

The Light company

Houston Lighting & Power South Texas Project Electric Generating Station P. O. Box 289 Wadsworth, Texas 77483

March 4, 1993

ST-HL-AE-4346

File No.: G03.03

10CFR50

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Response to NRC Bulletin No. 90-01, Supplement 1,
"Loss of Fill-Oil in Transmitters Manufactured by Rosemount"

Houston Lighting & Power Company (HL&P) has reviewed Supplement 1 to NRC Bulletin 90-01 to determine the degree of applicability to the South Texas Project (STP). HL&P has reviewed plant records and identified a total of 112 Rosemount Model 1153 Series B and Model 1153 Series D transmitters (56 for each unit). These transmitters were manufactured before July 11, 1989, and are currently utilized in either safety-related systems or in systems installed in accordance with 10CFR50.62 (ATWS rule). None of the 112 transmitters are used in the reactor trip systems, or ESF actuation systems. STP does not have any Rosemount Model 1154 transmitters, and no Model 1151 or 1152 transmitters are used in safety-related systems.

HL&P is in compliance with the requirements of Supplement 1. Specific responses to the requirements of NRC Bulletin 90-01 Supplement 1 are provided as an attachment. In addition, the Rosemount transmitters are being added to the Restricted Component List to ensure that Rosemount transmitters for replacement in safety-related applications will not have the problem identified in the bulletin. For those safety-related Rosemount transmitters in stock, an evaluation shall be performed to ensure that the Calibration Trending Program is implemented, or these transmitters shall be used for non-safety applications.

080189

9303090046 930304
PDR ADDCK 05000498
G PDR


GLB\93-047.001

A Subsidiary of Houston Industries Incorporated

JE39

Houston Lighting & Power Company
South Texas Project Electric Generating Station

If there are any questions, please contact either
Mr. P. L. Walker at (512) 972-8392 or me at (512) 972-8131.



S. L. Rosen
Vice President,
Nuclear Engineering

PLW/pla

Attachment: Response to NRC Bulletin 90-01, Supplement 1

Houston Lighting & Power Company
South Texas Project Electric Generating Station

ST-HL-AE- 4346
File No.: G03.03
Page 3

c:

Regional Administrator, Region IV
Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011

Project Manager
U.S. Nuclear Regulatory Commission
Washington, DC 20555

J. I. Tapia
Senior Resident Inspector
c/o U. S. Nuclear Regulatory
Commission
P. O. Box 910
Bay City, TX 77414

J. R. Newman, Esquire
Newman & Holtzinger, P.C., STE 1000
1615 L Street, N.W.
Washington, DC 20035

D. E. Ward/T. M. Puc ett
Central Power and Light Company
P. O. Box 2121
Corpus Christi, TX 78403

J. C. Lanier/M. B. Lee
City of Austin
Electric Utility Department
721 Barton Springs Road
Austin, TX 78704

K. J. Fiedler/M. T. Hardt
City Public Service
P. O. Box 1771
San Antonio, TX 78296

Rufus S. Scott
Associate General Counsel
Houston Lighting & Power Company
P. O. Box 61867
Houston, TX 77208

Institute of Nuclear Power
Operations - Records Center
1100 Circle 75 Parkway, Suite 150
Atlanta, GA 30339-3064

Dr. Joseph M. Hendrie
50 Bellport Lane
Bellport, NY 11713

D. K. Lacker
Bureau of Radiation Control
Texas Department of Health
1100 West 49th Street
Austin, TX 78756-3189

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

South Texas Project
Units 1 and 2
Response to NRC Bulletin 90-01, Supplement 1

- 1) a) Expeditiously replace, or monitor for the life of the transmitter on a monthly basis using an enhanced surveillance monitoring program, any transmitters that have a normal operating pressure greater than 1500 psia and that are installed in reactor protection trip systems, ESF actuation systems or ATWS systems. Action for those transmitters that have not met the Rosemount psi-month threshold criterion should be expedited. At their discretion, licensees may monitor using an enhanced surveillance program at least once every refueling cycle, but not exceeding 24 months, transmitters in this category if the appropriate psi-month threshold criterion recommended by Rosemount has been reached, and the monitoring interval is justified based upon transmitter performance in service and its specific safety function. The justification should show that a sufficiently high level of reliability for the function is provided by the redundancy or diversity of applicable instrumentation and control systems, commensurate with the importance of the function, when considered in conjunction with the overall performance of the reactor protection trip system, ESF actuation systems, or ATWS system. Provide to the NRC a copy of the licensee justification to extend the enhanced surveillance program beyond the monthly test interval for transmitters that have reached the appropriate psi-month threshold criterion recommended by Rosemount.

Response

STP does not have any Rosemount transmitters, Models 1153B and D with a normal operating pressure greater than 1500 psia installed in Reactor Protection systems (RPS), ESF actuation systems (ESFAS), or ATWS systems. Therefore, no replacement or monthly enhanced surveillance monitoring program for such transmitters is required.

