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CLOSES CTEAC 88-2

Mr. Malcolm L. Ernst
Acting Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
101 Marietta Street, N. W.
Atlanta, GA 30323

Dear Mr. Ernst:

Re: Turkey Point Units 3 and 4

Docket Nos. 50-250 and 50-251

Response to the Systematic

Assessment of Licensee Performance

Florida Power & Light Company (FPL) has reviewed NRC's Systematic Assessment of Licensee Performance (SALP) report for the Turkey Point facility covering the period June 1, 1987 to June 30, 1988. FPL's response is attached.

FPL shares NRC's view that implementation of the recommendations from the IMA should provide the impetus and momentum to continue the trend toward overall improvement in the performance of Turkey Point. FPL does not take exception to the ratings in the SALP report. Rather, the attached comments highlight current and planned improvements, many of which are reflected in the IMA response. We believe that these initiatives have already had a significant positive effect, and that they will contribute to sustained improvement at Turkey Point.

The attached comments address plant operations, maintenance, security and safeguards, licensing, and engineering support. Additionally, with respect to radiological controls, clarification of some of the information contained in the SALP report is provided.

Very truly yours,

W. F. Conway

Senior Vice President-Nuclear

WFC/SDF/gc

Attachment

8811Q1040Q GPP

PLANT OPERATIONS

FPL concurs with the SALP evaluation in this functional category, but would like to submit the following comments:

As stated in the IMA, FPL management has adopted a policy of accepting lower short term availability in the interest of enhanced equipment reliability. This has been demonstrated through a number of conservative actions to shut down the plants or keep them shutdown so that equipment repairs could be completed. These actions resulted in an improving operating record at the end of the SALP period.

We believe this improving trend can also be attributed to the increased involvement of the Operations Department in the prioritization of plant work orders (PWOs) and the performance of root cause analysis, and more specifically, to an enhanced sense of "ownership" on the part of operations personnel. For example, more emphasis is now being placed on the repair of components that impact the operation of the facility, and a plan-of-the-day (POD) document is being used to coordinate operations and maintenance activities.

With respect to leadership, management's expectations have been defined in a "Standards of Professionalism" document. Management is working closely with the operators to define and upgrade the standards of performance for the Plant Supervisors-Nuclear (PS-N) and their shift crews. The PS-Ns are accountable for Technical Specification (TS) interpretations, including those pertaining to equipment operability. Additional operator training on the interpretation of Technical Specifications is in progress.

With respect to violations noted during this SALP period, corrective actions have focused primarily on improving the work controls used by operations personnel. Corrective actions have been taken to improve the instruction in, and implementation of, stronger work controls on a plant-wide basis. The importance of work controls has been emphasized in shift meetings and will continue to be a subject of management attention.

Management recognizes the need for continuing high level attention to plant operations.

RADIOLOGICAL CONTROLS

FPL concurs with the SALP rating in this functional category, and submits the following clarifications:

(1) At page 13, the first paragraph, last sentence, states:

"In addition, procedures did not require documentation of personnel contaminations, even in an instance where extensive decontamination of an individual was required."

All personnel contamination events, including those events which require extensive decontamination, have been documented in accordance with Operating Procedure OP-11550.70, HP-70 "Decontamination of Personnel." During a Region II Health Physics (HP) inspection conducted from December 7 through December 11, 1987, it was noted that this procedure did not require a Radiological Investigation Report (RIR) for each documented skin decontamination event. During the inspection it was felt that the initiation of a RIR would ensure that all HP issues would be addressed for decontamination events. Since the inspection, procedures have been revised requiring all skin contamination events to be included within our Radiological Investigation Report System.

(2) At page 13, the last paragraph, first sentence, states:

"The licensee reported 437 instances of personnel contamination in 1987, of which 186 events were identified as skin contamination."

Our records indicate that only 252 total personnel contamination (skin and clothing) events occurred in 1987. Of this total, 187 events were skin contaminations. This total is less than the Region II average (306 skin and clothing events) as published in Section V. K of the SALP report and less than the 1987 median per PWR (194 skin and clothing events) as published in the 1987 INPO Annual Report. We are not satisfied with this record, however, and will continue to implement countermeasures to reduce the number of events.

