAL INFORMATION
ON THE PROPOSED THIRD INTAKE PIPELINE
FOR THE ST. LUCIE PLANT UNIT 2

291.1 The discussion of the difficulties experienced in maintaining flows introduces uncertainty as to what the actual cooling water flow will be with two units in service. With the new intake in service what will the flow be through each unit? Will this be maintained by throttling back pumps? Apparently higher flows could be employed. At what reduced flow and corresponding elevated temperature rise will intake pipeline cleaning procedures be initiated?

291.2 Discuss recirculation of discharged water to the new intake pipeline.

291.3 Page 10 of the Circulating Water System Modification document provides some flow velocities in the pipelines. Indicate whether these velocities are applicable to clean pipe or to fouled pipe. Explain why the maximum flow velocity would be reduced to 2/3's of the twin pipeline flow velocity when the existing pipelines are 12" in diameter and the new pipeline is to be 16" in diameter.

291.4 Provide estimates of flow velocities at the entrance of each velocity cap, each vertical pipe section of the velocity cap, each intake pipeline, and the intake canal under one and two unit operation and clean and fouled conditions.

291.5 Describe the procedures for removing a pipeline from service and cleaning it.

291.6 Indicate whether cleaning of any of the ocean intake pipelines will be attempted during two unit operation or whether cleaning be limited to outages.

291.7 Indicate whether all three pipelines will be used at all times or whether any pipeline will be blocked off during periods of one unit operation or kept on standby for any reason.

291.8 Verify that construction is still planned for February through December 1982.

Provide a schedule for the construction of the intake and indicate if and when nighttime construction is planned.

291.9 On page 13 of the Circulating Water System Modification document a discussion of decreased turtle nesting due to initial intake and discharge construction is presented. Provide the magnitude of the decrease in turtle nesting due to recent construction of the second discharge structure.

291.10 Is there any intention of using chemical procedures or chemical coatings to control fouling in the new intake? If so, give adequate detail for impact assessment.

291.11 Indicate the status of other Federal and State permit actions related to the new intake. Where actions are complete, provide copies of the permits or approvals along with copies of any conditions or qualifications. Provide copies of all environmental impact appraisals and other environmental review documents prepared in conjunction with the other permitting actions. Specifically, provide copies of the comments of the USFWS and the NMFS submitted to the Corps of Engineers on their permit.

291.12. On an aerial photo such as provided on site visit (scale 1" = 200', taken 12/12/80) show the exact location for the third intake pipeline including detail for the on-land portion. Also show the details of the mitigation area to be provided as compensation for the destruction of mangrove swamp.

On the same photo, if appropriate, or on other photo identify boundaries of areas to be used for the disposition of dredge spoils resulting from the construction of the third intake pipeline, headwall, and widening of the intake canal.

291.13 Provide the following information:

a. The month the mangrove swamp mitigation action is to take place.

b. The kind of equipment used to perform the mitigation action (e.g., backhoe, dragline).

c. The names of the specific native species to be planted.

291.14. Conduct a survey of the mangrove swamp to determine whether any leather ferns are in area to be destroyed.