

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9310130342 DOC. DATE: 93/10/08 NOTARIZED: NO DOCKET # 05000335
 FACIL: 50-335 St. Lucie Plant, Unit 1, Florida Power & Light Co.

AUTH. NAME: HARMON, J.W. AUTHOR AFFILIATION: Florida Power & Light Co.
 SAGER, D.A. Florida Power & Light Co.
 RECIP. NAME: RECIPIENT AFFILIATION:

SUBJECT: LER 93-006-00: on 930910, determined that meteorological tower instrumentation had been out of svc since 930909 due to personnel error. Operating Procedure 1400051 revised. W/931008 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

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October 8, 1993


L-93-253
10 CFR 50.73

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

Re: St. Lucie Unit 1
Docket No. 50-335
Reportable Event: 93-006
Date of Event: September 10, 1993
Waste Gas Releases with Meteorological Instruments out of
service due to personnel error.

The attached Licensee Event Report is being submitted pursuant to the requirements of 10 CFR 50.73 to provide notification of the subject event.

Very truly yours,


D. A. Sager
Vice President
St. Lucie Plant

DAS/JWH/kw

Attachment

cc: Stewart D. Ebnetter, Regional Administrator, USNRC Region II
Senior Resident Inspector, USNRC, St. Lucie Plant

DAS/PSL #999-93

9310130342 931008
PDR ADDCK 05000295
S PDR

12-109



LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) St. Lucie Unit 1	DOCKET NUMBER (2) 05000335	PAGE (3) 1 OF 4
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TITLE (4)
Waste Gas Releases with Meteorological Instruments out of service due to personnel error.

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
09	10	93	93	--006--	0	10	08	93	St. Lucie Unit 2	05000389
									N/A	05000

OPERATING MODE (9) 1	POWER LEVEL (10) 74	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
		20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)					
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)					
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER					
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)					
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)						
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)						

LICENSEE CONTACT FOR THIS LER (12)

NAME John W. Harmon, Shift Technical Advisor	TELEPHONE NUMBER (Include Area Code) (407) 465-3550
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
N/A	----	----	---	---					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE).	X	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On September 10, at 1120 and 1840 hours with Unit 1 at 100% power and Unit 2 at 74% power, controlled releases of the radwaste gas decay tanks were performed from Unit 2. Plant personnel were unaware that during these controlled releases the meteorological (met) tower information was invalid. On September 12, the Unit 2 Assistant Nuclear Plant Supervisor discovered that the met data was erroneous. The met tower was then entered into the out of service log and no subsequent controlled releases were made. After a review of the strip charts from the met tower, Operations and Chemistry determined that the met tower instrumentation had been out of service since September 9, at 1318.

The root cause of the event was cognitive personnel error by the Reactor Control Operators and the Chemistry technicians who performed the met data system daily channel checks and did not fulfill the intent of the met instrumentation surveillance procedure due to inattention to detail. A contributing factor to this event was that utility Instrument and Control specialists performed a scheduled channel calibration at the met tower and inadvertently caused the data logger to lockup and transmit the last met values without updating the data.

Corrective actions for this event: Operations revised procedures to enhance the control room met checks; Training will review this event with Operations, Chemistry and I&C personnel; and on September 13 at 1345 the met tower instrumentation was returned to service.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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St. Lucie Unit 1		05000335	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 4
			93	--006--	0	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

DESCRIPTION OF THE EVENT

The site's meteorological (met) tower (EIIS:IS) supplies fifteen minute averaged met information to the control rooms. This information is required to be operable by Technical Specifications to perform radwaste gas decay tank releases. The met tower is also used as the primary source of met information in the event of an emergency involving an uncontrolled release of radioactive materials.

On September 8, with Unit 1 at 100% and Unit 2 at 51% power, two utility Instrument and Control (I&C) specialists performed a scheduled channel calibration at the met tower. On September 9, the I&C Specialists inadvertently entered the security access code twice which caused the data logger to store and transmit the last fifteen minute averaged meteorological values without updating the data.

