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CNN0006  
04/30/87

N/A

CASE letter to Board attaching  
Potential 10 CFR 50.55(e)  
Items (SDAR's)

N/A

N/A

DOCKETED  
USNRC

'87 MAY -4 P3:29

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

# CASE

(CITIZENS ASSN. FOR SOUND ENERGY)

April 30, 1987

1426 S. Polk  
Dallas, Texas 75224

214/946-9446

Administrative Judge Peter B. Bloch  
U. S. Nuclear Regulatory Commission  
Atomic Safety & Licensing Board  
Washington, D.C. 20555

Dr. Kenneth A. McCollom  
1107 West Knapp Street  
Stillwater, Oklahoma 74075

Dr. Walter H. Jordan  
881 W. Outer Drive  
Oak Ridge, Tennessee 37830

Dear Administrative Judges:

Subject: In the Matter of  
Texas Utilities Electric Company, et al.  
Application for an Operating License  
Comanche Peak Steam Electric Station  
Units 1 and 2  
Docket Nos. 50-445 and 50-446 -OL

Potential 10 CFR 50.55(e) Items

To assist the Board in its desire to be kept up-to-date on matters of potential significance, CASE is attaching copies of the potential 50.55(e) items (SDAR's, or Significant Deficiency Analysis Reports) which we have received since we provided the Board with such items on March 20, 1987.

It is our intention to periodically continue to provide these SDAR's unless the Board indicates otherwise (unless we have to put exhibit numbers on each).

Respectfully submitted,

CASE (Citizens Association for Sound Energy)

*Juanita Ellis*

(Mrs.) Juanita Ellis, President

cc: Service List, with Attachments

8705060057 870430  
PDR ADOCK 05000445  
G PDR

D503



Log # TXX-6360  
File # 10110  
903.11  
Ref. # 10CFR50.55(e)

William G. Council  
Executive Vice President

March 27, 1987

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKETS NOS. 50-445 AND 50-446  
IMPACT OF HELB TEMPERATURES ON  
QUALIFIED EQUIPMENT OUTSIDE CONTAINMENT  
SDAR: CP-84-12 (INTERIM REPORT)

Gentlemen:

On June 4, 1984, we verbally notified your Mr. D. Hunnicutt of a deficiency involving the environmental qualification of equipment outside containment for high energy line breaks (HELB). This is an interim report of a potentially reportable item under provisions of 10CFR50.55(e). Our latest interim report, logged TXX-6179, was submitted on December 18, 1986.

The evaluation of cable temperatures in the area of concern is continuing. A preliminary analysis has indicated that the cable sheath temperatures in the main steam penetration area exceed the temperature to which the cables were qualified. Currently, engineering has identified all affected essential cables in the area of concern. An analysis of the elevated temperature effects on those cables, which includes consideration of raceway size and the insulating effect of any fire barrier material, is in progress. The results of this analysis, currently scheduled for completion by April 30, 1987, are required to determine the impact of this issue upon the safety of plant operations.

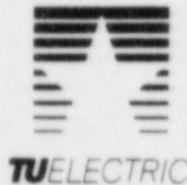
We will submit our next report on this issue no later than May 28, 1987.

Very truly yours,

W. G. Council

BSD/amb

c - Mr. E. H. Johnson, Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



Log # TXX-6420  
File # 10110  
903.9  
Ref: 10CFR50.55(e)

William G. Council  
Executive Vice President

April 28, 1987

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NO. 50-445  
THERMOLAG ON CONDUIT SUPPORT  
SDAR: CP-85-42 (INTERIM REPORT)

Gentlemen:

On October 26, 1986, we notified you (TUGCO Letter TXX-6049) that the deficiency involving the possible adverse effect of the substitution of rectangular and oversized preformed sections of thermolag on conduit installations is reportable under the provision of 10CFR50.55(e). Our most recent interim report was logged TXX-6153, dated December 12, 1987.

We are continuing our evaluation and anticipate submitting our next report by July 31, 1987.

Very truly yours,

*W. G. Council*  
W. G. Council

By: *G. S. Keeley*  
G. S. Keeley  
Manager, Nuclear Licensing

DAR/mlh

c - Mr. E. H. Johnson, Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



Log # TXX-6408  
File # 10110  
903.8  
Ref: 10CFR50.55(e)

April 27, 1987

William G. Council  
Executive Vice President

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
SEISMIC CATEGORY II PLATFORMS  
SDAR: CP-85-53 (INTERIM REPORT)

Gentlemen:

On December 20, 1985, we verbally notified your Mr. R. Hall of a deficiency involving Seismic Category II platforms. This is an interim report of a potentially reportable item under the provisions of 10CFR50.55(e). Our last interim report, logged TXX-6246, was submitted January 30, 1987. On April 22, 1987, we received an extension for submitting this report from Mr. I. Barnes to May 1, 1987.

Subsequent to our most recent report, several discussions involving engineering, construction and quality personnel have occurred in order to combine the corrective action for this issue and other related issues into one comprehensive plan. Currently, we anticipate finalizing this plan later this month.

Our next report will be submitted to you on or before June 19, 1987.

Very truly yours,

A handwritten signature in cursive script that reads 'W. G. Council'.

