New Hampshire
Yankee

NYN-89103

August 11, 1989

United States Nuclear Regulatory Commission
Washington, DC 20555

Attention: Document Control Desk

References: (a) Facility Operating License NPF-67, Docket No. 50-443

(b) NRC Bulletin No. 88-10: Nonconforming Molded Case Circuit Breakers

(c) NUMARC Letter dated April 28, 1989, "NUMARC Initiative on Molded Case Circuit Breakers," B. Lee to NUMARC Board of Directors

(d) NHY Letter NYN-89035 dated March 31, 1989, "Response to NRC Bulletin 88-10: Nonconforming Molded Case Circuit Breakers," G. S. Thomas to USNRC

(e) NHY Letter NYN-89071 dated May 31, 1989, "Response to NRC Bulletin 88-10: Nonconforming Molded Case Circuit Breakers," G. S. Thomas to USNRC

Subject: Response to NRC Bulletin 88-10: Nonconforming Molded Case Circuit Breakers

Gentlemen:

This letter presents an updated report of the New Hampshire Yankee (NHY) actions taken in response to NRC Bulletin 88-10 (not including Supplement 1) to ensure that Class 1E molded case circuit breakers (MCCB's) in inventory or installed in safety-related applications at Seabrook Station are traceable to a circuit breaker manufacturer (CBM).

Efforts to determine the traceability of Class 1E MCCB's within the scope of the Bulletin have been completed to the extent possible. A summary of the steps taken and results obtained to date to determine the traceability of these MCCB's is contained in Enclosure 1 to this letter. Specific traceability information pertaining to non-traceable MCCB's is presented in tabular form in Enclosure 2 to this letter.

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As previously reported, all non-traceable Class 1E MCCB's which had been installed in safety-related applications at Seabrook Station have been replaced with traceable Class 1E MCCB's. The replaced, non-traceable MCCB's have been returned to inventory. All non-traceable Class 1E MCCB's in inventory have been segregated and are administratively controlled to prevent their use in any application. Additionally, each non-traceable MCCB has been externally inspected for signs of refurbishment or prior use in accordance with the guidelines of the CBM provided through the Nuclear Management and Resources Council (NUMARC) [Reference (c)]. As a result of the inspection, no MCCB was determined to have unresolved indications of refurbishment or to be otherwise non-standard. These non-traceable MCCB's will be retained until June 30, 1990. Subsequent to June 30, 1990, NHY will make an appropriate disposition of these MCCB's unless further notice is received from either the NRC or NUMARC.

Administrative controls pertaining to the purchase, receipt and issuance from inventory of Class 1E MCCB's have been placed in effect. Since March 1, 1989, receipt inspections of MCCB's have included checks for external signs of refurbishment. Since March 31, 1989, only traceable Class 1E MCCB's have been permitted to be issued from inventory to safety-related applications at Seabrook Station. Since April 30, 1989, requirements to provide additional documentation have been imposed upon suppliers of MCCB's by means of an additional clause in NHY purchase orders to ensure that traceability to the CBM is provided.

New Hampshire Yankee has reviewed Supplement 1 to NRC Bulletin 88-10 dated August 3, 1989, and intends to pursue the additional required action and reporting within the schedule provided by the Supplement. Should you require further information regarding this matter, please contact Mr. Geoffrey Kingston at (603) 474-9521, extension 3371.

Very truly yours,

Bruce L. Drawbridge
Executive Director -
Nuclear Production

Enclosures

cc: Mr. William T. Russell
Regional Administrator
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NRC Senior Resident Inspector
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Seabrook Station, NH 03874

STATE OF NEW HAMPSHIRE

Rockingham, ss. August 11, 1989

Then personally appeared before me, the above-named Bruce L. Drawbridge, being duly sworn, did state that he is Executive Director - Nuclear Production of New Hampshire Yankee Division of Public Service Company of New Hampshire, that he is duly authorized to execute and file the foregoing information in the name and on the behalf of New Hampshire Yankee Division of the Public Service Company of New Hampshire and that the statements therein are true to the best of his knowledge and belief.

