

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9609050172	DOC.DATE: 96/08/27	NOTARIZED: NO	DOCKET #
FACIL:50-250	Turkey Point Plant, Unit 3,	Florida Power and Light C	05000250
AUTH.NAME	AUTHOR AFFILIATION		
KNORR,J.E.	Florida Power & Light Co.		
RECIP.NAME	RECIPIENT AFFILIATION		

SUBJECT: LER 96-009-00:on 960729,failed to reflect heavy load design info in procedural controls.Caused by failure to incorporate 1982 procedure changes.Suspended lifting of heavy loads & took turbine bldg cran out of service.W/960827 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 7
TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

RECIPIENT		COPIES		RECIPIENT		COPIES	
ID CODE/NAME	LTTR ENCL	ID CODE/NAME	LTTR ENCL	ID CODE/NAME	LTTR ENCL	ID CODE/NAME	LTTR ENCL
PD2-3 PD	1 1			CROTEAU, R	1 1		
INTERNAL: AEOD/SPD/RAB	2 2			AEOD/SPD/RRAB	1 1		
FILE CENTER	1 1			NRR/DE/ECGB	1 1		
NRR/DE/EELB	1 1			NRR/DE/EMEB	1 1		
NRR/DRCH/HHFB	1 1			NRR/DRCH/HICB	1 1		
NRR/DRCH/HOLB	1 1			NRR/DRCH/HQMB	1 1		
NRR/DRPM/PECB	1 1			NRR/DSSA/SPLB	1 1		
NRR/DSSA/SRXB	1 1			RES/DSIR/EIB	1 1		
RGN2 FILE 01	1 1						
EXTERNAL: L ST LOBBY WARD	1 1			LITCO BRYCE, J H	2 2		
NOAC MURPHY, G. A	1 1			NOAC POORE, W.	1 1		
NRC PDR	1 1			NUDOCS FULL TXT	1 1		

NOTE TO ALL "RIDS" RECIPIENTS:
PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,
ROOM OWFN 5D-5(EXT. 415-2083) TO ELIMINATE YOUR NAME FROM
DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

FULL TEXT CONVERSION REQUIRED
TOTAL NUMBER OF COPIES REQUIRED: LTTR 25 ENCL 25



FPL

AUG 27 1996

L-96-214
10 CFR §50.73

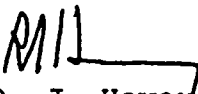
U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

Re: Turkey Point Unit 3
Docket No. 50-250
Licensee Event Report: 96-009-00
Failure to Reflect Heavy Load Design
Information in Procedural Controls

The attached Licensee Event Report, 250/96-009-00, is being provided as required by 10 CFR 50.73(a)(2)(v).

If there are any questions, please contact us.

Very truly yours,


R. J. Hovey
Vice President
Turkey Point Plant

JEK

attachment

cc: Stewart D. Ebnetter, Regional Administrator, Region II,
USNRC
Thomas P. Johnson, Senior Resident Inspector, USNRC,
Turkey Point Plant

9609050172 960827
PDR ADOCK 05000250
S PDR

IF22 1/1

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) TURKEY POINT UNITS 3 & 4										DOCKET NUMBER (2) 05000250		PAGE (3) 1 of 6	
TITLE (4) Failure to Reflect Heavy Load Design Information in Procedural Controls													
EVENT DATE (5)			LER NUMBER (6)			RPT DATE (7)			OTHER FACILITIES INV. (8)				
MON	DAY	YR	YR	SEQ #	R#	MON	DAY	YR	FACILITY NAMES			DOCKET # (S)	
07	29	96	96	009	00	08	27	96	Turkey Point Unit 4			05000251	
OPERATING MODE (9)		1/1		10 CFR 50.73(a)(2)(v)									
POWER LEVEL (10)		100/ 100											
LICENSEE CONTACT FOR THIS LER (12)													
J. E. Knorr, Compliance Specialist										TELEPHONE NUMBER			
										305-246-6757			
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)													
CAUSE	SYSTEM	COMPONENT	MANUFACTURER			NPRDS?	CAUSE	SYSTEM	COMPONENT	MANUFACTURER			NPRDS?
A													
SUPPLEMENTAL REPORT EXPECTED (14) NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>								EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR	
(if yes, complete EXPECTED SUBMISSION DATE)													
<p>ABSTRACT (16)</p> <p>On July 29, 1996, Florida Power & Light Company discovered that the location of Heavy Load exclusion areas was not documented correctly in procedures controlling the lift of heavy loads. Documents sent to the NRC in 1982 as part of the review of a Technical Evaluation Report changed the location of the safe load path for heavy loads from that described in the original response in 1981. This change in the safe load path description was not reflected in administrative procedure 0-ADM-717. As a result, heavy loads have been lifted over restricted areas without the procedurally required evaluation and approval. A discrepancy was also found in the procedure definition of the size of a heavy load. Because this event affected both units, it is being reported under docket 05000250.</p> <p>The cause of the event was the lack of a satisfactory process in 1982, for the capture of revisions to design documentation not related to physical modifications.</p> <p>Incorporation of design information into operating procedures is governed by a commitment tracking process. This process was started in 1984.</p>													

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME NO.	DOCKET NUMBER	LER NUMBER	PAGE
TURKEY POINT UNITS 3 & 4	05000250	96-009-00	2 OF 6

I. DESCRIPTION OF THE EVENT

Discrepancy Found in Safe Load Path:

On July 29, 1996, Florida Power & Light Company (FPL) completed a preliminary review of safe load paths reflected in plant procedures and the safe load paths as described in submittals to the NRC as part of FPL's NUREG-0612 evaluation. During that evaluation some discrepancies were identified which revealed the need for procedure correction and/or further evaluation.

