

# The Light company

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

September 25, 1992

ST-HL-AE-4216

File No.: G3.03

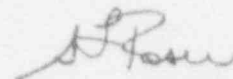
U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

South Texas Project  
Units 1 and 2  
Docket Nos. STN 50-498, STN 50-499  
Response to NRC Bulletin 92-01, Supplement 1

Reference: Letter ST-HL-AE-4156 dated July 21, 1992 from  
S. L. Rosen (HL&P) to the USNRC Document Control Desk

HL&P submits the attached response to NRC Bulletin 92-01,  
Supplement 1.

Mr. A. W. Harrison is the point of contact for this issue at  
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S. L. Rosen  
Vice President,  
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SDP/ag

Attachment: Response to NRC Bulletin 92-01, Supplement 1

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Houston Lighting & Power Company  
South Texas Project Electric Generating Station

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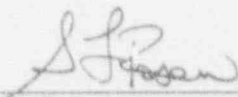
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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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

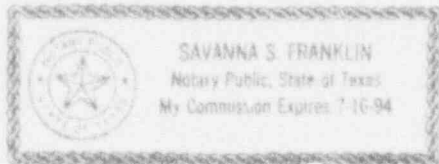
AFFIDAVIT


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 92-01, 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 )  
 )  
 )

Subscribed and sworn to before me, a Notary Public in and for The State of Texas this 25<sup>th</sup> day of September, 1992.



  
\_\_\_\_\_  
Notary Public in and for the  
State of Texas

Response to NRC Bulletin 92-01, Supplement 1

REQUESTED ACTION:

All holders of operating licenses for nuclear power reactor, immediately upon receiving this bulletin supplement, are requested to take the following actions. The actions are essentially the same as those listed in Bulletin 92-01, but the scope has been expanded to include all sizes of conduits and trays and to include walls, ceilings, and equipment enclosures.

1. For those plants that use either 1- or 3-hour pre-formed Thermo-Lag 330 panels and conduit shapes, identify the areas of the plant which have Thermo-Lag 330 fire barrier material and determine the plant areas which use this material for the protection and separation of the safe shutdown capability.
2. In those plant areas in which Thermo-Lag fire barriers are used in raceways, walls, ceilings, equipment enclosures, or other areas to protect cable trays, conduits, or separate redundant safe shutdown functions, the licensee should implement, in accordance with plant procedures, the appropriate compensatory measures, such as fire watches, consistent with those that would be implemented by either the plant technical specifications or the operating license for an inoperable fire barrier. These compensatory measures should remain in place until the licensee can declare the fire barriers operable on the basis of applicable tests which demonstrate successful 1- or 3-hour barrier performance.

Each licensee who has installed Thermo-Lag 330 fire barriers must inform the NRC in writing within 30 days of receiving this bulletin supplement, whether or not it has taken the above actions. Where fire barriers are declared inoperable, the licensee is required to describe the measures being taken to ensure or restore fire barrier operability. These measures should be consistent with actions taken in response to Bulletin 92-01.

HL&P RESPONSE:

**ACTION 1:**

Thermo-Lag 330 fire barrier systems have been used for the protection and separation of the safe shutdown capability in STP units 1 and 2. All areas of the plants which have Thermo-Lag 330 fire barrier material installed have been identified. HL&P has located all Thermo-Lag installations being used to protect the primary safe shutdown circuits and those which separate HVAC ductwork needed to support safe shutdown. Thermo-Lag is not used for walls, ceilings or other such enclosures at STP.

**ACTION 2:**

As reported in response to NRC Bulletin 92-01, hourly fire watches have been established for each of the affected fire areas outside the reactor containment building. These fire watches have been expanded in response to NRC Bulletin 92-01, Supplement #1 to envelope the expanded scope described in the Supplement. The net effect on fire watch activities was minimal due, in part, to conservatism used in establishing fire watches in response to the Bulletin. This action is consistent with the requirements of the STP fire protection program as described in the STP UF3AR.

HL&P also initially established hourly fire watches inside the reactor containment building (RCB) in response to NRC Bulletin 92-01. These watches were discontinued subsequent to a conference call with the NRC on June 25, 1992 in which HL&P agreed to impose alternative compensatory actions. There is no reason to impose compensatory actions in addition to the ongoing actions thus established since the expanded scope described in the Bulletin Supplement #1 did not address any Thermo-Lag installations inside containment which had not been identified and evaluated previously. HL&P has staged fire suppression equipment close to containment entry air locks, established pre-staged radiation work permits to ensure prompt RCB entry in case of fire, briefed the fire brigade on the Thermo-Lag degraded condition and has drilled the fire brigade specifically on RCB entry. As previously described in response to Bulletin 92-01, HL&P considers the Thermo-Lag inside the RCB effective as a radiant energy shield in accordance with Appendix R, III.G.2.f. Consequently, the ongoing compensatory actions for the RCB described above are conservative.

ACTION TO ENSURE AND TO RESTORE FIRE BARRIER OPERABILITY

As a benefit of having three independent safety trains, STP's safe shutdown design generally includes two functionally redundant pathways, which exceeds regulatory requirements. As a result, the impact of the Thermo-Lag issues is mitigated by STP's unique design. Also, HL&P has conservatively established fire watches for areas where the primary pathway is protected by Thermo-Lag.

Appropriate actions to establish fire barrier operability are being developed through an industry program being coordinated by NUMARC. This program includes the establishment of a test database, development of guidance for applicability of tests, development of generic installation guidance and consideration and coordination of additional testing as appropriate. HL&P supports the NUMARC program and will apply the results of these efforts, when completed, to the affected STP Thermo-Lag installations.

As an additional indication of the safety of the STP design relative to fire, the STP Probabilistic Safety Analysis (PSA) shows that fire contributes less than 1% of the total STP core damage frequency. Furthermore, the PSA did not include credit for applied fire barriers such as Thermo-Lag.