

Log # TXX-88492

File # 10115

Ref # IE Bulletin 78-04

June 6, 1988

Willia n G Counsi! Execut e V e President

U. S. Nuclear Regulatory Commission Attr: Document Control Desk

Wash igton, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)

DOCKET NOS. 50-445 AND 50-446

IE BULLETIN 78-04

ENVIRONMENTAL QUALIFICATION OF CERTAIN STEM

MOUNTED LIMIT SWITCHES INSIDE REACTOR CONTAINMENT

(SUPPLEMENTAL REPORT)

REF: 1) TXX-2765, dated March 22, 1978

2) TXX-2884, dated September 29, 1978

Gentlemen:

References 1 and 2 transmitted TU Electric's responses to the subject bulletin. As a result of a recent review of these responses, onsite NRC inspectors requested additional details. The following CPSES information is provided as a complete response to each item as required by IE Bulletin 78-04;

#### (1) IEB 78-04 Action Item 1:

Determine if your facility utilizes or plans to utilize NAMCO D2400X or EA-170--302 SNAP LOCK switches in any safety related equipment in the primary containment, including the valve control circuitry previously discussed.

TU Electric Response of March 22, 1978 (Reference 1)

We have determined from our NSSS vendor, Westinghouse Electric Corporation, that the NAMCO Model D2400X or EA-170-302 SNAP LOCK switches will be used in certain safety-related control circuits in primary containment equipment as described in IE Bulletin 78-04. Similarly our Architect Engineer, Gibbs & Hill, Inc., advises us that NAMCO stemmounted limit switches (SMLS) are specified in the balance of Plant Design (see attached Gibbs & Hill letter GTN-25356).



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## (2) IEB 73-04 Action Item 2:

If any such applications are identified, review these applications to determine the adequacy or qualification testing for these switches and submit the qualification documentation or references to NRC for review.

## TU Electric Response of March 22, 1978 (Reference 1):

Westinghouse has stated that certain of these switches will require additional environmental qualification to IEEE-323-1974 for application involving hostile environments and that switches presently specified are "seismically qualified." It is the applicant's position that any NSSS equipment under Westinghouse scope (as are the subject switches,) will be environmentally qualified by Westinghouse. The applicant previously committed to qualification of Balance-of-Plant Class 1E Equipment. Consistent with this position, only qualified NAMCO or equivalent SMLS will be utilized. We have taken appropriate action to ensure that all of our vendors/sub-vendors have selected only environmentally qualified stem mounted limit switches for usage in safety related equipment.

## Clarification/Update:

The intent of the response was to describe and acknowledge the concern addressed in the bulletin and in Westinghouse Technical Bulletin (WTB) NSD-TB-77-13, dated September 30, 1977. The response states that it was TU Electric's position that Westinghouse was responsible for environmental qualification of any NSSS equipment; this is clarified by stating that Westinghouse was responsible for environmental qualification (to identified generic parameters) of Westinghouse supplied equipment requiring environmental qualification. This position was based on the fact that a Westinghouse review resulted in issuance of WTB NSD-TB-77-13 and, subsequently, in the NRC's issuance of the bulletin. In addition, Westinghouse letter NS-CE-1489, dated August 17, 1977, advised the NRC of this concern and stated, in part, that Westinghouse would include resolution of stem mounted limit switch qualification in the Westinghouse Supplemental Seismic and Environmental Qualification Program, outlined in Westinghouse letter NS-CE-692, dated 7/10/75.

More importantly, it should also be noted that TU Electric adopted the WCAP-8587 ("Methodology for Qualifying Westinghouse WRD Supplied NSSS Safety Related Electrical Equipment") qualification program for Comanche Peak in October 1980. Revision 6 of WCAP-8587 was accepted by the NRC on 11/10/83 and included Equipment Qualification Data Package EQDP-HE-3/HE-6, addressing Safety Related Externally Mounted Limit Switches (Qualification Group A). NAMCO limit switches, qualified to WCAP-8587, Supplement 1, EQDP-HE-3/HE-6, were installed on active NSSS Class 1E valves inside containment during 1982. Installations were reviewed by onsite Westinghouse engineering personnel. Westinghouse Field Change Notices, CPSES design documents (DCAs), and construction travelers that document this replacement activity are onsite and available for review.

