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ISHAM, LINCOLN & BEALE
COUNSELORS AT LAW

RELATED CORRESPONDENCE

DOCKETED
USNRC

EDWARD S. ISHAM 1872-1902
ROBERT T. LINCOLN 1872-1889
WILLIAM G. BEALE 1885-1923

THREE FIRST NATIONAL PLAZA
CHICAGO, ILLINOIS 60602
TELEPHONE 312 558-7500
TELEX: 2-5288

July 12, 1985

'85 JUL 16 A10:08

WASHINGTON OFFICE
1120 CONNECTICUT AVENUE N.W.
SUITE 840
WASHINGTON, D.C. 20036
202 833-9730

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

Lawrence Brenner, Esq.
Chairman
Administrative Law Judge
Atomic Safety and Licensing
Board
United States Nuclear Regulatory
Commission
Washington, DC 20555

Dr. Richard F. Cole
Administrative Law Judge
Atomic Safety and Licensing
Board
United States Nuclear Regulatory
Commission
Washington, DC 20555

Dr. A. Dixon Callihan
Administrative Law Judge
102 Oak Lane
Oak Ridge, TN 37830

Re: In the Matter Of: Commonwealth Edison
Company (Braidwood Nuclear Power Station,
Units 1 and 2), Docket Nos. 50-456, 50-457. -OC

Dear Administrative Judges:

In accordance with the disclosure requirements set forth in Duke Power Company (William B. McGuire Nuclear Station, Units 1 and 2), ALAB-143, 6 AEC 623 (1973), I have enclosed copies of a July 3, 1985 letter from A. D. Miosi, Commonwealth Edison Nuclear Licensing Administrator, to James Keppler, NRC Regional Administrator, a July 3, 1985 letter from Duane R. Gallup, Superintendent of Boiler & Pressure Vessel Safety, to Michael J. Wallace, Braidwood Project Manager, and a July 8, 1985 letter from L. O. DelGeorge, Commonwealth Edison Assistant Vice-President to James Keppler. These documents concern the Braidwood Material Traceability Verification Program and are directly relevant to issues 1.B. at page 20 and 10.B. at pages 37-38 of the amended contention, as admitted by the Board in its Order of June 21, 1985.

8507170412 850712
PDR ADOCK 05000456
PDR

RJL:bc
Encs.
cc: Service List

Respectfully,

Rebecca J. Lauer
Rebecca J. Lauer

One of the Attorneys For
COMMONWEALTH EDISON COMPANY

8501

DOCKETED
USNRC

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

'85 JUL 16 A10:09

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter Of:)


COMMONWEALTH EDISON COMPANY)

(Braidwood Nuclear Power)
Station, Units 1 and 2))

Docket Nos. 50-456
50-457

CERTIFICATE OF SERVICE

I, Rebecca J. Lauer, one of the attorneys for Commonwealth Edison Company, certify that copies of the letter, dated July 12, 1985, from Rebecca J. Lauer to the Administrative Judges, together with copies of the enclosures thereto, have been served in the above-captioned matter on those persons listed in the attached Service List by United States mail, postage prepaid, this 12th day of July, 1985.


Rebecca J. Lauer

ISHAM, LINCOLN & BEALE
Three First National Plaza
Suite 1200
Chicago, Illinois 60602
(312) 558-7500

DATED: July 12, 1985

SERVICE LIST

Lawrence Brenner, Esq.
Chairman
Administrative Law Judge
Atomic Safety and Licensing
Board
United States Nuclear Regulatory
Commission
Washington, DC 20555

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Board
United States Nuclear Regulatory
Commission
Washington, DC 20555

Dr. A. Dixon Callihan
Administrative Law Judge
102 Oak Lane
Oak Ridge, TN 37830

Myron Karman, Esq.
Elaine I. Chan, Esq.
Office of the Executive Legal
Director
United States Nuclear Regulatory
Commission
Washington, DC 20555

Atomic Safety and Licensing
Board Panel
United States Nuclear Regulatory
Commission
Washington, DC 20555

Atomic Safety and Licensing
Appeal Board Panel
United States Nuclear Regulatory
Commission
Washington, DC 20555

Mr. William L. Clements
Chief, Docketing and Services
United States Nuclear Regulatory
Commission
Office of the Secretary
Washington, DC 20555

C. Allen Bock, Esq.
P.O. Box 342
Urbana, IL 61801

Ms. Bridget Little Rorem
117 North Linden Street
P.O. Box 208
Essex, IL 60935

Robert Guild
Douglass W. Cassel, Jr.
Timothy W. Wright, III
BPI
109 North Dearborn Street
Suite 1300
Chicago, IL 60602

Ms. Lorraine Creek
Route 1
Box 182
Manteno, IL 60950

Charles Jones, Director
Illinois Emergency Services
and Disaster Agency
110 East Adams
Springfield, IL 62705



Office of the Illinois
State Fire Marshal

DIVISION OF BOILER AND PRESSURE VESSEL SAFETY

July 3, 1985

Michael J. Wallace, Project Manager
Commonwealth Edison Company
Braidwood Nuclear Power Station
Rt. 1, Box 81
Braceville, IL 60407

Dear Mr. Wallace:

Attached is a copy of the minutes pertaining to the presentation given by Commonwealth Edison Company to the Office of the State Fire Marshal and the Department of Nuclear Safety held in Springfield, May 30, 1985.

