

# The Light company

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

March 5, 1992

ST-HL-AE-4017

File No.: G09.16

10CFR50.55a

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

South Texas Project  
Units 1 and 2

Docket Nos. STN 50-498 and STN 50-499

Request for Relief from ASME Boiler and Pressure Vessel  
Code, Section XI Requirements (Relief Request RR-ENG-11)

In accordance with the provisions of 10 CFR 50.55a(g), Houston Lighting & Power Company (HL&P) requests relief from Paragraphs IWD-5223(a), IWA-4400, and IWA-4600 of Section XI of the ASME Boiler and Pressure Vessel Code (ASME XI) for hydrostatic testing of Class 3 components of the Essential Cooling Water (ECW) system.

Existing ECW system isolation valves are of the butterfly type. These valves are not designed to provide the leak-tight boundary required for hydrostatic pressure testing. In lieu of the hydrostatic pressure test, HL&P proposes to conduct a system functional test at nominal system operating pressure when the Code would otherwise require a hydrostatic test. Justification for the relief is provided on the attachment.

Granting of the requested relief will result in reduced ECW system out-of-service time. Performing the hydrostatic test will not provide any additional assurance of ECW system operability.

HL&P's Plant Operations Review Committee has reviewed the relief request and found it to be acceptable.

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PDR ADOCK 05000498  
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If you have any questions, please contact Mr. A. W. Harrison  
(512) 972-7298 or me at (512) 972-7138.



S. L. Rosen  
Vice President,  
Nuclear Engineering

PLW/amp

Attachment: Request for Relief from ASME Boiler and Pressure  
Vessel Code, Section XI Requirements (Relief  
Request RR-ENG-11)

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cc:

Regional Administrator, Region IV  
Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 400  
Arlington, TX 76011

George Dick, Project Manager  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

J. I. Tapia  
Senior Resident Inspector  
c/o U. S. Nuclear Regulatory  
Commission  
P. O. Box 910  
Bay City, TX 77414

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

D. E. Ward/T. M. Puckett  
Central Power and Light Company  
P. O. Box 2121  
Corpus Christi, TX 78403

J. C. Lanier/M. B. Lee  
City of Austin  
Electric Utility Department  
P.O. Box 1088  
Austin, TX 78767

K. J. Fiedler/M. T. Hardt  
City Public Service Board  
P. O. Box 1771  
San Antonio, TX 78296

Rufus S. Scott  
Associate General Counsel  
Houston Lighting & Power Company  
P. O. Box 61867  
Houston, TX 77208

INPO  
Records Center  
1100 Circle 75 Parkway  
Atlanta, GA 30339-3064

Dr. Joseph M. Hendrie  
50 Bellport Lane  
Bellport, NY 11713

D. K. Lacker  
Bureau of Radiation Control  
Texas Department of Health  
1100 West 49th Street  
Austin, TX 78756-3189

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South Texas Project  
Units 1 and 2  
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Request for Relief from ASME Boiler and Pressure Vessel  
Code, Section XI Requirements (Relief Request RR-ENG-11)

Reference Code: ASME Boiler and Pressure Vessel Code, Section XI,  
1983 Edition Through Summer 1983 Addenda.

A. Introduction

A1. Components For Which Exemption Is Requested:

- a. Name and Identification Number: Class 3  
pressure-retaining components of the Essential Cooling  
Water (ECW) System.
- b. Function: See Section 9.2.1.2 of the STPEGS UFSAR.
- c. Class: ASME Class 3

A2. Code Requirement For Which Relief Is Requested:

Hydrostatic pressure testing of repair welds or replacement  
installation welds when such testing is required by IWA-4400,  
IWA-4600, or IWD-5223(a).

A3. Basis For Relief Requests:

Class 3 pressure-retaining components of the ECW system are  
required to be hydrostatically pressure tested:

- Following Repair by welding (IWA-4400)
- Following Installation of replacements by welding  
(IWA-4600), or
- For the System Hydrostatic Test (IWD-5223(a)).

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Open-ended portions of the ECW system are exempt from hydrostatic testing by IWD-5223. However, remaining sections of the system are only isolable by means of butterfly valves that are not designed to provide a leak-tight boundary for conducting the required hydrostatic pressure test. The necessary pressure cannot be maintained for the duration of the required test. As a result of this constraint, hydrostatic pressure-testing cannot be accomplished during a 72-hour limiting condition of operation (LCO). The butterfly valves can be replaced with blanks which would permit hydrostatic testing to be performed. However, this results in expenditure of more time before returning the ECW system to service, including time required for draining and filling the system, which will also impact the 72-hour LCO. Consequently, HL&P requests relief from the Code requirement for hydrostatic pressure-testing of the ECW system.

Relief from the requirement is acceptable for the following reasons:

- System integrity is routinely monitored during operation.
- The ample margin in cooling capacity inherently provided by system design does not dictate a need for a leak-tight boundary.
- The ECW system is classified as a low pressure system. Thorough inspection of the system at the full operating pressure is adequate to detect failures in the system without degrading system safety or availability.

Relief from the requirement is also desirable in that the ECW system will spend less time out-of-service. This greater availability of the ECW system will improve the safe operation of the facility, and is consistent with protecting the health and safety of the public.

A similar request was previously submitted by Rochester Gas & Electric for the R. E. Ginna Nuclear Power Station.

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B. Proposed Alternative Examination:

A VT-2 visual examination will be conducted during a system functional test at nominal operating pressure to verify leak-tight integrity whenever the Code requires hydrostatic testing.

C. Applicability and/or Schedule:

Relief from ASME Section XI Code requirements is requested as specified herein for Class 3 pressure-retaining components of the ECW system of STPEGS Unit 1 and STPEGS Unit 2.