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The remainder of the paragraph (Reference 1) indicates that TU Electric, through its Architect Engineer, had committed to use only environmentally qualified NAMCO limit switches in Balance-Of-Plant (BOP) Class 1E applications and that actions had been taken to satisfy this commitment. These actions, described in Gibbs & Hill letter GTN-25356, included issuing letters (GTN-25348 through 25354) to vendors advising them of bulletin concerns. The letters included copies of the bulletin. TU Electric recently retrieved one of these letters (GTN-25354) along with other objective evidence such as documented telecons and vendor/subvendor responses. This sample of documentation indicates that Gibbs & Hill transmitted correspondence to vendors to ensure proper qualification. This sample of documents is onsite and available for review.

## (3) IEB 78-04 Action Item 3:

If evidence is not available to support a conclusion of adequacy, submit your plans and programs, including schedules, for corrective action.

TU Electric Response of March 22, 1378 (Reference 1):

The actions required by the subject bulletin will be completed by September 29, 1978.

TU Electric Response of September 29, 1978 (Reference 2):

We hav determined by a vendor survey performed by our Architect Engineer, Gibbs & Hill, Inc., that only environmentally qualified NAMCO limit switches are being used on safety-related valves inside the Containment Buildings of CPSES.

# Clarification/Update:

At the time of this response (September 29, 1978), Gibbs & Hill had completed their survey of vendors described above. Based on vendor responses, TU Electric had concluded that only qualified switches would be shipped to CPSES for installation. Therefore Licensee Action No. 2 and Licensee Action No. 3 of the bulletin were not applicable and it was unnecessary to provide the NRC with procedures, programs, and schedules for corrective action. As an example of the vendor responses, a letter dated August 10, 1978, from Fisher Controls states in part:

"The following is Fisher Controls reply to Gibbs & Hill's letter of March 17, 1978, (GTN-25353):

1. Please note that Fisher Controls is not installing a NAMCO Model D2400X or EA-170-302 for inside containment use. However, Fisher is using a Model EA-180-31302 or EA-180-34302 for inside containment which are environmental qualified for inside containment use.

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> This request does not apply as Fisher again is not using unqualified limit switches."

As an additional point of clarification, this paragraph states in part, "...only environmentally qualified NAMCO limit switches are being used on safety-related valves inside the Containment Buildings of CPSES..." This statement means that the procurement process and the GTN letters would assure that qualified switches were being selected, shipped and installed within containment, not that switches were actually installed at the time.

## (4) IEB 78-04, Action Item 4:

Provide your response in writing within 30 days for facilities holding an operating license and within 60 days for those facilities with a construction permit. Reports should be submitted to the Director of the appropriate NRC Regional office and a copy should be forwarded to the U. S. Nuclear Regulatory Commission of Inspection and Enforcement, Division of Reactor Operations Inspection, Washington, D. C. 20555.

TU Electric Response of March 22, 1978 (Reference 1):

N/A

# Clarification/Update:

TU Electric provided the response to the IEB 78-04 within 30 days of the receipt of the bulletin, by letter TXX-2765 dated March 22, 1978 (Reference 1).

# Subsequent Actions Related to IEB 78-04

In late December 1979, TU Electric determined that documentation was inadequate for four different models of NAMCO limit switches mounted on BOP valves (including EA 170 and 180). Documentation deficiencies as identified in internal correspondence included:

Qualified life was not included in test reports.
 Specific parameters were not indicated for CPSES.

LOCA simulation test may not be adequate.

 Seismic test section did not provide calibration certification for test equipment.

 If the above test reports were modified to resolve all of the above comments, the qualified life would be approximately four years. TXX-88492 June 6, 1988 Page 5 of 5

Subsequently, NCRs E-80-00088 and E-81-00106S were written to document these deficiencies. Construction travelers documenting installation and qualification packages identifying proper equipment qualification of NAMCO limit switches is onsite and available for review.

