

# The Light company

Houston Lighting & Power P.O. Box 1700 Houston, Texas 77001 (713) 228-9211

February 3, 1986  
ST-HL-AE-1591  
File No.: G9.17

Mr. Vincent S. Noonan, Project Director  
PWR Project Directorate #5  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

South Texas Project  
Units 1 and 2  
Docket Nos. STN 50-498, STN 50-499  
Response to DSER Item Regarding  
Category D HEDs Relative to Lamp Test Capabilities

Reference: ST-HL-AE-1448 dated 10/24/85

Dear Mr. Noonan:

In response to a concern related to the above reference expressed during a conference call with your Dr. Saba N. Saba, HL&P has reviewed the Category D Human Engineering Deficiency (HED) relative to detecting failed indicating lights in the Control Room. STP will require plant operators to check for burned-out bulbs on a routine basis. The majority of the indicating lights on the control panels are in red/green pairs, where at least one of the two lights should always be illuminated. These bulb pairs will be checked in two phases.

First, shift turnover procedures will require that control room operators scan the control boards for normally illuminated lights during each shift change.

Secondly, the Conduct of Operations procedure will require control room operators to observe proper operation of control board indicating lights, including the normally dark (unlit) lights, during periodic testing of plant equipment.

An additional concern for single indicating lamps was expressed during a subsequent call. A total of fifty-two (52) single indicators, which fall into four (4) groups were identified at STP:

1. Normally illuminated power available lights -

Operation of these eight (8) bulbs will be observed during shift change in accordance with the procedures discussed above.

8602060095 860203  
PDR ADOCK 05000498  
E PDR

L1/NRC/lp

A001  
1/0

2. One of three (1 set) or one of two (4 sets) equipment operating mode lights -

One of the bulbs in each group should always be illuminated. These eleven (11) bulbs will be observed during shift change in accordance with procedures discussed above.

3. Interlock or permissive lights -

These bulbs are either normally illuminated, or become illuminated as a result of events when an operator prepares to actuate a major component (i.e. pump start permissive, etc). Failure of these bulbs is conservative, in that the plant operators are trained not to actuate a component without verifying that the permissive conditions are met. These twenty-seven (27) bulbs will be observed for proper operation each time the equipment is actuated during periodic testing in accordance with the procedure discussed above.

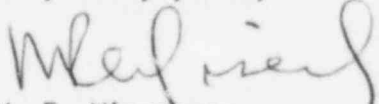
4. Single, normally dark indicating lights -

The only applications in the STP control room where a single, normally dark light is illuminated to indicate a change in status are the ESF Actuation status lights for the Control Room and Fuel Handling Building HVAC systems. These six (6) lights provide an indication that an ESF Actuation has occurred. This information is redundant to that provided by the ESF Status Monitoring Lamp Boxes on the same control panel, and that provided by the Emergency Response Facilities Data Acquisition and Display System (ERFDADS) CRT Displays located throughout the Control Room. These bulbs will be observed for proper operation during periodic testing of plant equipment in accordance with the procedure discussed above.

Based on the above, HL&P recommends that confirmatory item 108C against Draft SER Chapter 18 to be closed.

If you should have any questions on this matter, please contact Mr. M. E. Powell at (713) 993-1328.

Very truly yours,

  
M. R. Wisenburg  
Manager, Nuclear Licensing

THC/CAA/yd

Houston Lighting & Power Company

CC:

Hugh L. Thompson, Jr., Director  
Division of PWR Licensing - A  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Robert D. Martin  
Regional Administrator, Region IV  
Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 1000  
Arlington, TX 76011

N. Prasad Kadambi, Project Manager  
U.S. Nuclear Regulatory Commission  
7920 Norfolk Avenue  
Bethesda, MD 20814

Claude E. Johnson  
Senior Resident Inspector/GTP  
c/o U.S. Nuclear Regulatory  
Commission  
P.O. Box 910  
Bay City, TX 77414

M.D. Schwarz, Jr., Esquire  
Baker & Botts  
One Shell Plaza  
Houston, TX 77002

J.R. Newman, Esquire  
Newman & Holtzinger, P.C.  
1615 L Street, N.W.  
Washington, DC 20036

Director, Office of Inspection  
and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

T.V. Shockley/R.L. Range  
Central Power & Light Company  
P.O. Box 2121  
Corpus Christi, TX 78403

H.L. Peterson/G. Pokorny  
City of Austin  
P.O. Box 1088  
Austin, TX 78767

J.B. Poston/A. vonRosenberg  
City Public Service Board  
P.O. Box 1771  
San Antonio, TX 78296

ST-HL-AE-1591  
File No.: G9.17  
Page 3

Brian E. Berwick, Esquire  
Assistant Attorney General for  
the State of Texas  
P.O. Box 12548, Capitol Station  
Austin, TX 78711

Lanny A. Sinkin  
Christic Institute  
1324 North Capitol Street  
Washington, D.C. 20002

Oreste R. Pirfo, Esquire  
Hearing Attorney  
Office of the Executive Legal Director  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Charles Bechhoefer, Esquire  
Chairman, Atomic Safety &  
Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dr. James C. Lamb, III  
313 Woodhaven Road  
Chapel Hill, NC 27514

Judge Frederick J. Shon  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Mr. Ray Goldstein, Esquire  
1001 Vaughn Building  
807 Brazos  
Austin, TX 78701

Citizens for Equitable Utilities, Inc.  
c/o Ms. Peggy Buchorn  
Route 1, Box 1684  
Brazoria, TX 77422

Docketing & Service Section  
Office of the Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555  
(3 Copies)

Advisory Committee on Reactor Safeguards  
U.S. Nuclear Regulatory Commission  
1717 H Street  
Washington, DC 20555

Revised 12/2/85