Beverly E. Silloway

Beverly E. Silloway, Notary Public
My Commission Expires: March 6, 1990

New Hampshire Yankee
August 11, 1989

ENCLOSURE 1 TO NYN-89103

Detailed Description of Actions Completed
in Response to NRC Bulletin 88-10

For the purposes of this letter, the term "traceable" shall mean having verifiable traceability as defined by NRC Bulletin 88-10. Similarly the term "non-traceable" shall mean not having verifiable traceability as defined by the Bulletin. However, as Enclosure 2 demonstrates, considerable traceability information has been obtained for each non-traceable Class 1E MCCB.

The first phase of the New Hampshire Yankee (NHY) response to NRC Bulletin 88-10 applied to the Class 1E MCCB's in Seabrook Station Unit 1 spare part inventory. The objective of this first phase of the response was to complete Requested Action No. 1 of the Bulletin. This action requested a verification that the Class 1E MCCB's in inventory purchased prior to August 1, 1988, were traceable to a circuit breaker manufacturer (CBM). In order to perform this action, Seabrook Station Unit 1 inventory system records were reviewed to identify the number of Class 1E MCCB's in inventory as of January 30, 1989. The August 1, 1988 target date requested by the Bulletin was extended to January 30, 1989 in order to identify as many Class 1E MCCB's in inventory as possible. Inventory records indicated that 306 Class 1E MCCB's were in inventory as of January 30, 1989. On-site purchase order records for the 306 MCCB's were then reviewed to determine to the extent possible their procurement chain. During the first quarter of 1989 additional information was requested from suppliers of these MCCB's as necessary to supplement the on-site information regarding traceability. Additionally, during a vendor surveillance conducted on the premises of Telemecanique, Westminster, MD, NHY reviewed the Telemecanique procurement records directly related to NHY purchase orders to Telemecanique for Class 1E MCCB's. The result of the above actions, reported in Reference (d), was that 244 of the 306 Class 1E MCCB's were traceable to the CBM. Traceability to the CBM of 243 of the 244 MCCB's was verified by means of the vendor surveillance at Telemecanique. The remaining MCCB (supplied by COMSIP Inc.) was initially determined to be traceable on the basis of available documentation.

After submitting Reference (d), NHY reviewed accumulated documentation relating to the procurement chain of the 306 Class 1E MCCB's identified in inventory as of January 30, 1989. The reviewed documentation included supplier responses to the NHY requests for additional information and the detailed report of the vendor surveillance at Telemecanique. As a result of this review, minor revisions to the figures reported in Reference (d) were made.

The total number of Class 1E MCCB's identified in inventory as of January 30, 1989, was revised from 306 to 309, 243 of which were traceable and sixty-six (66) of which were non-traceable. The number of traceable MCCB's decreased from 244 to 243 as a result of a revised determination that the COMSIP-supplied MCCB was non-traceable.

Concurrent with the effort to determine the procurement chain of the Class 1E MCCB's in inventory, additional administrative controls related to the purchase, receipt and issuance from inventory of Class 1E MCCB's were placed in effect. As of March 1, 1989, MCCB receipt inspections included checks for external signs of refurbishment. As of March 31, 1989, only traceable Class 1E MCCB's could be issued from inventory to safety-related applications at Seabrook Station. As of April 30, 1989, requirements to provide additional documentation were imposed upon suppliers of MCCB's by means of an additional clause in NHY purchase orders to ensure traceability to the CBM.

It was recognized that, during the time interval between the initial January 30, 1989, inventory records review and the April 30, 1989, establishment of MCCB-related administrative controls, the number of Class 1E MCCB's in inventory could have changed due to receipt or issuance activity. Therefore, inventory records were again reviewed to determine the number of Class 1E MCCB's in inventory as of May 8, 1989. 384 Class 1E MCCB's were identified in inventory as of May 8, 1989, 316 of which were traceable and sixty-eight (68) of which were non-traceable. Please note that sixty-six (66) traceable MCCB's were inadvertently omitted from the traceable and total figures reported in inventory as of May 8, 1989, by Reference (d). [Reference (d) reported a total of 318 Class 1E MCCB's in inventory as of May 8, 1989, 250 of which were traceable.]

