

1/26/89

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AEOD

MEMORANDUM FOR: Eugene J. Holler, Chief
Projects Section D
Division of Reactor Projects
Office of Nuclear Reactor Regulation
Region IV

FROM: Jack E. Rosenthal, Chief
Reactor Operations Analysis Branch
Division of Safety Programs
Office for Analysis and Evaluation
of Operational Data

SUBJECT: EVALUATION OF LERs FOR SOUTH TEXAS PROJECT ELECTRIC
GENERATING STATION UNIT 1 AEOD INPUT TO SALP REVIEW
COVERING THE PERIOD FROM JANUARY 1, 1988 THROUGH DECEMBER 31,
1988

In support of the ongoing SALP reviews, AEOD has reviewed the reports submitted by Houston Lighting and Power for South Texas Unit 1. Our review concentrated on the safety significance of the events, LER completeness, clarity, understandability and adequacy of the event report contents.

The enclosure provides our input on the subject review. If you should have any questions regarding this report, please contact either me or Earl Brown of my staff. Mr. Brown can be reached at FTS 492-4491.

Original signed by Jack E. Rosenthal

Jack E. Rosenthal, Chief
Reactor Operations Analysis Branch
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Office for Analysis and Evaluation
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Enclosure:
As stated

cc w/enclosure
G. Dick, NRR

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ENCLOSURE

AEOD INPUT TO SALP REVIEW FOR SOUTH TEXAS UNIT 1

Houston Light & Power submitted 63 LERs, not including revisions, for Unit 1 at the South Texas Project Electric Generating Station during the assessment period from January 1, 1988 through Decemebr 31, 1988. Our review included LERs numbered as follows:

88-001 through 88-063

The LER review followed the general instructions and procedures of NUREG-1022. The specific review criteria and our findings follow:

1. Significant Operating Events

There were eleven reported events at South Texas Unit 1 that were identified as significant events by the AEOD screening and review process in the assessment period. The significant events were:

<u>LER No.</u>	<u>Title</u>
88-008-01	Safety-Related Electrical Cable Splices
88-026-00	Reactor Trip and Safety Injection Due to Loss of Offsite Power Caused by Personnel Error
88-027-01	Use of Improper Seal Material in Steam Generator Power-Operated Relief Valves
88-028-00	Leakage of Aluminum - Bronze Essential Cooling Water System
88-031-00	Cable Assemblies for Neutron Flux Monitoring Which Failed Qualification Testing
88-032-00	Auxiliary Feedwater Pump Shaft Sleeve Failure Due to Stress Corrosion Cracking Hydrogen Embrittlement
88-033-00	Air Binding of Charging Pump Suction Line from the Refueling Water Storage Tank Due to a Design Error
88-037-00	Failure of a 480 Volt Breaker to Automatically Close Due to a Manufacturing Defect
88-039-00	Entry Into Technical Specification 3.0.3 on June 16, 1988
88-061-00	Emergency Operating Procedure Error Due to Inadequate Review
88-063-00	Failure to Install Vortex Breakers in the Containment Emergency Sumps

Six of the listed LERs involved equipment or material deficiencies. The materials problems appear to be restricted to the South Texas site rather than apply generically to other plants. In each instance, the licensee corrective action appeared adequate to address the materials problems. Three of the listed LERs involved personnel error as a contributing factor. These events involved: (1) A partial loss of offsite power resulted in a reactor trip due to failure to adequately review the relay circuits involved with the current transformer trouble shooting activities; (2) Inadvertent tripping of train B 480 volt load center coincident with train C essential service water repair which caused entry into technical specification 3.0.3; and (3) Inadequate review lead to an error in an emergency operating procedure for operator response to a steam generator tube rupture. Two of the listed LERs involved discovery of a design or construction deficiency.

The primary problems identified in the LERs submitted involved personnel error in approximately 28 percent of the reports, inadequate procedures in nearly 25 percent of the reports, and ESF actuation of the control room recirculation ventilation due to the sensitivity of monitors in about 17 percent of the reports.

2. AEOD Technical Study Report

No AEOD studies were prepared for specific events at the South Texas site.

3. PNs Issued in Assessment Period

There were 19 Preliminary Notice of Event or Unusual Occurrence reports issued for the South Texas site. One of these, PNO-IV-88-78, "Planned Outage to Inspect Bottom Mounted Instrument Tubes," involved an issue addressed by NRC in Information Notice 87-044, Supplement 1 to that notice, and NRC Bulletin 88-09. The instrument tube thinning observed at South Texas is being proposed as an Appendix C item for the third quarter report to Congress. We have not been able to identify that an LER or other report was submitted on the instrument tube thinning.

We believe about 9 of the PNs should have been followed by subsequent licensee LERs or other reports. We have identified that approximately 70% of those issues in the PNs were subsequently discussed in an LER or other report.

4. LER Quality

The LERs adequately described the major aspects of the event, including component or system failure that contributed to the event, and the significant corrective actions taken or planned to prevent recurrence. The reports were thorough, detailed, well written and easy to understand. The narrative sections typically included specific detail of the event such as valve identification numbers, model numbers, numbers of operable redundant systems, the date of completion of repairs, etc., to provide a good understanding of the event. The root cause of the event was clearly identified in most cases.

The LERs presented the event information in an organized pattern with separate headings and specific information in each section that led to a clear understanding of the event information.

Previous similar occurrences were properly referenced in the LERs.