(3) Page 15, third paragraph, the first sentence, states:

"During 1987, the volume of solid radioactive waste shipped by the licensee totalled 4,300 cubic feet containing 903 Curies of activity."

During 1987, the volume of solid radioactive waste shipped totalled 10,848 cubic feet. The quantity reported in the SALP report was volume generated in 1987 per reactor. The 10,848 cubic feet of radioactive waste shipped is still below the Region II average as published in Section V. K of the report.

MAINTENANCE

FPL concurs with the SALP evaluation in this area, and offers the following comments:

Much of the analysis provided in the SALP report for this functional area dealt with deficiencies in the Plant Work Order (PWO) system. To address the issue of the time lag between the identification of a deficiency in the field and the actual entry of the deficiency in the work control system, additional electronic terminals have been installed in field locations to provide ready access by non-licensed operators. This allows for direct entry of the PWO into the nuclear job planning system (NJPS) by the operator and provides verification to the originator of the progress of the work order.

The Operations Department requires all operationally invalid or duplicate PWOs be returned to Operations prior to cancellation. The PWO tracking system has been revised so that a PWO is reflected in the PWO backlog indicator after it is approved as a valid PWO and not following the completion of the planning stage as had been the case previously. A walkdown of the entire plant is being conducted by maintenance personnel to verify the status of equipment deficiency tags.

The program described in the SALP report to improve the prioritization of PWOs will continue. This technique was implemented late in the review period, but its value in supporting Operations Department needs was already evident by the close of the period. To improve the job packages, planners are now required to perform field walkdowns of corrective maintenance work orders and to review the machinery history records in the job planning stage. Accountability for work-package quality has been assigned to the Planning Supervisor who will ensure review of each package prior to its issuance. To further increase the quality of work packages and reduce rework, maintenance engineers are assigned to each maintenance department. These engineers are utilized, and special teams are formed, as necessary, to assist in root cause determinations.

In order to reduce the maintenance backlog, increased emphasis has been placed on the identification and repair of plant deficiencies. Regularly scheduled management inspections are established to monitor the plant material condition. A reliability-based outage was scheduled for the current Unit 4 outage and another is being planned for the 1989 Unit 3 outage.

As discussed in the SALP report, communications between Operations and Maintenance has been greatly improved through shift turnover briefings, the plan-of-the-day, event response teams, and increased involvement by operations in the prioritization and root cause determination phases of the PWO job planning process. We believe that with the increased awareness of Operations as the "customer", closer management oversight of programmatic changes, and the implementation of the initiatives outlined in the response to the IMA, significant improvements can be achieved in the maintenance program. As noted in the IMA, progress will be carefully monitored and additional measures will be taken, including additional resources and/or programmatic changes, as necessary, to achieve FPL's maintenance goals.

SECURITY AND SAFEGUARDS

FPL concurs with the SALP rating for this functional category, and would like to make the following comments:

We have taken significant actions in response to the independent management appraisal (IMA) to improve the security program. As noted in the SALP report, implementation of many of these actions occurred too late in the SALP period to have an impact on the current assessment. At this time, however, in addition to the new security supervisor, five security shift supervisors have been assigned to provide on shift management overview of the security operation. In addition, a plant security project manager has been assigned to provide management overview of the security system upgrade tasks. The personnel filling these new positions were selected based upon their skills, knowledge, and experience, and all have the necessary regulatory sensitivity to be effective in ensuring compliance with regulatory requirements.

With respect to the security system upgrade, considerable resources have been allocated to the design and implementation of the new system which includes, among other aspects, the separation of the fossil units from the nuclear units, a new detection system, an upgraded lighting plan, and upgrade of many of the current vital area barriers. This program is scheduled for completion in 1991.

