

# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

June 20, 1990

Mr. Martin A. Smith, Ph.D.  
Manager, Environmental Permitting & Programs  
Florida Power & Light Company  
P.O. Box 078768  
West Palm Beach, FL 33407-0768

Dear Mr. Smith:

RE: Orimulsion Test Burn  
Sanford Unit #4  
PSD-FL-150  
AC64-180842

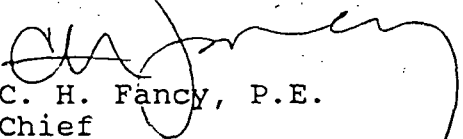
On May 22, 1990, the Department received FP&L's application to construct equipment at the Sanford plant to perform test burns of Orimulsion fuel in Unit #4. The application is deemed incomplete. Additional information is required for further processing of this application.

Within 30 days of receipt of this letter, please respond to the following items of incompleteness:

1. As stated in the application, there was a successful long-term burning of Orimulsion in the 100 MW corner-fired Dalhousie Generating Station Unit 1 in New Brunswick, Canada. Please submit the results of those tests. What were the pollution control devices tested and what were their efficiencies?
2. The requested permitted equipment operating time is 120 full-capacity equivalent burn days when Orimulsion is fired. How much time will each pollution control device spend in operation? Please submit a detailed schedule of testing of the pollution control devices. How long will Unit #4 be burning Orimulsion before the stack emissions are tested? Will the test scale and duration be sufficient to size full-scale equipment or will future tests be necessary?
3. What is the estimated cost to FP&L for the individual components of the proposed pollution control pilot study?
4. What are the model names and expected efficiencies of each of the pollution control devices to be tested?

5. What type of continuous emissions monitors (opacity, SO<sub>2</sub>, NO<sub>X</sub>, etc.) will be used on the inlet and outlet pilot test gas streams? Will these be in use the entire time the pilot test control equipment is being operated?
  6. What type of continuous emission monitors will be used on the Unit #4 exhaust stack while Orimulsion is being burned? Will these monitors also be used while No. 6 fuel oil is being fired?
  7. What is the expected cost of No. 6 fuel oil per BTU during the next year? What is the expected cost of Orimulsion per BTU during the next year?
  8. The solid waste generated during the test should go to a lined landfill with a leachate collection system. Is this type of landfill available for disposal of the solid waste?
  9. For PSD purposes, potential emission increases from a modification are compared to past actual emissions on a tons per year basis. Why were the potential emissions resulting from any fuel oil burning (which could occur the remainder of the year when Orimulsion is not being burned) not included in the potential emissions?
  10. Past actual emissions listed in Table 3-2 do not correspond to values calculated from information submitted in the 1989 annual operating reports. Please explain the discrepancies.
- If you have any questions concerning this request for additional information, please contact Cindy Phillips at (904)488-1344.

Sincerely,

  
C. H. Fancy, P.E.  
Chief  
Bureau of Air Regulation

cc: Kennard F. Kosky, P.E., KBN  
Elsa Bishop, FP&L  
William Green, Equire, Hopping Boyd Green & Sams