

APPENDIX
NOTICE OF VIOLATION

Houston Lighting & Power Company
South Texas Project, Unit 1

Docket: 50-498
Permit: CPPR-128

During an NRC inspection conducted on May 18-21 and June 8-11, 1987, violations of NRC requirements were identified. The violations involved improperly torqued bolts and an inadequate calculation for weld size on the Residual Heat Removal (RHR) pump support assemblies. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987), the violations are listed below:

A. Failure to Provide Adequate Design Change Control

Criterion VI of Appendix B to 10 CFR 50 requires that measures be established to control the issuance of documents such as drawings, including changes thereto, and that these measures shall assure that documents, including changes, are reviewed for adequacy and approved for release by authorized personnel and are distributed to and used at the location where the prescribed activity is performed.

Contrary to the above, a design change notice (Brown & Root DCN No. 1-S-1600-1) issued in 1980, but never implemented, was erroneously incorporated into Bechtel design drawing No. 3C01-9-S-1600 and Bechtel calculation No. 2C011SC045, "RHR Pump Support Pedestal." As a result of this erroneous incorporation, both the Bechtel drawing and calculation indicated a 1/2-inch weld on the column to base plate connection while the actual as-built condition was a 5/16-inch weld.

This is a Severity Level IV violation. (Supplement II) (498/8727-02)

B. Failure to Use Correct Procedure for Installation of Bolts

Criterion V of Appendix B to 10 CFR 50 requires that activities affecting quality be prescribed by documented instructions or procedures, and shall be accomplished in accordance with these procedures. Bechtel Construction Specification No. 3A010SS0030, Revision 8, "Specification for Erection of Structural Steel and Miscellaneous Steel," Section 7.1.1.4, requires that high-strength bolts be installed in accordance with the American Institute of Steel Construction (AISC) "Specification for Structural Joints Using ASTM A325 or A490 Bolts." Section 5 of the AISC specification requires that fasteners be tightened to provide, when all fasteners in the joint are tight, at least the minimum tension of 39,000 pounds for 7/8-inch diameter A325 bolts.

Contrary to the above, the NRC inspector independently measured the tension for 12 randomly selected 7/8-inch diameter A325 bolts on each of the three Residual Heat Removal (RHR) pump support structures and found that the tension was less than the required value of 39,000 pounds for one

bolt on RHR pump A and for six bolts on RHR pump C. All three RHR pump support structures had been inspected by Quality Control.

This is a severity level IV violation. (Supplement II) (498/8727-03)

Pursuant to the provisions of 10 CFR 2.201, Houston Lighting & Power Company is hereby required to submit to this office within 30 days of the date of the letter transmitting this Notice, a written statement or explanation in reply, including for each violation: (1) the reason for the violations if admitted, (2) the corrective steps which have been taken and the results achieved, (3) the corrective steps which will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.

Dated at Arlington, Texas
this 22nd day of June 1987