Also, a new corporate position, Manager - Nuclear Security, has been established in the Nuclear Energy Department to develop corporate nuclear security policy and to monitor the security program implementation. This will provide the corporate management attention needed to ensure that security performance improves, and that the necessary resources are in place to sustain that improvement.

LICENSING ACTIVITIES

FPL concurs with the SALP rating for this functional category, and would like to submit the following comments:

We have evaluated the licensing and regulatory compliance support organizations, including the communications interface and coordination between the onsite and offsite groups. This evaluation was completed by October 1, 1988 and its recommendations have been provided to management.

As discussed in the SALP report, the Licensing Department recently initiated a new licensing action status report to track open NRC issues. The report lists the open issues, their status, and their priority and also attempts to identify or project future actions. We will continue to work on the development of this report with the NRC, to provide a better visual representation of issues, to focus on future actions and schedules, and to document the history of key communications on open actions.

With respect to forecasting NRC technical review requirements, a control system has been established to ensure timely development and completeness of proposed licensing amendments (PLAs). This system monitors the accuracy and completeness of safety evaluations and "no significant hazards" determinations as well as the schedule for PLA submittals to the NRC.

ENGINEERING SUPPORT

FPL concurs with the SALP evaluation for this functional category, and would like to provide the following comments:

In response to the IMA, FPL has taken actions to enhance the "system engineer" concept at Turkey Point. All of the plant systems have been reviewed and 82 systems have been selected to be managed under the system engineer concept.

FPL's response to the IMA identified actions being taken to improve engineering support. On September 1, 1988, FPL transferred the nuclear engineering functions of the Power Plant Engineering Department to the Nuclear Energy Department. The organizational structure has been implemented.

ENCLOSURE 4

ERRATA SHEET - TURKEY POINT SALP

PAGE	LINE	NOW READS	SHOULD READ
13	10-13	In addition, procedurewas required.	Sentence deleted
Basis for	_change:	To properly address the facts procedures.	in regard to licensee's
13	49	437 instances	252 instances
Basis for	change:	To correct administrative err	or.
13 ,	50	186 events	187 events
Basis for	change:	To correct administrative err	or.
13	51-52	These numbers represented an increase relative to 1986were reported.	These numbers are relatively unchanged from 1986were reported
Basis for	change:	To properly address the facts of reported contamination eve	
13-14	53	The higher numberoutage work conducted in 1987.	sentence deleted
Basis for	change:	To properly address the facts of reported contamination eve	
14	1-3 .	The total numberwas above averagePWRs.	The total numberwas slightly below averagePWRs.
Basis for	change:	To properly address the facts of reported contamination eve	
15	17-19	During 19874,300 cubic feet	During 198710,800 cubic feet
Basis for	change: .	To correct administrative err	or.
15,	19-20	This volumeis one of the lowest of any facility	This volumeis below the average for PWRs in

Enclosure 4

Basis for change: To properly address the facts in regard to the volume

of radioactive waste which the licensee shipped

offsite.

15 21-26 Increased...resulted in a Inc

Increased...resulted in

significant reduction a reduction...

Basis for change: To properly address the facts in regard to the volume

of radioactive waste which the licensee shipped

offsite.

54 Section V.K.3.a

<u>1987</u> 437 1987 252

Basis for change:

To correct administrative error.

54 Section V.K.6.a

1987 4,300 1987 10,800

Basis for change:

To correct administrative error.

54 Section V.K.6.b

1987 14,49 $\frac{1987}{14,500}$

Basis for change:

To correct administrative error.

staff in the procedural upgrade and the comprehensiveness of their technical reviews of procedures by the site and corporate HP staff were less than adequate. For example, a violation concerning inadequate procedure guidance for radiation controls during removal and transfer of reactor coolant system (RCS) spent filters was identified during the assessment period despite the fact that radiation controls for this activity had been previously reviewed earlier in the assessment period following an event which exposed workers to high radiation levels. In addition, procedures did not require documentation of personnel contaminations, even in an instance when extensive decontamination of an individual was required.