- 1) b) Replace, or monitor for the life of the transmitter on a quarterly basis using an enhanced surveillance monitoring program, any transmitters that have a normal operating pressure greater than 1500 psi and that are used in safety-related applications but are not installed in reactor protection trip systems, ESF actuation systems, or ATWS systems. At their discretion, licensees may monitor using an enhanced surveillance program at least once every refueling cycle, but not exceeding 24 months, transmitters in this category if the appropriate psi-month threshold criterion recommended by Rosemount has been reached, and the monitoring interval is justified based upon transmitter performance in service and its specific function. Provide to the NRC a copy of the justification to extend the enhanced surveillance program beyond the quarterly test interval for transmitters that have reached the appropriate psi-month threshold criterion recommended by Rosemount.

Response

STP includes two Rosemount transmitters with normal operating pressure greater than 1500 psi and which are used in safety-related applications in the reactor coolant system, but not in reactor protection systems, ESF actuation systems, or ATWS systems. However, these transmitters have met the Rosemount threshold criterion of 60,000 psi-months time-in-service. Therefore, replacement is not required.

The existing STP surveillance program with frequency of once every 18 months will be continued, and calibration trending will be performed.

- 1) c) Replace, or monitor at least once every refueling cycle, but not exceeding 24 months, using an enhanced surveillance program until the transmitter reaches the appropriate psi-month threshold criterion recommended by Rosemount, any transmitters that have a normal operating pressure greater than 500 psi and less than or equal to 1500 psi and that are installed in reactor protection trip systems, ESF actuation systems, or ATWS systems.

Response

STP incorporates eight Rosemount transmitters with normal operating pressures greater than 500 psi and less than or equal to 1500 psi, located in the ATWS Mitigation System Actuation Circuitry. These transmitters have not yet reached the appropriate 130,000 psi-month Rosemount threshold criterion.

These Rosemount transmitters have not been scheduled for replacement. However, STP has committed to perform preventive maintenance every 26 weeks. Calibration data will now be trended as an enhancement to the program.

- 1) d) Replace, or monitor at least once every refueling cycle, but not exceeding 24 months, using an enhanced surveillance monitoring program until the transmitter reaches the appropriate psi-month threshold criterion recommended by Rosemount, any transmitters used in safety-related systems that have a normal operating pressure greater than 500 psi and less than or equal to 1500 psi, and that are not installed in reactor protection trip systems, ESF actuation systems, or ATWS systems.

Response

STP includes eighteen Rosemount transmitters in the subject applications. Of these, fourteen have reached the 60,000 psi-month threshold criterion recommended by Rosemount. The STP surveillance program is performed once every eighteen months, which is consistent with the STP refueling cycle. Therefore, replacement is not required. The existing STP surveillance program with frequency of once every 18 months will be continued and calibration trending will be performed.

- 1) e) At licensee discretion, exclude from the enhanced surveillance program any transmitters that have a normal operating pressure greater than 500 psi and less than or equal to 1500 psi that have reached the appropriate psi-month threshold criterion recommended by Rosemount (60,000 psi-months or 130,000 psi-months depending on the range code of the transmitter). A high degree of confidence should be maintained for detecting failure of these transmitters caused by a loss of fill-oil and a high degree of reliability should be maintained for the function consistent with its safety significance.

Response

HL&P will perform adequate surveillance monitoring/preventive maintenance for these transmitters installed at STPEGS. The existing STP surveillance program with frequency of once every 18 months will be continued, and calibration trending will be performed.

- 1) f) At licensee discretion, exclude from the enhanced surveillance program any transmitters that have a normal operating pressure less than or equal to 500 psi. A high degree of confidence should be maintained for detecting failure of these transmitters caused by a loss of fill-oil and a high degree of reliability should be maintained for the function consistent with its safety significance.

Response

HL&P will perform appropriate surveillance for these Rosemount transmitters (84 total) that are subject to Technical Specification requirements. The existing STP surveillance program with frequency of once every 18 months will be continued, and calibration trending will be performed.

- 2) Evaluate the enhanced surveillance monitoring program to ensure that the program provides measurement data with an accuracy range consistent with that needed for comparison with manufacturer drift data criteria for determining degradation caused by a loss of fill-oil.

Response

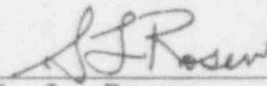
The surveillance monitoring program at STP, with the addition of the calibration trending program, is adequate to detect degradation caused by loss of fill-oil.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter)	
)	
Houston Lighting & Power)	Docket Nos. 50-498
Company, et al.,)	50-499
)	
South Texas Project)	
Units 1 and 2)	

AFFIDAVIT

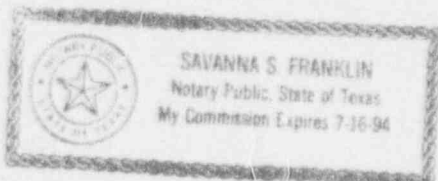
S. L. Rosen being duly sworn, hereby deposes and says that he is Vice President, Nuclear Engineering, of Houston Lighting & Power Company; that he is duly authorized to sign and file with the Nuclear Regulatory Commission the attached response to NRC Bulletin 90-01, Supplement 1; is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge and belief.




S. L. Rosen
Vice President,
Nuclear Engineering

STATE OF TEXAS)
)
COUNTY OF)

Subscribed and sworn to before me, a Notary Public in and for The State of Texas this *4th* day of *March*, 1993.





Notary Public in and for the
State of Texas