W. G. Council

By: A handwritten signature in cursive script that reads 'G. S. Keeley'.  
G. S. Keeley  
Manager, Nuclear Licensing

JCH/mlh

c - Mr. E. H. Johnson, Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV





Log # TXX-6348  
File # 10110  
909.2  
Ref # 10CFR50.55(e)

William G. Council  
Executive Vice President

March 26, 1987

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
SERVICE WATER SYSTEM LEAKAGE  
SDAR: CP-86-07 (INTERIM REPORT)

Gentlemen:

On April 11, 1986, we notified you by our letter logged TXX-4762 of a deficiency involving weld failure and coating degradation in the Service Water System which we deemed reportable under the provisions of 10CFR50.55(e). This is an interim report submitted to status corrective actions implemented on Unit 1 to date. Our latest interim report, logged TXX-6351 was submitted on January 30, 1987.

Pipe coating inspections have been completed on the accessible piping in the Train "A" Service Water System with coating repairs implemented on the identified problem areas. Weld repairs have been implemented where previously identified.

The completion of design modification ECN-426, alleviates the erosion/corrosion effects associated with cavitation downstream of the 1-SW-023 valve for Train "A". A fabricated pipe spool of ASTM 316 Stainless Steel has been installed downstream of the valve. Insulating gaskets and sleeves provide electrical isolation between dissimilar materials.

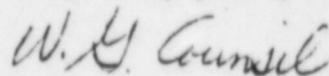
A Train "B" field weld in the stainless steel line 2-SW-1-302-150-3 (Ref. TXX-4762) has been radiographed and an ultrasonic test performed on the surrounding area. As a result of the above test and related deficiency a complete weld analysis will be performed when Train "B" is out of service. Presently Train "B" is scheduled to be out of service at the end of March 1987. Further an investigation will be conducted to determine whether this problem is limited to the identified areas.

A Service Water System inspection program similar to the above will be scheduled for Unit 2 after completion of the Unit 1 corrective actions.

SWEC Engineering (Boston) is performing a corrosion study to provide recommendations to alleviate corrosion problems in the service water system. This report is scheduled to be issued by June 15, 1987.

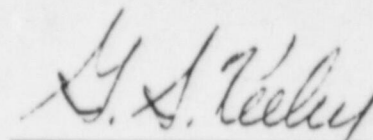
We anticipate submitting our next report no later than July 15, 1987.

Very truly yours,



W. G. Council

By:



G. S. Keeley  
Manager, Nuclear Licensing

DAR:ef

- c - Mr. E. H. Johnson, Region IV
- Mr. D. L. Kelley, RI - Region IV
- Mr. H. S. Phillips, RI - Region IV



Log # TXX-6357  
File # 10110  
908.1  
Ref # 10CFR50.55(e)

William G. Council  
Executive Vice President

March 27, 1987

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
ELECTRICAL PENETRATION ASSEMBLIES  
SDAR: CP-86-10 (INTERIM REPORT)

Gentlemen:

On April 24, 1986, we notified you by our letter logged TXX-4774 of a deficiency involving the electrical penetration assemblies (EPA's) supplied by Bunker Ramo which we deemed reportable under the provisions of 10CFR50.55(e). This is a follow-up interim report submitted to status corrective action implemented to date. Our last interim report, logged TXX-5044, was submitted September 26, 1986.

As noted in our previous report, the EPA modules supplied by Bunker Ramo will be replaced by modules supplied by Conax. Rework in Unit 1 has begun and is currently scheduled for completion by May 25, 1987. Rework in Unit 2 has also begun and is currently scheduled for completion by November 30, 1987.

We expect to submit our next report by July 10, 1987.

Very truly yours,

*W. G. Council*  
W. G. Council

WJH/d1

c - Mr. E. H. Johnson - Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



Log # TXX-6362  
File #10110  
903.7  
Ref# 10CFR50.55(e)

William G. Council  
Executive Vice President

March 27, 1987

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
COMMODITY INSTALLATIONS AT SECONDARY WALL DESIGN GAPS  
SDAR: CP-86-12 (INTERIM REPORT)

Gentlemen:

On February 27, 1986, we verbally notified your Mr. T. Westerman of a deficiency involving attachments at, or in close proximity to, design gaps between secondary walls and adjacent walls/floors. This is an interim report of a potentially reportable item under the provision of 10CFR50.55(e). Our last interim report was logged TXX-6234, dated January 21, 1986.

The methodology for evaluation of commodities attached to, or in close proximity to, adjacent structures or walls has been developed. Specifically, wall displacements are to be determined during a seismic event and compared to allowable commodity movements for acceptability. Currently, a Design Base Document (DBD CS-19) is being developed to define these maximum wall displacements.

Evaluation of the commodities bridging gaps between secondary walls and adjacent structures is scheduled to be completed by the end of May, 1987 for Unit 1 and common areas. Unit 2 will be scheduled after the completion of Unit 1.

A Commodity Clearance Program is being developed for commodities installed in close proximity, but not attached to, secondary walls. The program will establish a matrix of displacements for all commodities and associated structural elements including secondary walls. Maximum displacements will be based on the above DBD CS-19. The maximum movement matrix will be utilized through a multi-discipline walkdown for as-built clearance acceptability. A definitive completion schedule will be submitted with our next report.

During evaluation of the issue, we have additionally discovered that secondary wall designs did not consider commodity support loadings. Therefore, our evaluation effort has been expanded to include the methodology for determining the structural adequacy of these walls.