Sincerely,

W. G. Counsil

MCP/tgw
Attachment: Gibbs & Hill letter GTN-25356 dat

Attachment: Gibbs & Hill letter GTN-25356, dated March 17, 1978

c- Mr. R. D. Martin, Region IV Resident Inspectors, CPSES (3) Attachment to TXX-88492 June 6, 1988

#### UNITED STATES OF AMERICA

#### NUCLEAR REGULATORY COMMISSION

In the Matter of

Texas Utilities Electric Company

(Comanche Peak Steam Electric Station, Units 1 & 2)

Docket Nos. 50-445 50-446

#### AFFIDAVIT

W. G. Counsil being duly sworn, hereby deposes and says that he is Executive Vice President, Nuclear Engineering and Operations of TU Electric, the Applicant herein; that he is duly authorized to sign and file with the Nuclear Regulatory Commission this response to IE Bulletin 78-04 that he is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge, information and belief.

W. G. Counsil

Executive Vice President,

Nuclear Engineering and Operations

STATE OF TEXAS

COUNTY OF DALLAS

Subscribed and sworn to before me, a Notary Public in and for 2 for , on this 6 th day of June , 1988.

Rotary Public

My commission expires: 3/12/90.

ibbs & Hill. Inc. ENGINEERS DESIGNERS CONSTRUCTORS

> DIRECT DIAL EXTENSION (212) 760- 4450

March 17, 1978

GTN-25356

Texas Utilities Generating Company 2001 Bryan Tower Dallas, Texas 75201

1,06

Attention: Mr. E. G. Gibson, Jr.

Project Engineer

Gentlemen:

TEXAS UTILITIES GENERATING COMPANY COMANCHE PEAK STEAM ELECTRIC STATION 1981-83 - 2300 MW INSTALLATION G&H PROJECT NO. 2323

10115 RESPONSE TO NRC IE BULLETIN 78-04 "ENVIRONMENTAL QUALIFICATION OF CERTAIN STEM MOUNTED LIMIT SWITCHES INSIDE CONTAINMENT"

In response to the subject document, we offer the following:

- 1. Our review indicates that NAMCO stem-mounted limit switches (SMLS) are specified in the Balance-of-Plant safety related equipment. We have been advised by NAMCO that they now have a newer "qualified" version of the NAMCO switch available which we believe will be furnished for all CPSES safety related specifications for SMLS's.
- To determine if all of our vendors/sub-vendors have selected environmentally unqualified NAMCO SMLS's for usage in safety related equipment, we have sent inquiries (copy attached) to all relevant vendors. In these inquiries, vendors have been asked to take action and provide information as required, per the subject NRC Bulletin.

GTN-25356 -2-March 17, 1978 Texas Utilities Generating Company NRC could be advised that the actions required by the subject bulletin will be completed by September 29, 1978. If you have any questions, please contact this office. Very truly yours, GIBBS & HILL, Inc. Harvey R. Rock Project Manager Attachments (Listing of Vendors and GTN numbers) cc: ARMS (B&R Site) Original + 1A J. C. Kuykendall (TUGCo) 1L, 1A J. T. Merritt (TUSI Site) 2L, 1A L. A. Ashley (B&R Site) 1L, 1A J. R. Ainsworth (TUSI NY) 1L, 1A R. E. Holloway (G&H Dallas) 2L, 2A

Spec. No.	Vendor Name & Address	GTN No.
MS-20A.1	Rockwell International Flow Control Division P.O. Box 47767 4934 Iron Ave. Dallas, Texas 75247	25348
	Att: Mr. J. E. Hilliard	
MS-20B	ITT Grinnell Corp. Specialty Valve Group 225 No. Front Street Wrightsville, Pa. 17368	25349
	Att: Mr. W. E. Broome	
MS-20B.1	Nuclear Valve Division Borg Warner Corp. 7500 Tyrone Ave. Van Nuys, California 91406	25350
	Att: Mr. S. Campion	
MS-20B.2	Rockwell International Flow Control Division 55 Washington Street East Orange, New Jersey 0701	
	Attention: M. A. Conklin	
MS-86	Posi-Seal International Rts. 49 & US 95 No. Stonington, Conn. 06359	
	Attention: Mr. R. J. Sites	
MS-600	Fisher Controls c/o Control Assoc. 67 N. Summit St. Tenafly, New Jersey 07670	25353
	Att: J. Dinzik	
MS-603	Valve Engineering 365 Carnegie Ave. Kenilworth, N.J. 07033	25354
MS-604	ITT Grinnell Corp. Specialty Valve Group 225 North Front St. Wrightville, Pa. 17368	25355

Att: W. E. Broome