

Docket No. 50-458/82-03

SEP 29 1982

Gulf State Utilities  
ATTN: Mr. William J. Cahill, Jr.  
Senior Vice President - River Bend  
Nuclear Group  
P. O. Box 2951  
Beaumont, Texas 77704

Gentlemen:

Thank you for your letter of August 9, 1982, in response to our letter, dated July 8, 1982, and the attached Notice of Violation and Notice of Deviation. As a result of our review, we find that your information, in response to the Notice of Violation, is adequate. We have no further questions concerning this item and will review your corrective actions during a future inspection. However, we find that additional information is needed in regard to your response to the Notice of Deviation. Specifically, the deviation titled, "FSAR Requirements for Analysis and Design of Pipe Supports" utilizing ASTM A 500 Grade B tube steel, requires additional information on strain values and material capability analysis specific to River Bend.

Although the resultant design stresses for Service Levels B and D occur within the elastic limit, consideration must be given to the basis for the exclusion of secondary stresses in the Code. The exclusion is based on the fact that such stresses are self-limiting and are relieved by ductile displacements and localized yielding. This philosophy requires that sufficient ductility exist in the material to allow relief of the stresses prior to the material reaching failure strain. The specification of a minimum percentage of elongation is therefore a requirement that assures an acceptable deformability of the material. It is this apparent failure to attain sufficient ductility which formed the basis for the original deviation. Please provide additional information which addresses the ability of the material to release energy in the plastic range prior to reaching failure strain. This information should define the range of strain values associated with the capable plastic deformation of the material, along with an analysis of the material's capability to relieve expected secondary stresses in the defined strain range.

RPSB  
LMartin/sm  
9/28/82

RPSB  
WCrossman  
9/28/82

RPB1  
GMadsen  
9/28/82

DRRP&EP  
JGagliardo  
9/28/82

RA/RIV  
JCollins  
9/29/82

IE01

Gulf States Utilities

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Please provide the supplemental information within 20 days of the date of this letter.

Should you have any questions concerning this matter, we will be pleased to discuss them with you.

Sincerely,

"Original Signed by:  
G. L. MADSEN"

G. L. Madsen, Chief  
Reactor Project Branch 1

cc:  
Gulf State Utilities  
ATTN: J. E. Broker, Manager  
Technical Programs  
P. O. Box 2951  
Beaumont, Texas 77704

bcc:  
Resident Inspector  
Section Chief (RPS-B)  
Accompanying Personnel  
J. T. Collins, RA  
Enforcement Assistant (if NV or Deviation  
Info. Systems

~~RPB2~~

TPB

RIV File

C. Wisner

\*Texas State Dept. Health

\*D. Sells, UNRR