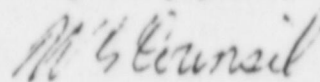


TXX-6362  
March 27, 1987  
Page 2

Following a full analysis of these issues, an evaluation will be made regarding the effects on the safety of plant operations had these conditions gone uncorrected.

We will submit our next report by June 3, 1987.

Very truly yours,



W. G. Council

JCH/ef

c - Mr. E. H. Johnson, Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



Log # TXX-6379  
File #10110  
903.11  
Ref# 10CFR50.55(e)

William G. Council  
*Executive Vice President*

April 3, 1987

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
JET IMPINGEMENT LOAD REVIEW  
SDAR: CP-86-13 (INTERIM REPORT)

Gentlemen:

On March 5, 1986, we verbally notified your Mr. T. F. Westerman of a deficiency involving a computer entry error which could invalidate portions of the jet impingement load review for high energy piping. This is an interim report of a potentially reportable item under the provision of 10CFR50.55(e). Our last interim report, logged TXX-6231, was submitted on January 21, 1987.

The schedule for the completion of our review and the issuance of a final Engineering Evaluation Report is May 22, 1987. Our next report will be submitted no later than June 24, 1987.

Very truly yours,

W. G. Council

JCH/mlh

c - Mr. E. H. Johnson, Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



Log # TXX-6332  
File # 10110  
910.3  
Ref # 10CFR50.55(e)

William G. Council  
Executive Vice President

March 20, 1987

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
INSTRUMENTATION INSTALLATIONS  
SDAR: CP-86-19 (INTERIM REPORT)

Gentlemen:

On March 21, 1986, we notified you of a reportable item involving the installation of steam service pressure transmitters (see TXX-4824). This is a follow-up interim report to status the corrective actions for a reportable item under the provisions of 10CFR50.55(e). Our last interim report was logged TXX-6235 dated January 21, 1987.

The scope of this item has been expanded to include corrective action implementation for SDARS: CP-86-16, "Fire Effects on Instrumentation Tubing," CP-86-50, "Unistrut Spring Nuts on Instrument Supports," CP-86-70, "Elevated Temperature Effects on Instrument Supports and Tubing," and CP-86-77, "Instrument Tubing Minimum Wall Thickness"; all of which were previously reported under the provisions of 10CFR50.55(e).

We have completed a comprehensive evaluation of instrument installations with proposals to relocate them as necessary. The design engineering package is in an internal review cycle.

Engineering is in the process of evaluating correspondence, design documentation and technical chemistry reports covering zinc contamination of and fire effects on stainless steel tubing. The scope of corrective action will be forthcoming after completion of this study.

We are implementing a program to assure proper alignment and torquing of unistrut nuts. Installation specifications and design drawings are being revised and retraining of affected personnel will be scheduled.

We are in the process of revising instrument tubing layout design criteria to include the provision that makes the layout compatible with high environmental temperatures caused by a postulated Loss of Coolant Accident (LOCA) event. This criteria is based on ASME Code Case N-47 which specifies the strain limits for a "one-time" event.

We are currently evaluating the instrumentation tubing minimum allowable wall thickness criteria previously established. After completion of the evaluation, a walkdown and reinspection of tubing is planned. Procedures and checklists are being established to implement the walkdown.

We are currently evaluating instrument support types for load capacity and the ability to accommodate a High Energy Line Break (HELB) load.

All the above instrumentation evaluations are scheduled to be completed on or before June 30, 1987. Our next report will be submitted on or before July 31, 1987.

Very truly yours,

*W. G. Council*

W. G. Council

By:

*G. S. Keeley*  
G. S. Keeley  
Manager, Nuclear Licensing

GLB/d1

- c - Mr. E. H. Johnson - Region IV
- Mr. D. L. Kelley, RI - Region IV
- Mr. H. S. Phillips, RI - Region IV





Log # TXX-6335  
File # 10110  
909.5  
Ref # 10CFR50.55(e)

William G. Council  
Executive Vice President

March 23, 1987

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
DIESEL GENERATOR LUBE OIL SUMP TANK FOOT VALVES  
SDAR: CP-86-31 (INTERIM REPORT)

Gentlemen:

On August 22, 1986, we notified you by our letter, logged TXX-4975, of a deficiency involving the possible failure of the rubber facing on foot valves mounted in the diesel generator lube oil sump tank, which we deemed reportable under the provisions of 10CFR50.55(e). This is an interim report submitted to status corrective action implemented to date.

Installation of the Unit One replacement rubber facings is complete. Unit Two replacement rubber facings will be installed upon completion of the lube oil flush of the diesel generator system. The Unit Two rubber facing installation is currently scheduled for completion by April 15, 1987.

We will submit our next report on this issue no later than July 13, 1987.

Very truly yours,

A handwritten signature in cursive script, appearing to read "W. G. Council".  
W. G. Council

RWH/d1

c - Mr. E. H. Johnson - Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV

**TUELECTRIC**

Log # TXX-6404  
File # 10010  
903.11  
Ref: 10CFR50.55(e)

April 24, 1987

William G. Council  
Executive Vice President

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
THRU WALL EMBEDDED CONDUIT SLEEVES  
SDAR: CP-86-32 (INTERIM REPORT)

Gentlemen:

On April 21, 1986, we verbally notified your Mr. T. F. Westerman of a deficiency involving thru wall embedded conduit sleeves which have not been identified by number and may be overfilled. This is an interim report of a potentially reportable item under the provisions of 10CFR50.55(e). Our latest interim report, logged TXX-6105, was submitted November 21, 1986.