An NRC Generic Letter dated December 12, 1980, was issued requiring a review of controls for the handling of heavy loads. FPL's response (L-81-132) to the request for implementation of interim actions was provided on September 4, 1981. In that response, safe load paths were identified. Based upon that identification, Administrative Procedure (AP) 0736, Heavy Load Handling, was drafted and implemented as part of the interim actions required by the Generic Letter. In L-81-132 and in AP 0736, safe load paths were described which limited load sizes and described in graphic form those areas over which load lifts above a certain size were prohibited without prior written approval of the Maintenance Superintendent (now Maintenance Manager). Subsequent to L-81-132, FPL reviewed and commented on a draft Technical Evaluation Report on the Control of Heavy Loads at Turkey Point. These comments (L-82-346) also provided an adjusted safe load path for the turbine deck which further limited Heavy Load lifts in some areas and allowed some lifts in others. The NRC issued a Safety Evaluation Report, dated November 1, 1983, referencing the Technical Evaluation Report which described and took credit for the adjusted safe load paths as described in L-82-346. The Control of Heavy Loads procedure was not revised to reflect that change. As a result of the incorrect procedure, heavy loads have been lifted over restricted areas without the procedurally required evaluation and approval.

Heavy Load Definition Discrepancy:

In NUREG-0612 a heavy load was defined as one which exceeded the weight of a fuel assembly and its associated handling tool. In the case of Turkey Point that load was 1760 pounds. A license amendment was approved by the NRC in 1984, redefining the size of a heavy load as 2000 pounds for areas over spent fuel (Spent Fuel Pool and the Reactor Core) [DB:] [AC:RPV]. This took place to allow the lift of a fuel assembly, with an installed control rod and the handling tool. The Control of Heavy Loads procedure was inadvertently revised to define all heavy loads at Turkey Point as 2000 pounds. All areas described in the procedure other than those discussed in the approved license amendment should have maintained the 1760 pound limit. As a result of the incorrect procedure, loads in excess of 1760 pounds but less than 2000 pounds may have been lifted over areas restricted to less than 1760 pounds without the procedurally required evaluation and approval.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME NO.	DOCKET NUMBER	LER NUMBER	PAGE
TURKEY POINT UNITS 3 & 4	05000250	96-009-00	3 OF 6

These procedure discrepancies are being reported in accordance with 10 CFR 50.73(a)(2)(v). Because this event affected both units, it is being reported under docket 05000250.

II. CAUSE OF THE EVENT

The changes made in 1982 to the safe load path for heavy loads as described in L-82-346 were not incorporated into the procedures controlling the lift of heavy loads.

Procedural processes for transfer of safety evaluation information into the Turkey Point procedures, which are present today, did not exist in 1982 and 1983. Personnel responsible for the transfer of the heavy load safe load path change made in L-82-346 did not ensure, at the time, that controlling procedures were revised to accurately reflect any changes.

The change to the heavy load definition in the procedures was interpreted broadly. The 2000 pound definition of a heavy load in the 1984 NRC license amendment SER was implemented as a revision to the Heavy Load Control procedure. Processes in place at the time did not provide for adequate review to assure correct interpretation of the 2000 pound definition in the license amendment and its incorporation into procedures controlling heavy loads in areas other than the spent fuel pool.

III. ANALYSIS OF THE EVENT

Licensing Requirements

The Turkey Point current licensing basis for the control of heavy loads is contained in the safety evaluation report provided by the NRC as a closure document for the Generic Letter issued December 20, 1980. The safe load paths, restricted lift areas, and sizes of the heavy loads are defined in the Technical Evaluation Report (TER) and by L-82-346. The TER and L-82-346 were referenced in the NRC safety evaluation report for the FPL response to the December 12, 1980, Generic Letter.

The heavy load definition change which occurred as a part of license Amendment No. 108 to Facility Operating License No. DPR-31 and Amendment No. 102 to Facility Operating License No. DPR 41 in 1984, changed the size of the heavy load over spent fuel in the spent fuel pool or the core.