The sixty-eight (68) non-traceable MCCB's identified in inventory as of May 8, 1989, were segregated in the warehouse and administratively restricted from being used in any equipment or discarded. Additionally, an external visual inspection was performed on each of the sixty-eight (68) non-traceable MCCB's. The external inspection was based upon guidance from the CBM provided through the NUMARC Industry Initiative on Molded Case Circuit Breakers [Reference (c)] and had the objective of identifying any external signs of refurbishment, prior use, or alteration from the as-new condition. The inspection of the sixty-eight (68) non-traceable MCCB's did not identify any MCCB as having unresolved indications of refurbishment or being otherwise suspect.

Based upon the results of the procurement chain determination for Class 1E MCCB's in inventory, it was determined that the appropriate follow-up action was to proceed with Requested Action No. 4 of the Bulletin, the five-year review of Class 1E MCCB in-plant replacement activity. The Bulletin requested that this review focus upon MCCB's purchased between August 1, 1983, and August 1, 1988 and installed in safety-related applications as replacements or as part of modifications. To ensure identification of all such MCCB's installed at Seabrook Station prior to the establishment of applicable MCCB-related administrative controls, the end date of the specified five-year interval was extended to May 3, 1989. Inventory system records and work control program documentation were reviewed to identify Class 1E MCCB's issued from inventory for use in safety-related applications at Seabrook Station during this five and three-quarter year interval. As of May 3, 1989, twenty-three (23) Class 1E MCCB's were identified as issued from inventory to safety-related applications in the Station. Of the twenty-three (23), eight (8) were determined to be non-traceable.

Each of the eight (8) non-traceable MCCB's was replaced with a traceable Class 1E MCCB. The replaced non-traceable MCCB's were returned to inventory, and were segregated, restricted from use and inspected in accordance with CBM guidelines as described above for the sixty eight (68) non-traceable MCCB's identified in inventory. The inspection did not identify any MCCB as having unresolved indications of refurbishment or being otherwise non-standard. The addition of the eight (8) previously installed, non-traceable MCCB's to the sixty-eight (68) non-traceable MCCB's segregated in inventory resulted in the current total of seventy-six (76) non-traceable MCCB's segregated in inventory. The seventy-six (76) MCCB's will be retained until June 30, 1990. Subsequent to June 30, 1990, NHY will make an appropriate disposition of these MCCB's unless further notice is received from either the NRC or NUMARC. Specific traceability information pertaining to the seventy-six (76) non-traceable MCCB's is presented in tabular form in Enclosure 2 to this letter.

As committed to in Reference (e) a physical verification of Class 1E MCCB's in inventory has been performed. Inventory system records were reviewed to identify all Class 1E MCCB's in inventory as of June 5, 1989. A physical check of Class 1E MCCB's in inventory was then performed. The result of the above verification was complete reconciliation between the inventory records count and the physical count of Class 1E MCCB's in inventory as of June 5, 1989.

The final numerical result of this physical verification was 312 traceable Class 1E MCCB's and seventy-six (76) non-traceable Class 1E MCCB's in inventory as of June 5, 1989. There is a difference between the June 5, 1989, figure (312) and the May 8, 1989, figure (316) of traceable Class 1E MCCB's in inventory. This difference represents a net reduction of four traceable Class 1 MCCB's in inventory as a result of receipt and issue transactions between the two dates. There was no change in the number of non-traceable Class 1E MCCB's in inventory between these same dates.