Collection of the Unit 1 as-built data, needed to complete the technical evaluation of this issue, is approximately 50 percent complete. To date, 27 nonconformance reports have been issued to document deficiencies relating to embedded conduit sleeves. These deficiencies were identified during collection of the as-built data.

The collection of Unit 1 as-built data is currently scheduled for completion by May 22, 1987. The technical evaluation of this issue upon the safety of plant operations is currently scheduled for completion by September 25, 1987. Upon completion of the evaluation, as-built data for Unit 2 will be obtained. The schedules for Unit 2 will be provided in our next report.

We will submit our next report on this issue no later than October 30, 1987.

Very truly yours,

*W. G. Council*  
W. G. Council

By: *G. S. Keeley*  
G. S. Keeley  
Manager, Nuclear Licensing

RSB/mlh

c - Mr. E. H. Johnson, Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



Log # TXX-6405  
File # 10110  
903.9  
Ref # 10CFR50.55(e)

April 24, 1987

William G. Counsil  
Executive Vice President

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
ANCHOR BOLTS SUPPLIED BY HILTI  
SDAR: CP-86-51 (INTERIM REPORT)

Gentlemen:

On July 17, 1986, we verbally notified your Mr. I. Barnes of a deficiency involving a condition cited at another nuclear facility in which anchor bolts supplied by Hilti do not meet average ultimate tensile loads in certain sizes as published by the supplier. Our latest interim report, logged TXX-6343 was submitted on March 20, 1987.

Evaluation of the problem by the vendor (Hilti) resulted in the concern being limited to 1/2 inch diameter Hilti Kwik Bolts with design embedments of 3-1/2 inches and larger. This evaluation resulted in the issuance of NRC Information Notice 86-94, "Hilti Concrete Expansion Anchor Bolts," reporting a reduction in ultimate tensile capacity values for the 1/2 inch diameter Hilti Kwik Bolts.

Our evaluation of this concern is continuing. We will to submit a follow-up report by July 8, 1987.

Very truly yours,

*W. G. Counsil*

W. G. Counsil

By: *G. S. Keeley*  
G. S. Keeley  
Manager, Nuclear Licensing

GLB/gj

c - Mr. E. H. Johnson - Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV





Log # TXX-6358  
File # 10110  
903.9  
Ref. # 10CFR50.55(e)

William G. Council  
*Executive Vice President*

March 27, 1987

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKETS NOS. 50-445 AND 50-446  
LARGE BORE PIPING AND SUPPORTS  
SDAR: CP-86-36 (INTERIM REPORT)

Gentlemen:

On June 9, 1986, we verbally notified you of a reportable item involving the scope of plant modifications resulting from the project's pipe support reverification program (see TXX-4844). This is a follow-up interim report on a reportable item under provisions of 10CFR50.55(e). Our latest interim report logged TXX-6296 was submitted on February 20, 1987.

The continuing engineering evaluation has not identified any additional instances which are considered reportable pursuant to 10CFR50.55(e). The attached list shows the support modifications issued to date. The evaluation is continuing and we anticipate submitting our next report by June 12, 1987.

Very truly yours,

W. G. Council

BSD/amb  
Attachment

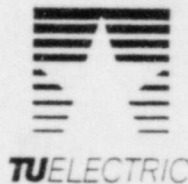
c - Mr. E. H. Johnson, Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



ATTACHMENT  
LARGE BORE PIPE SUPPORT MODIFICATIONS

<u>Unit</u>	<u>Category</u>	<u>Number of Modifications</u> *
1	Prudent	849
	Recent Industry Practice	1337
	Adjustment	889
	Cumulative Effects	1366
2	Prudent	1012
	Recent Industry Practice	360
	Adjustment	345
	Cumulative Effects	560

\* Changes in these figures from the last report represent not only identification of further modifications but a recategorization of certain supports.



Log # TXX-6343  
File # 10110  
903.9  
Ref # 10CFR50.55(e)

March 20, 1987

William G. Council

*Executive Vice President*

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
ANCHOR BOLTS SUPPLIED BY HILTI  
SDAR: CP-86-51 (INTERIM REPORT)

Gentlemen:

On July 17, 1986, we verbally notified your Mr. I. Barnes of a deficiency involving a condition cited at another nuclear facility in which anchor bolts supplied by Hilti do not meet average ultimate tensile loads in certain sizes as published by the supplier. Our latest interim report, logged TXX-6238, was submitted on January 27, 1987.

Evaluation of the problem by the vendor (Hilti) resulted in the concern being limited to 1/2 inch diameter Hilti Kwik Bolts with design embedments of 3-1/2 inches and larger. This evaluation resulted in the issuance of NRC Information Notice 86-94, "Hilti Concrete Expansion Anchor Bolts," reporting a reduction in ultimate tensile capacity values for the 1/2 inch diameter Hilti Kwik Bolts.

Our evaluation of this concern is continuing; we expect to submit a follow-up report by April 24, 1987.