Analysis of Effects on Safety

The lifting of heavy loads over various areas of the turbine deck is limited to certain load sizes. When a heavy lift is required which will lift a load in excess of that allowed in the restricted areas, an evaluation of the lift must be completed, special precautions must be taken, and the express permission of the Maintenance Manager, Operations Manager and the Plant Nuclear Safety Committee (PNSC) must be obtained prior to the start of the lift.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME NO.	DOCKET NUMBER	LER NUMBER	PAGE
TURKEY POINT UNITS 3 & 4	05000250	96-009-00	4 OF 6

Administrative Procedure 0-ADM-717, which succeeded AP-0736, controls the lifting of heavy loads and requires that when a heavy load (2000 pounds) is lifted, it must be lifted only over a safe load path. Any load that deviated from a safe load area must either be controlled by an approved procedure which is reviewed and approved by the Maintenance Manager, Operations Manager and PNSC or must be done only after written approval from the Maintenance Manager, Operations Manager and PNSC. The written approval is required to provide instructions about inspections required prior to movement, acceptance criteria, special precautions to be taken prior to the movement of the load, a specified load path, and the steps and proper sequence to be followed for the load lift to take place in a safe manner.

Procedure 0-ADM-717 also provides precautions to be taken in those areas described as safe load paths as well as those areas allowed in the special procedures or written approval described above. The general operability of the crane must be checked prior to each crane use. The upper limit switch on the load blocks of the crane must be tested every shift if the crane is not in continuous use. Monthly preventive maintenance inspections must be completed on the Turbine Gantry Crane in accordance with 0-PMM-089.2, Turbine Gantry Crane - Inspection and Preventive Maintenance. The procedure discusses safety when rigging a load to ensure adequate rigging capability, that the load does not swing, and that the load is within the rated capacity of the crane. Slings and wire ropes are required to be used such that they are of sufficient rating to handle the load. Details of the required inspections of the rigging and descriptions of the indications of degradation are also included in the procedure. Use of damaged rigging or components is not permitted.

Special lifting devices are required to be visually inspected prior to each use and have nondestructive examinations performed every 10 years as part of each inservice inspection outage.

Crane operator qualifications meet those described in NUREG-0612 and the expectations for conduct of the crane operators is also described in 0-ADM-717.

With the safe load path diagrams in the procedure reflecting an earlier description of safe load paths, heavy lifts have been made over an area limited to 1760 pounds without the required specific procedural control required by 0-ADM-717 and its preceding procedure. As described above, however, nonspecific procedural controls have been in place for lifting of loads. These procedural controls have reduced the possibility of a load drop.

No drops of heavy loads have occurred at Turkey Point during the time that the Heavy Load Control procedure has been in place. Since the lifting of heavy loads over the areas of concern has typically been limited to outage times for Units 3 or 4, the probability of a lift being dropped has therefore been typically

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME NO.	DOCKET NUMBER	LER NUMBER	PAGE
TURKEY POINT UNITS 3 & 4	05000250	96-009-00	5 OF 6

limited to only those short durations during refueling outages.

Even though no load drop has occurred, a review has been performed by FPL engineering staff to assess the relative risk on safe shutdown capability and the removal of decay heat. FPL assumed that both units were operating at power and required to go to safe shutdown after a load drop.

Turkey Point is designed to a safe shutdown definition of hot standby. FPL has concluded that, given the unlikely drop of a heavy load (> 1760 pounds) lifted over the areas of the turbine deck which was limited to 1760 pounds, hot standby could be achieved and maintained. This review of the risk of lifting a heavy load over a restricted area assumed manual actions to actuate and operate safety related as well as non-safety related equipment could be credited and thus, safe shutdown could be maintained and removal of decay heat continued.

Given the above assessment, the health and safety of plant personnel and the general public were not compromised.

IV. CORRECTIVE ACTIONS

Immediate corrective actions

1. The lifting of heavy loads in the power block was suspended until the safe load paths and definition of heavy loads were reviewed and incorporated into 0-ADM-717.
2. The turbine building gantry crane was taken out of service and allowed to be used only by the express permission of the Operations Manager. The crane was not used until after the revision of the controlling procedure.
3. Except for those areas restricted to 1760 pounds, a restriction of 5 tons was placed for lifts over the turbine deck until the Condition Report for this issue was resolved.

Long term corrective actions

1. Procedure changes to resolve the discrepancies discussed in this LER will be made prior to use of the procedure in those heavy load restricted areas affected by the discrepancies.
2. A review of all documentation on the control of heavy load lifts has been performed. The review has shown that the safe load path described in L-82-346 is appropriate and is consistent with the intent of NUREG-0612. This review identified the discrepancies in the safe load paths and load sizes and their implementation in the controlling procedures. Those discrepancies discussed in this LER have been corrected. Other 0-ADM-717 procedure enhancements are being completed to provide further defense in depth protection for loads that may be carried over areas containing essential equipment.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME NO.	DOCKET NUMBER	LER NUMBER	PAGE
TURKEY POINT UNITS 3 & 4	05000250	96-009-00	6 OF 6

3. To address potential generic implications of the transfer of license related information into procedures and other license related documents, a sample population of other safety evaluations issued by the NRC or FPL prior to 1985 which are not related to physical modifications will be reviewed. This population will include safety evaluations and 10 CFR 50.59 screens involving procedure revisions.

V. ADDITIONAL INFORMATION

EIIS Codes are shown in the format [EIIS SYSTEM: IEEE component function identifier, second component function identifier (if appropriate)].

Similar Events: None.