ENCLOSURE 2 TO NYN-89103

INFORMATION REGARDING NON TRACEABLE CLASS 1E MCCB'S IN INVENTORY
AS OF MAY 8, 1989

SUPPLIER	NUMBER	MANUFACTURER	MODEL NO.	PROCUREMENT CHAIN	REMARKS
Telemecanique, Inc. 2002 Bethel Road Westminster, MD 21157	3 1 13 9 1 1 2 1 2 1	Siemens Energy and Automation, Inc.	BQ1-B020 BQ1-B030 BQ2-B020 BQ2-B030 HE43-M040 HE43-M050 E22-B050 E22-B040 FJ3B-125L FJ2-B225	Telemecanique from Siemens (CBM)	NOTE 1 NOTE 2
Basler Electric Box 269, Route 143 Highland, IL 62249	4 4 4	Airpax Electronics	APG-1-50-103-01 APG-1-50-153-01 APG-1-50-502-01	Basler Electric from Airpax Electronics (CBM)	NOTE 3
Vitro Corporation 14000 Georgia Ave. Silver Spring, MD 20906-2972	2	Gould/ITE	EH2-B015	Vitro Corporation from D.H.E. Electric Inc. from Gould/ITE (CBM)	NOTE 4 NOTE 2
Sorrento Electronics 10240 Flanders Ct. San Diego, CA 12126	13	Heinemann	AM1-A3-A	Sorrento Electronics who obtained MCCB's from: a) Cypress Electronics b) Newark Electronics c) PoCo Sales	
Westinghouse Nuclear Technology Division P.O. Box 355 Pittsburgh, PA 15230	1 1	Heinemann	AM2-A3-A AM1-Z22-081	Westinghouse Nuclear Technology Division from Westinghouse I&C Systems Department	

SUPPLIER	NUMBER	MANUFACTURER	MODEL NO.	PROCUREMENT CHAIN	REMARKS
CVI Incorporated P.O. Box 2138 Columbus, OH 43216	1	Westinghouse	LB-3150	CVI Inc. from Loeb Electric from WESCO	
COMSIP, Inc. Delphi Systems Division 3030 Red Hat Lane P.O. Box 981 Whittier, CA 90601	1	ITE/Siemens	P-1515	COMSIP, Inc. from Associated Wholesale Electric Co. from ITE/Siemens (CBM)	NOTE 5 NOTE 2
Power Conversion Products Inc. 42 East St. P.O. Box 380 Crystal Lake, IL 60014	1	Westinghouse	1366 D 42G66	Power Conversion Products from WESCO, Elmhurst, IL	NOTE 6
Elgar Corporation 9250 Brown Deer Road San Diego, CA	1 1	General Electric	THED136100 TJJ426Y400	Elgar	
TOTAL	68				

INFORMATION REGARDING NON TRACEABLE CLASS 1E MCCB'S WHICH HAD BEEN INSTALLED IN SAFETY RELATED APPLICATIONS AS OF MAY 3, 1989 AND HAVE SINCE BEEN REPLACED

Telemecanique, Inc.	5 1 1	Gould/ITE JL3-F400	BQ1-B020 HE3-M060	Telemecanique from Siemens (CBM)	NOTE 7
Sorrento Electronics	1	Heinemann	AM1-A3-A	Sorrento Electronics from either Newark Electronics or PoCo Sales	NOTE 8
TOTAL	8				

NOTES

(1) Telemecanique letter dated March 15, 1989 certifies that all MCCB's supplied as spares or replacements for type 5600 MCC's were purchased from Siemens.

(2) Siemens includes predecessors ITE/Siemens and Gould/ITE.

(3) Basler letter dated February 27, 1989 states that Basler would have purchased these MCCB's from Airpax.

(4) Vitro and Siemens letters dated March 29, 1989 indicate that D.H.E. Electric Inc. was an authorized distributor for Gould/ITE.

(5) COMSIP letter dated February 22, 1989 indicates that this MCCB was purchased by Associated directly from ITE/Siemens.

(6) This MCCB is similar to a Model HFB 3050 except having 120 VAC shunt trip and alarm switch to close when breaker trips.

(7) These MCCB's were installed in the Emergency Electrical Distribution System.

(8) These MCCB's were installed in the Radiation Monitoring System.