Very truly yours,

W. G. Council

By:

G. S. Keeley,  
Manager, Nuclear Licensing

GLB/d1

c - Mr. E. H. Johnson - Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



Log # TXX-6346  
File # 10110  
903.8  
Ref # 10CFR50.55(e)

William G. Council  
Executive Vice President

March 23, 1987

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
POLAR CRANE SUPPORT STRUCTURE  
SDAR: CP-86-62 (INTERIM REPORT)

Gentlemen:

On October 3, 1986, we notified you by our letter logged TXX-6011 of a deficiency involving a misinterpretation of the polar crane load cases which we deemed reportable under the provisions of 10CFR50.55(e). We have submitted an interim report logged TXX-6239, dated January 26, 1987. This is an interim report submitted to status corrective action implemented to date.

In previous reports, we concluded that reduced loading exists for the polar crane support structure. An analysis of the acceptability of the crane rail structure for these reduced loads is continuing.

We will submit our next report no later than June 8, 1987.

Very truly yours,

W. G. Council

RWH/d1

c - Mr. E. H. Johnson - Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV





Log # TXX-6391  
File # 10110  
903.9  
Ref: # 10CFR50.55(e)

William G. Council  
Executive Vice President

April 16, 1987

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
PIPE SUPPORT INSTALLATIONS  
SDAR: CP-86-63 (INTERIM REPORT)

Gentlemen:

By letter logged TXX-6027, dated October 16, 1986, we notified you of a reportable item involving pipe support construction deficiencies. This is a follow-up interim report on a reportable item under provisions of 10CFR50.55(e). Our last interim report was logged TXX-6260, dated February 2, 1987.

Currently, physical inspections of large and small bore pipe supports are in process as part of the Hardware Validation Program. This program will assure that pipe supports meet the established design, fabrication, installation and regulatory criteria. Rework, as required for acceptance, will be documented for each support. Approximately 19,261 supports are involved in the unit 1 and common area program. The estimated completion date, as previously reported to you, is September 1, 1987.

Unit 2 inspections will be performed as part of the normal final inspections required for support certification.

Our next report will be submitted on or before July 20, 1987.

Very truly yours,

*W. G. Council*  
W. G. Council

By: *G. S. Keeley*  
G. S. Keeley  
Manager, Nuclear Licensing

BSD/gj

c - Mr. E. H. Johnson - Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV





Log # TXX-6336  
File # 10110  
909.5  
Ref # 10CFR50.55(e)

William G. Counsil  
Executive Vice President

March 23, 1987

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

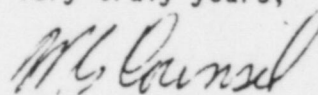
SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
COATINGS FOR UNIT 2 DIESEL FUEL OIL TANKS  
SDAR: CP-86-64 (INTERIM REPORT)

Gentlemen:

On September 4, 1986, we verbally notified your Mr. I. Barnes of a deficiency involving the protective coatings for the Unit 2 diesel fuel storage tanks. We have submitted interim reports, logged TXX-6013 and TXX-6263 dated October 3, 1986 and February 6, 1987, respectively.

We have completed our assessment of Nuclear Regulatory Commission Information Notice 87-04 impact on this issue and find it does not affect our evaluation. However, our evaluation of this issue with regard to the safety of plant operations is continuing. We will submit our next report on this issue no later than May 22, 1987.

Very truly yours,

  
W. G. Counsil

RWH/d1

c - Mr. E. H. Johnson - Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



Log # TXX-6327  
File # 10110  
903.9  
Ref. # 10CFR50.55(e)

William G. Council  
Executive Vice President

March 19, 1987

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NO. 50-445  
PRE-OPERATIONAL VIBRATIONAL TEST CRITERIA  
SDAR: CP-86-67 (INTERIM REPORT)

Gentlemen:

On September 26, 1986, we verbally notified your Mr. Ian Barnes of a potential deficiency regarding the design calculations and tests used to qualify the Pre-Operational Piping Vibration Program. Our last report was logged TXX-6290, dated February 19, 1987.

We have concluded that the deficiency identified above is reportable under the provisions of 10CFR50.55(e).

#### DESCRIPTION OF PROBLEM

A review of the CPSES criteria document "Pre-Operational Vibration Test Program", Issue 1, June 1980, indicated that the mathematical formulas used to determine stress endurance limits, allowable deflections, and flexibility characteristics of certain piping systems may not have been accurate. All vibration calculations and test results were evaluated to determine the validity of the original calculations in accordance with established CPSES procedures.

The evaluation has yielded the following results:

1. Two test data points (from a total of 21 system tests) were found to exceed the allowable deflection limits.
2. The measured direction of deflection movement was not clearly identified in all instances.
3. The test deflections were measured in only one direction in some cases.

Deficiency 1 was the result of an inadequate design review to verify the accuracy of mathematical formulas used to determine allowable deflection limits.

Deficiencies 2 and 3 were the result of a failure to adequately incorporate documentation requirements into the vibration test procedures.

#### SAFETY IMPLICATION

In order to evaluate the safety significance of item 1 above, a rigorous analysis would have to be conducted to determine the stresses induced in the piping and pipe supports by the excessive deflections. However, as a result of items 2 and 3 above, the extent of any additional test data which exceed allowable deflection limits is indeterminate. This information could only be retrieved by returning the piping systems to their original 1980 configuration and repeating the vibration test. This is neither practical nor useful.

