UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

OFFICE OF THE
COMMISSIONER

March 23, 1983

MEMORANDUM FOR THE FILES

FROM: James K. Joosten, Technical Assistant
to Commissioner Gilinsky

SUBJECT: WATERFORD TRIP

INTRODUCTION

On March 9th, 1983 Commissioner Gilinsky and I arrived at the Waterford site and met with Les Constable (Sr. Resident Inspector), Tracy Flippo (Resident Inspector), and Bill Crossman (Chief Project Manager). During the meeting we reviewed the current plant status, plant staffing, operator experience levels, the QA level III civil penalty, the role of contractors and consultants in normal station functions, and briefly touched on LP&L's recent emergency rate request. The Resident Inspectors commented that the station's attitude was good and that they were agressive in taking corrective action.

PLANT TOUR

Following the meeting with the residents, Les Constable conducted a tour of the following areas:

(1) Turbine floor and overview of the Switchyard

(2) Control Room

(3) Technical Support Center

(4) Remote Shutdown Panel

(5) Emergency Diesel Generator Rooms

(6) Auxiliary Feedwater Pumps and Component Cooling Booster Pumps

(7) Safety injection pumps and containment spray pumps

(8) Shutdown cooling system and ultimate heat sink

(9) Emergency Operations Facility

(10) Thompkins & Beckwith Building

At the Thompkins & Beckwith Building, Mr. Henry Miller described the welder qualification process. Welding procedures were observed along with the records of several welders' qualification tests. Mr. Miller indicated that T&B was computerizing much of the QA process.

The control room was large and well layed out. Lighting was poor at the time but may have been undergoing modifications. There were numerous CRT's for the operators use. Three significant items were noticed which detract from the operators' ability to control the plant. First, the process instrumentation gauges are equipped with very thin orange needles for indication. The needles are impossible to read while standing at the operators console or at another panel. This is a serious defect since it encourages operators and shift supervisors to stand in front of and focus in on a particular panel instead of stepping back and assessing the whole plant condition during an accident. Additionally, it makes instrument failures almost impossible to detect. I have notified Mr. Barkhurst of these concerns and suggested their using larger needles.

Secondly, the U-shaped operator console in front of the control panels prevents rapid operator access to the controls and may result in unnecessary trips from such common things as feedwater control failures.

Finally, annunciator windows were quite small and difficult to read unless you were very close. This problem will be somewhat offset as operators become more experienced and familiar with the board.

The Auxiliary Feed Pumps were found to be located in individual rooms. A substantial amount of redundancy has been built into Waterford's AFW system.

MANAGEMENT MEETING

Following the plant tour a meeting was held with the utility management. A list of attendees is attached.

Shift staffing was discussed with the plant manager, Mr. Barkhurst. He indicated that 38 license candidates were in training at the present time. Five of these held previous licenses, and most had Navy experience. He also stated that while it would be desirable to have six shifts with 32 licenses, nevertheless, he could run the plant safely with just 17. Recognizing that the company intends to have more operators than the minimum, it is still a matter of concern that a new plant undergoing its first power ascention, could be permitted to start up with only 17 operators just out of a training program.

The training program was described by Dr. Sabri. Of concern was the mention of on-shift retraining for operators. It was not clear how the retraining requirements could be met without adversely impacting the operators' normal responsibilities.

Waterford's auxiliary feedwater system reliability was briefly discussed. The need for PORV's was dicussed along with diverse decay heat removal methods and solid plant overpressure protection. A site specific PORV study is expected to be completed by June 30,1983.

Finally, Commissioner Gilinsky suggested that the utility safety committee review the progress of the plant start up testing programs to assure that pressures to get the plant online would not affect the completeness nor the adequacy of final review.

Attachment

James K. Joosten
Technical Assistant
to Commissioner Gilinsky

ATTACHMENT

Les Constable, Senior Resident Inspector, USNRC

W. A. Crossman, Chief Reactor Project Section, USNRC

R. P. Barkhurst, Plant Manager, LP&L

P. V. Prasankumar, Maintenance Supdt., LP&L

O. D. Hayes, OPs. Supt/Sta. Coordinator, LP&L

S. A. Alleman, Asst. Plant Manager, LP&L

D. B. Lester, Asst. to the V.P., Nuclear Operations, LP&L

Z. A. Sabri, Director, Nuclear Training, LP&L

T. F. Gerrets, Manager, Quality Assurance, LP&L

Roy Prados, Licensing Engineering Supervisor, LP&L

M. J. Meisner, Safety Licensing, LP&L

G. D. McLendon, Senior Vice President, LP&L

L. V. Maurin, V.P., Nuclear Operations, LP&L

Tracy A. Flippo, Resident Inspector, USNRC

Victor Gilinsky, Commissioner, USNRC

J. Joosten, Technical Assistant to Comm. Gilinsky, USNRC