Operating Procedure 1400051, "Meteorological Data System Daily Channel Check" is performed by the Reactor Control Operator (RCO) during the midnight shift to ensure operability of the met tower's instrumentation. Operability is determined by viewing the two hour strip chart in the Unit 1 control room to ensure the time is correct and the trace appears normal. The procedure also requires a check of the instruments and equipment located at the met tower. This check is normally performed by a member of the Chemistry department. During the midnight shift on September 10, 1993, the RCO performing the channel check questioned the validity of the straight line indications he saw on the Unit 1 met tower strip chart. The RCO informed the Assistant Nuclear Plant Supervisor (ANPS) of the suspected problem. Then they reviewed an independent source of met information on the Emergency Response Data Acquisition Display System (ERDADS) (EIIS:IU). ERDADS receives meteorological information from the met tower and displays it in numerical and graphical trend forms. The RCO and ANPS requested the ERDADS twenty four hour graphical trend for wind speed and direction. The screen started filling from left to right, and all indications appeared normal. The screen was approximately half filled with graphical data when the numerical met data was selected. If the operators had allowed the twenty four hour graph to complete the trend they would have observed the trend begin to draw straight lines which would indicate a failure of met data. The numerical data screen appeared and displayed numerical data which appeared to be valid. The operators incorrectly assumed that with two backup verifications, the met tower was supplying valid met data to the control room and they documented the channel check as satisfactory. Later the same day, a Chemistry technician performed the met tower local operability check and did not identify the data on the recorder locally at the met tower as invalid.

On September 10, at 1120 and 1840 hours, controlled releases of radwaste gas decay tanks were performed from the Unit 2 waste gas system (EIIS:WE). Plant personnel were unaware that during these controlled releases the met information was invalid. On September 12, during a review of the ERDADS 24 hour graphical met display, the on shift Unit 2 ANPS discovered that the meteorological data was erroneous. The met tower was entered into the out of service log and no subsequent controlled releases were performed. Operations and Chemistry determined that the met instrumentation had been out of service since September 9 at 1318. The met tower instrumentation was restored to service on September 13 at 1345.

LICENSEE EVENT REPORT (LER)
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				93	--006--	0	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

CAUSE OF THE EVENT

The root cause of the event was cognitive personnel error. The RCOs and the Chemistry technicians who performed the meteorological data system daily channel checks did not fulfill the intent of the procedure due to inattention to detail.

A contributing factor to this event was that the I&C specialists who set the date and time on the data logger did not recognize the lock up condition on the data logger.

There were no unusual characteristics of the work location which contributed to this event.

ANALYSIS OF THE EVENT

This event is reportable under 10 CFR 50.73.a.2.i.b, as any operation prohibited by Technical Specifications.

Technical Specification 3.3.3.4 states that with the number of operable meteorological monitoring channels less than required suspend all release of gaseous radioactive material from the radwaste gas decay tanks until the inoperable channels are restored to operable status.

The basis for this Technical Specification ensures that sufficient meteorological data is available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere.

The contribution of the controlled release from the radwaste gas decay tanks added to the normal ventilation pathway concentration being released during this event was less than 1% of the releases allowable by St. Lucie Plant Technical Specifications. Additionally, under a postulated accident with the met tower unavailable, plant procedures state that the West Palm Beach Airport is the back up means of obtaining meteorological information to use in dose assessments calculations. Therefore, the health and safety of the public was not affected by this event.

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TEXT CONTINUATION

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

CORRECTIVE ACTIONS

1. Operations revised Operating Procedure 1400051, "Meteorological Data System Daily Channel Check," to enhance the control room met check sheet to include a review of the ERDADS twenty four hour graphical display of the wind speed and direction.
2. Operations revised Operating Procedures 1/2-0530021, "Controlled Gaseous Batch Release to Atmosphere," to provide a caution in the procedure to review the past twenty four hours of met data on the ERDADS graphical display.
3. The Chemistry local met check sheet will also be revised to include more detail in reviewing validity of the meteorological data.
4. Training will review this event during Operations requalification training, Chemistry industry event training, and I&C industry event training.
5. I&C will develop a process to ensure that the meteorological equipment is updating the data after any channel calibration is performed or if any adjustments are made to a data point.
6. A Human Performance Enhancement System evaluation was performed on this event. The results of that review are included in this report.

ADDITIONAL INFORMATION

Failed Component Identification:

There were no component failures associated with this event.

Previous Similar Events:

There are no previous LERs related to radwaste gas decay tank releases without meteorological instrumentation in service.