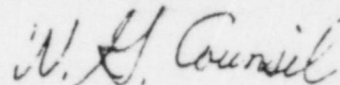
We have no reason to believe that any of the undocumented vibration test data exceeded the allowable deflection limits. However, it is conservatively assumed that had this condition remained undetected, the integrity of affected piping systems may not have been assured.

#### CORRECTIVE ACTION

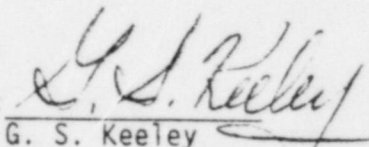
As a result of ongoing work and/or modifications to the piping systems as part of the piping and pipe support systems requalification program, it is necessary to repeat the steady state vibration testing. The re-test will resolve all the above concerns.

To prevent recurrence of items 1, 2 and 3, a new vibration test procedure has been issued for Unit 1. The start of testing is scheduled for September 1987. Our next report will be issued no later than October 22, 1987.

Very truly yours,



W. G. Council

By: 

G. S. Keeley  
Manager, Nuclear Licensing

BSD/amb

- c - Mr. E. H. Johnson, Region IV
- Mr. D. L. Kelley, RI - Region IV
- Mr. H. S. Phillips, RI - Region IV





Log # TXX-6328  
File # 10110  
909.1  
Ref #10CFR50.55(e)

William G. Council  
Executive Vice President

March 27, 1987

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
SUPPORT OF CLASS 1E WIRING  
SDAR: CP-86-69 (INTERIM REPORT)

Gentlemen:

On October 2, 1986, we verbally notified your Mr. I. Barnes of a deficiency regarding the failure to incorporate specific restraining/support requirements defined by IEEE Standard 420-1973, "Class 1E Control Switchboards," into project specifications and procedures. This is an interim report of a potentially reportable item under the provisions of 10CFR50.55(e). Our most recent interim report was logged TXX-6225, dated January 21, 1987. We requested and received a two week extension until March 27, 1987 in providing a response to this deficiency during the March 13, 1987, telephone conversation with Mr. I. Barnes.

Preliminary evaluations indicate that in the event these conditions had remained uncorrected no condition adverse to the safety of plant operations would exist. Documentation supporting our position is currently in the final stages of review.

Our next report will be submitted no later than April 27, 1987.

Very truly yours,

A handwritten signature in cursive script, appearing to read 'W. G. Council'.

W. G. Council

By: A handwritten signature in cursive script, appearing to read 'G. S. Keeley'.  
G. S. Keeley  
Manager, Nuclear Licensing

DAR:ef

c - Mr. E. H. Johnson, Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



Log # TXX-6406  
File # 10110  
909.1  
Ref # 10CFR50.55

William G. Council  
Executive Vice President

April 27, 1987

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
SUPPORT OF CLASS 1E WIRING  
SDAR: CP-86-69 (INTERIM REPORT)

Gentlemen:

On October 2, 1986, we verbally notified your Mr. I. Barnes of a deficiency regarding the failure to incorporate specific restraining/support requirements defined by IEEE Standard 420-1973, "Class 1E Control Switchboards," into project specifications and procedures. This is an interim report of a potentially reportable item under the provisions of 10CFR50.55(e). Our most recent interim report was logged TXX-6328, dated March 27, 1987.

Documentation supporting our position is currently in the final stages of review. We anticipate submitting our next report no later than May 29, 1987.

Very truly yours,

W. G. Council

By:   
G. S. Keeley  
Manager, Nuclear Licensing

DAR/gj

c - Mr. E. H. Johnson - Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



Log # TXX-6359  
File # 10110  
903.9  
Ref. # 10CFR50.55(e)

William G. Counsil  
Executive Vice President

March 27, 1987

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKETS NOS. 50-445 AND 50-446  
SMALL BORE PIPING AND SUPPORTS  
SDAR: CP-86-72 (INTERIM REPORT)

Gentlemen:

On June 9, 1986, we verbally notified you of a reportable item involving the scope of plant modifications resulting from the project's pipe support reverification program (see TXX-4844). This is a follow-up interim report on a reportable item under provisions of 10CFR50.55(e). Our latest interim report logged TXX-6297 was submitted on February 20, 1987.

The continuing engineering evaluation has not identified any additional instances which are considered reportable pursuant to 10CFR50.55(e). The attached list shows the support modifications issued to date. The evaluation is continuing and we anticipate submitting our next report by June 12, 1987.

Very truly yours,

W. G. Counsil

BSD/amb  
Attachment

c - Mr. E. H. Johnson, Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



ATTACHMENT  
SMALL BORE PIPE SUPPORT MODIFICATIONS

<u>Unit</u>	<u>Category</u>	<u>Number of Modifications</u> *
1	Prudent	23
	Recent Industry Practice	87
	Adjustment	185
	Cumulative Effects	136
2	Prudent	2
	Recent Industry Practice	17
	Adjustment	46
	Cumulative Effects	20

\* Changes in these figures from the last report represent not only identification of further modifications but a recategorization of certain supports.