Licensee action in replacing several primary components of the post accident sampling system was timely and demonstrated licensee initiative in problem solving

The licensee did not effectively address technical issues in the radiation protection area such as electronic drifting of the invivo counter. The licensee did not develop complete and technically sound procedures. These findings, combined with the violations identified in the radiation protection area during the assessment period, indicate a decline in what had been in previous assessment periods identified as a strong, aggressive and technically sound radiation protection program, with effective leadership from management.

During the assessment period, the licensee's radiation work permit and respiratory protection programs were found to be satisfactory.

Control of contamination and radioactive materials within the facility was /generally adequate. At the beginning of January 1987, approximately 27,000 square feet (ft²) or 38% of the radiation controlled area (RCA), excluding containment, were controlled/as contaminated. Although the licensee had a goal of reducing/the area contaminated by 20% in 1987, the actual reduction was less than 12%. At the end of December 1987, the licensée maintained 34% of the RCA as contaminated. This is the largest percentage of any Region II facility. Toward the end of this assessment period, the licensee began an extensive upgrade of the contaminated control program including decontamination of plant areas, use of contamination containments and preventive maintenance of leaking valves. As of July 15, 1988, the total area maintained as contaminated was reduced to 12,600 ft² or 18% of the RCA, which is still greater than most Region II facilities.

The licensee reported 437 instances of personnel contamination in 1987, of which 186 events were identified as skin contamination. These numbers represented an increase relative to 1986, when a total of 257 contamination events were reported. The higher number of personnel contaminations was related to the

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unscheduled outage work conducted in 1987. The total number of personnel contaminations for 1987 was above average for Region II PWRs.

The 1987 collective radiation dose was 645 person-rem per unit which was approximately 75% above the national average of 368 person-rem per PWR. The increased collective dose for 1987 was attributed to increase outage activities. A comparison of Turkey Point radiation protection attributes to Region II plant averages is listed in section V. K.

During this SALP period, the chemistry supervisory staff had been reorganized and administrative program's were initiated to more effectively address qualification of personnel and chemistry control. A new training staff and training laboratory had been provided; however, the small size of the chemistry staff continued to be an impediment to initating the training Also, insufficient personnel resources created an program. obstacle to upgrading chemistry procedures. In 1984, the licensee initiated a chemistry improvement program for upgrading facilities, equipment and analyses for controlling chemistry in the secondary water cycle. This program was in line with the recommended guidelines of the Steam Generators Owners Group (SGOG) and the Electric Power Research Institute (EPRI). Completion of the total improvement program has been delayed because of assignment of lower priorities as part of the Turkey Point Nuclear Plant Integrated Schedule. Completion of the secondary chemistry/inline monitors is scheduled for November 1991, and November 1992, for Units 3 respectively. Construction of a new secondary chemistry laboratory is scheduled for March 1992.

The licensee continued to encounter difficulties in controlling chemistry because of degradation of condenser tubes and problems associated with the equipment conditions of the makeup water treatment plant.

Liquid radwaste processing, using a contractor and a portable demineralizer system, maintained excellent control over the release of radioactive effluents. The mixed fission and activation products in liquid effluents for 1987, were 0.75 curies for both units, which was consistent with previous years and less than the 0.5 curies per unit industry average for PWRs for 1983, the last year for which industry data was available.

There were no significant changes in the quantities of gaseous effluent during this SALP period from previous periods. The effluent releases for the past three years are summarized in the Supporting Data and Summaries Section V.K.

The licensee's quality assurance program for the counting room was adequate. The licensee participated in a quarterly

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The licensee's quality assurance program for the counting room

cross-check program with a vendor whose quality assurance program was traceable to the National Bureau of Standards. As part of the NRC's confirmatory measurements program, the licensee analyzed samples for selected beta-emitting radionuclides. The results were in agreement for tritium, strontium-90 and iron-55.

The maximum environmental radiation doses attributed to plant release were a small fraction of 10 CFR 20 and 10 CFR 50, Appendix I limits and criteria. Maximum total body dose to a hypothetical individual from liquid effluents was calculated to be 0.0156 mrem per unit, which was 0.524 percent of the annual limit. Maximum gamma air dose and beta air dose to a hypothetical individual from gaseous releases were less than 0.2 percent of the annual limit.

