

The Light company

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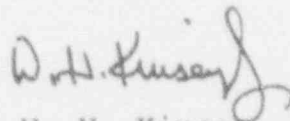
January 08, 1993
ST-HL-AE-4300
File No.: G02
10CFR50

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

South Texas Project
Unit 1
Docket No. STN 50-496
Special Report Regarding a Valid
Failure of Standby Diesel Generator #11 on December 9, 1992

Pursuant to the South Texas Project Electric Generating Station (STPEGS) Technical Specifications, Houston Lighting & Power (HL&P) submits the attached Special Report Regarding a valid failure of Standby Diesel Generator #11 on December 9, 1992. This event did not have an adverse effect on the health and safety of the public.

If you should have any questions on this matter, please contact Mr. C. A. Ayala at (512) 972-8628 or me at (512) 972-7921.



W. H. Kinsey, Jr.
Vice President,
Nuclear Generation

JMP/ag

Attachment: Special Report Regarding a Valid Failure of Standby Diesel Generator #11 on December 9, 1992

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South Texas Project Electric Generating Station

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Revised 10/11/91

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South Texas Project
Unit 1
Docket No. STN 50-498
Special Report Regarding a Valid
Failure of Standby Diesel Generator #11 on December 9, 1992

DESCRIPTION OF EVENT:

On December 9, 1992, at 1041 hours, Unit 1 was in Mode 3 during a refueling outage. Operators were performing the Standby Diesel Generator (SDG) #11 Operability Test when the 8R cylinder exhaust temperature indicated 1050°F. The maximum allowable operating temperature of any cylinder is 980°F. The SDG was unloaded and declared inoperable due to the high exhaust temperature.

Troubleshooting indicated that the lever arm on the fuel control shaft which actuates the fuel injection pump rack was binding on the affected cylinder. The binding arm was freed using a penetrating lubricant. The lever arms on the other cylinders associated with SDG #11 were inspected and lubricated. Only one other cylinder had a lever arm that was experiencing binding, however, this lever arm was not completely stuck (as was the case with the 8R cylinder). On December 11, 1992, SDG #11 was tested and returned to service.

CAUSE OF EVENT

The cause of this event has been attributed to binding of the lever arm on the fuel control shaft which actuates the Fuel injection pump rack causing an abnormal fuel condition. The source of the binding was due to inadequate lubrication. Although other components of the fuel control shaft are lubricated quarterly, the lubrication of the lever arm is not included in preventive maintenance (PM) activities.

EVENT ANALYSIS

This event has been classified as a valid failure since SDG #11 would not have been able to perform its safety function. Although the SDGs have been analyzed to perform satisfactorily with only 18 of the 20 cylinders operable, operator intervention to lock out the specific cylinder may not have occurred fast enough to prevent equipment damage.

CORRECTIVE ACTIONS

- 1) Inspection and lubrication of the remaining SDGs in both Units has been performed to identify similar freedom of movement problems.
- 2) SDG Preventive Maintenance activities for each SDG will be revised to require lubrication of the lever arm. The PM activities will be revised by February 26, 1993.
- 3) An evaluation of the SDG design will be performed to identify other components or locations not currently being lubricated which warrant lubrication. This evaluation will be completed by March 30, 1993.

ADDITIONAL INFORMATION

Per STPEGS Technical Specification 4.8.1.1., there has been 1 valid failure in the last 20 valid tests of SDG #11. The number of valid failures within the last 100 valid tests is less than 4. Therefore, the testing frequency for SDG #11 remains at once per 31 days.

This event has been made available to the industry via Nuclear Network. Additionally, a copy of this letter will be sent to the SDG vendor, Cooper Bessemer.

A review of the NPRDS database did not identify any other high exhaust temperatures for similar reasons.