Log # TXX-6315  
File # 10110  
903.9  
Ref # 10CFR50.55(e)

William G. Counsel  
Executive Vice President

March 20, 1987

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
ASME SNUBBER ATTACHMENT BRACKETS  
SDAR: CP-86-73 (INTERIM REPORT)

Gentlemen:

On October 20, 1986, we verbally notified your Mr. Ian Barnes of a deficiency involving installation of ASME snubber attachment brackets. Our last interim report was logged TXX-6188, dated December 23, 1986. On March 6, 1987, we requested and received a two week extension until March 20, 1987, to provide our next report. We have concluded that this issue is reportable under the provisions of 10CFR50.55(e), and the required information follows:

#### DESCRIPTION OF PROBLEM

A drawing review of all ASME snubbers was conducted to verify the adequacy of swing clearances. 1063 snubbers were identified as having attachment brackets with attributes that could potentially result in restricted movement and/or binding of the snubbers. As a result of field examinations, this number was reduced to 165.

An evaluation of the 165 supports was conducted in which the predicted pipe movements were compared to the field verified swing angle data.

A summary of the evaluation results follows:

- 83 supports were determined to have sufficient field verified swing angle to accommodate the predicted pipe movement.
- 15 supports were determined to be unnecessary in a previously initiated pipe support requalification effort and are being deleted.
- 30 supports are being modified as a result of the pipe support requalification effort (but not as a result of this deficiency).
- 16 supports have been identified as having less clearance than required by analysis and are being modified to correct the situation.

- 3 supports have no safety related function nor impair the safety related function of other components and are therefore being removed from further evaluation.
- 18 supports are under further evaluation.

Several causes for the deficiencies have been identified.

1. Certain sizes of struts and snubbers may use interchangeable rear attachment brackets. These rear attachment brackets were kept mixed in the same bulk storage bin. Although this practice was considered acceptable for rear bracket types XRB-06 and XRB-08, it may have been unacceptable when strut rear attachment brackets of a later edition (SRRB-06 and SRRB-08) were used with the corresponding size snubber.
2. The forward brackets for size 3 (SMF) snubbers that are fabricated at the minimum specified "c-c" dimension do not have the full required 5° swing when pinned to a rear bracket.
3. Size 10 snubbers, depending on which revision of rear bracket was used and which fabrication tolerances were employed, may not have the full required 5° swing.

#### SAFETY IMPLICATION

The supports deleted or modified by the requalification effort are not being analyzed in their original configuration to determine the safety significance (as this is neither practical or useful). Rather, it is conservatively assumed that these supports, the supports yet to be analyzed, and the supports being modified as a result of this deficiency, may have had inadequate swing clearances sufficient to impair their ability to perform their required safety function.

#### CORRECTIVE ACTION

To prevent recurrence of deficiency 1, the bulk storage bins have been purged of all SRRB-06 and SRRB-08 strut rear attachment brackets. Additionally, future shipments of rear attachment brackets of these sizes will consist only of the XRB type.

Corrective actions to prevent recurrence of deficiencies 2 and 3, are still under review and will be provided in our next submittal.

As previously noted, 16 supports are being modified as a result of this deficiency. The evaluation of the remaining 18 supports is scheduled for completion by May 15, 1987.



We will submit our next report no later than June 12, 1987.

Very truly yours,

*W. G. Council*

W. G. Council

By: *G. S. Keeley*  
G. S. Keeley  
Manager, Nuclear Licensing

BSD:lw

c - Mr. E. H. Johnson, Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



Log # TXX-6363  
File # 10110  
908.3  
Ref # 10CFR50.55(e)

William G. Counsil  
*Executive Vice President*

March 30, 1987

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
OVER-TORQUED WESTINGHOUSE AR RELAYS  
SDAR: CP-86-79 (INTERIM REPORT)

Gentlemen:

On November 7, 1986, we verbally notified your Mr. T. Westerman of a deficiency involving the possible overtightening of the contact cartridge terminal screws on the Westinghouse AR Relays. This is an interim report of a potentially reportable item under the provisions of 10CFR50.55(e). We have submitted interim reports, logged TXX-6141 and TXX-6253 dated December 5, 1986, and January 27, 1987, respectively.

Conceivably, overtightening of the terminal screws could have deformed the stationary contact assembly, reduced contact overtravel, and resulted in a loss of contact continuity. These terminal screws have a specified torque requirement of  $9.5 \pm 0.5$  inch-pounds. The accuracy of the torque wrench used at CPSES may have allowed an overtorqued or undertorqued condition on the terminal screws. The accuracy of the torque wrench, when set for 9.5 inch-pounds, allowed a range of  $9.5 \pm 1.5$  inch-pounds.

Preliminary review results have indicated that no material deformation would occur (at 11.0 inch-pounds) which would cause the relay contact to malfunction. Additionally, it was previously thought that some torque wrenches used for this application had a calibration range which did not encompass the Westinghouse specified range. Our evaluation has determined that all torque wrenches used had a calibration range which encompassed the Westinghouse specified range (9 to 10 inch-pounds). However, review of contact operability for their qualified life is continuing.

TXX-6363  
March 30, 1987  
Page 2 of 2

We are continuing our evaluation and anticipate submitting our next report by June 22, 1987.

Very truly yours,

*W. G. Council*

W. G. Council

By: *G. S. Keeley*

G. S. Keeley  
Manager, Nuclear Licensing

RDD/d1

c - Mr. E. H. Johnson - Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV





Log # TXX-6383  
File #10110  
903.9  
Ref: 10CFR50.55(e)

April 3, 1987

William G. Council  
*Executive Vice President*

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
CABLE TRAY HANGER SPLICE WELDS  
SDAR: CP-86-82 (INTERIM REPORT)

Gentlemen:

On January 6, 1987 we notified you by our letter logged TXX-6201 of a deficiency involving certain welds which are used to splice cable tray hangers (CTHs) channel sections end-to-end to form posts which we deemed reportable under the provisions of 10CFR50.55(e). This is an interim report submitted to status corrective action implemented to date.