During 1987, the volume of solid radioactive waste shipped by the licensee totalled 4,300 cubic feet (ft³) containing 903 curies of activity. This volume of waste shipped offsite is one of the lowest of any facility in Region II. During 1987, the licensee initiated the use of a vendor to super compact the waste prior to shipment for burial. Increased decontamination efforts for equipment and material leaving the RCA, as well as control of material being brought into the RCA, resulted in a significant reduction in radioactive waste volume relative to 1986, when approximately 11,420 ft³ were shipped containing approximately 89 curies.

Three violations were identified:

- a. Severity Level IV violation for failure to follow radiation work permit (RWP) requirements (87-36).
- b. Severity Level IV violation for failure to properly complete a manifest for a radioactive waste shipment (87-36).
- c. Severity Level IV violation (four examples) for failure to follow and have adequate procedures (87-48).

2. Conclusion

Category: 2

3/ Board Recommendations

Licensee management should give continued attention to: (1) addressing the continuing higher than average annual collective occupational doses and (2) efforts to reduce plant and personnel contaminations. In addition, licensee management should assure that there is an adequate level of resources and support provided to effectively deal with these issues.

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During 1987, the volume of solid radioactive waste shipped by the licensee totalled 10,800 cubic feet (ft) containing 903 curies of activity. This volume of waste shipped offsite is below the average for PWRs in Region II. During 1987, the licensee initiated the use of a vendor to super compact the waste prior to shipment for burial. Increased decontamination efforts for equipment and material leaving the RCA, as well as control of material being brought into the RCA, resulted in a reduction in radioactive waste volume relative to 1986, when approximately 11,420 ft were shipped containing approximately 89 curies.

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- c. October 12, 1987, the unit was shut down as a precautionary measure for a hurricane warning.
- February 7, 1988, the unit was shut down from 100% power d. due to exceeding the Technical Specification action statement for inoperable battery chargers.
- April 6, 1988, the unit was shut down to investigate and e. repair a leak in the turbine control oil system.
- f. April 28, 1988 the unit was shut down due to increased RCS leakage (3.2 gpm) caused by a pressurizer spray valve bellows rupture.

		bel	lows rupture.	*					
Κ.	Radioactive Effluent Releases (Ci/YR)								
•	Act	ivity Released (Curies)		1985	1986	1987			
n	1.	Fission Gases	Effluents and Activation and Particulates	3.12 0.015 310	4.65 0.023 593	1.70 0.025 820			
	2.	Liquid E Fission Produc Tritium	and Activation /	0.9 869	0.506 727	0.75 540			
	3.	Personne Contamin	,						
		a. Tur b. Reg	key Point ion II PWR Average		***	437 306			
	4.	Contamin	Contaminated Area (ft ²)						
		a. Tur b. Reg	key Point ion II		•••	23,821 16,023			
	5.	Collection Dose (Man							
	/		key Point ion II PWR Average			645 390			
,	8 .	Solid Rad	i Waste (ft³)		•				
\$\f	•		key Point ion II PWR Average			4,300 14,497			

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K. Radioactive Effluent Releases (Ci/YR)

Activ	ity F	Released	(Curies)	1985	1986	1987	
1.	Fissi Gas	es Ims and	uents Activation Particulates	3.12 0.015 310	4.65 0.023 593	1.70 0.025 820	
2.	Liquid Effluents Fission and Activation Products Tritium			0.9 869	0.506 727	0.75 540	
3.	Personnel Contaminations						
	a. b.	Turkey Region	Point II PWR Average			252 306	
4.	Contaminated Area (ft)						
d.	a. b.	Turkey Region				23,821 16,023	
5.	Collective Dose (Man-rem)						
	a. b.	Turkey Region	Point II PWR Average			645 390	
6.	Solid Rad Waste (ft)						
	a. b.	Turkey Region	Point II PWR Average			10,800 14,500	