The CTHs of Unit 1 have been subjected to an as-built program. The CTHs without thermolag have been visually examined and the locations where this condition has occurred are noted on the as-built drawings. Each condition will be "repaired" or "reworked" in accordance with established project procedures.

CTH's with potential hidden splice welds due to installed thermolag are being investigated as follows:

- A) To determine whether splice welds exist on the post and tier members of the CTH's, nondestructive testing (UT) is being utilized on members which are channels 62" or less in length (for C8 channels or larger, UT can be performed up to 84" or less length).
- B) Where the potential condition is identified by UT, the thermolag will be removed to provide for visual confirmation.
- C) Thermolag will also be removed from all supports where UT produces indeterminate results or cannot be utilized (e.g. CTH members over the lengths specified above) to verify the subject condition.

UT has been performed on over 1173 hangers to date which has identified 14 splice welds with this deficiency.

Each condition which is determined to be unacceptable by engineering evaluation will be "repaired" or "reworked" in accordance with established project procedures.

Some instances of the subject condition have been identified in Unit 2. The cases identified to date have been corrected as part of the design verification program. (Problems of inaccessibility due to thermolag installation are not of concern in Unit 2.) Identification of the subject condition and any necessary corrective action will continue for Unit 2.

The cause of this construction deficiency is attributed to a lack of specific direction regarding problems encountered during the "original" fabrication and installation of the cable tray hangers. The following Construction Procedures, which address cable tray and hanger installation for Units 1 and 2, have been revised to correct this condition.

-ECP-10, Rev. 9 "Cable Tray Hanger Installation"	(Unit 1)	Issued January 13, 1987
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-ECP-10A, Rev. 4 "Cable Tray Hanger Installation, Unit 2"	(Unit 2)	Issued September 8, 1986
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We will submit our next report no later than July 17, 1987.

Very truly yours,

*W. G. Council*

W. G. Council

By:

*G. S. Keeley*  
G. S. Keeley  
Manager, Nuclear Licensing

DAR/amb

c - Mr. E. H. Johnson, Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV



Log # TXX-6338  
File # 10110  
908.3  
Ref. # 10CFR50.55(e)

William G. Council  
Executive Vice President

March 20, 1987

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
SEPARATION BARRIER MATERIAL ON POWER CABLES AND  
POWER RACEWAYS  
SDAR: CP-86-83 (INTERIM REPORT)

Gentlemen:

On December 8, 1986, we verbally notified your Mr. Ian Barnes of a deficiency involving the use of Separation Barrier Material (SBM) on power cables and power raceways. This is an interim report of a potentially reportable item under the provisions of 10CFR50.55(e). Our last interim report submitted was logged TXX-6281, dated February 13, 1987.

The discrepancy involves the installation of thermal SBM on power cables and/or power raceways without derating of the cables' power carrying capacity (ampacity).

We have completed our calculations and have concluded that, due to significant conservatism in cable sizing design, the subject cables and cables in raceways did not exceed their insulation temperature rating during start-up testing.

The thermal barrier material is in the process of being removed from the power cables and power raceways. However, in order to determine safety significance, we are continuing the process of determining if the cable sizing design was sufficiently conservative to allow for the necessary cable ampacity derating with SBM in place. Our evaluation will determine the impact of this issue on the safety of plant operations during its 40 year design life.



We expect to submit our next report by June 5, 1987. ct

Very truly yours,

*W. G. Council*

W. G. Council

By: *G. S. Keeley*  
G. S. Keeley  
Manager, Nuclear Licensing

WJH:lw

c - Mr. E. H. Johnson - Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV

310  
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Log # TXX-6397  
File # 10110  
Ref # 10CFR50.55(e)

April 15, 1987

William G. Council  
Executive Vice President

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
PLUG WELDING ON EMBEDDED CHANNELS  
SDAR: CP-87-04 (INTERIM REPORT)

Gentlemen:

On March 16, 1987, we verbally notified your Mr. I. Barnes of a deficiency involving base metal damage on the embedded channels for one of the Unit 2, 6.9Kv Switchgear. Specifically, cracks were observed in the plug welds made to repair grout holes in the embedded channels. This is an interim report of a potentially reportable item under the provisions of 10CFR50.55(e).

The Nonconformance Report (CE-87-7-S) initiated to document this issue has been dispositioned "repair" by adding a new mounting detail for the entire switchgear train.

The design document (DCA 20986) detailing the grout hole repair will be reviewed for proper weld details. This evaluation and a review of similar electrical installations will be performed to determine the generic implications, if any, of this issue. These results are required to determine the impact of this issue upon the safety of plant operations.

We will submit our next report on this issue no later than June 17, 1987.

Very truly yours,

A handwritten signature in cursive script that reads 'W. G. Council'.

W. G. Council

By:

A handwritten signature in cursive script that reads 'G. S. Keeley'.

G. S. Keeley  
Manager, Nuclear Licensing

DAR/gj

c - Mr. E. H. Johnson - Region IV  
Mr. D. L. Kelley, RI - Region IV  
Mr. H. S. Phillips, RI - Region IV