Very truly yours,

Duane R. Gallup

Supt. of Boiler & Pressure
Vessel Safety

DRG:lab

Enclosure

MEETING WITH COMMONWEALTH EDISON COMPANY
STATUS OF THE BRAIDWOOD NUCLEAR POWER STATION

The presentation by Commonwealth Edison Company personnel to the Office of the State Fire Marshal and the Department of Nuclear Safety on materials involved in ASME Code related installation work at the Braidwood Nuclear Station was held at the Office of the State Fire Marshal, 3150 Executive Park Drive, Springfield, Illinois on Thursday, May 30, 1985.

Mr. Gallup opened the meeting at 10:00 a.m. and began with introductions. Those in attendance are listed below:

Commonwealth Edison Company

Edwin J. Hemzy, Construction Manager, Technical Support
Daniel J. Skoza, Project Field Engineering Supervisor
Daniel L. Shamblin, Project Construction Superintendent
Warren E. Vahle, Project Field Engineering Manager
Michael J. Wallace, Project Manager

Department of Nuclear Safety

Donald Benz, Lead Electrical Engineer
Kathleen N. Knepper, Assistant Legal Advisor
Dale Powell, Lead Mechanical Engineer
Steven W. Swartz, Lead Nuclear Engineer

Hartford Steam Boiler

C. M. Decker, Regional Manager
R. T. Rainey, Assistant Regional Manager

National Boiler of Boiler and Pressure Vessel Inspectors

Charles W. Allison, Field Representative
Robert P. Holt, Consultant
Michael F. Sullivan, Consultant

Phillips, Getschow Company

Jack Carlson, Quality Control Manager
John A. Hite, Executive Vice President

Office of the State Fire Marshal

Harold L. Schmeilski, State Fire Marshal
Duane R. Gallup, Superintendent of Boiler Safety
Victor Bogosian, Jr., Assistant Superintendent of Boiler Safety
Lisa Bell, Secretary

Mr. Wallace of Commonwealth Edison started the presentation by stating they requested the meeting to update the Office of the State Fire Marshal and the Department of Nuclear Safety concerning material identification involved in ASME Code related installations at the Braidwood Nuclear Power Station. Based on a concern of the NRC in 1983 of documentation associated with material traceability of Code piping at the point of installation at the Braidwood site, an audit was performed by Commonwealth Edison, Phillips, Getschow, and Sargent Lundy. Upon further request from the NRC, Commonwealth Edison agreed to a 100 percent verification effort. Mr. Wallace gave a summary of presentation to be given: The history of the program conducted and conclusions they are reaching as the program draws to a close; steps they are taking to resolve issues in the program; and proposal of a multi-party agreement as one alternative to document resolution of certain material traceability verification issues.

Each speakers' presentation was implemented with visual documentation, copies of which are attached.

The next speaker was Mr. Shamblin who covered the piping material traceability verification program used by Phillips, Getschow Company which has been accepted in previous ASME Code surveys. He also discussed NRC concerns and the sample program and results, the material traceability verification program's purpose, description and implementation. He also showed a sample of the Stores Request document used by Phillips, Getschow and explained its use.

Mr. Shamblin advised that in February, 1984, Mr. Hemzy and Sargent Lundy personnel met with the ASME to review the program and it was concluded the program met the ASME Code requirements. He further

listed the NRC's concern's, which are also included in the attached summary. He then described the sampling program used to establish confidence in past installations and the results wherein more than 99 percent of the Stores Requests and material markings matched. It was at this point the NRC requested additional assurance - a 100 percent verification of the material traceability program.

The next speaker was Mr. Skoza who supplied a summary of the material traceability verification program stating that, at a minimum, 97 percent of the material met the ASME material traceability requirements. The remaining material will be dispositioned as non-conformities if verification is not achieved. Upon question, he indicated the items that are buried and inaccessible to physical verification were the ones where a Stores Request only check was used.

The next speaker was Mr. Hemzy, ASME Code person for Commonwealth Edison Company and his entire statement is attached.

Concluding for Commonwealth Edison was Mr. Wallace. He emphasized that Commonwealth Edison Company wants to assure Code compliance and the quality of the Braidwood project. He also described the on-going work being done to disposition all material and estimated the disposition would be completed within the next two weeks so all concerned could discuss a multi-party agreement, if necessary, at that time. Mr. Wallace advised if material does not meet the Code, they will cut out and replace. They want everyone to agree they have an acceptable installation wherein he suggested a meeting be held on June 13, 14 or 17 at the Braidwood site with members of the jurisdictional authority to decide if a multi-party agreement is necessary.

Mr. Wallace advised Commonwealth Edison was meeting with the NRC on June 20, 1985 and want to present results to the NRC of the material traceability verification program and conclusions. He further stated the National Board is presently performing an audit of the construction activities.

Ms. Knepper of the Department of Nuclear Safety questioned if everything is dispositioned and all non-conformities are resolved, if it would be necessary to have the multi-party agreement. Mr. Hemzy stated they may resolve all items but would still prefer to have the meeting to assure everyone agrees and they are interested in obtaining concurrence of the jurisdiction with the way they are achieving compliance.

Mr. Gallup asked for comments from the National Board and Mr. Sullivan stated they have followed the material traceability verification program closely and have confidence in the work Commonwealth Edison is doing and stated the problem for the group to resolve was the issue of inaccessible pipe that is buried for which no physical verification can be made and whether it will impact the hardware in the future and these issues are what should be addressed in a multi-party agreement.

Upon question, Mr. Hite of Phillips, Getschow stated they verified items at the Braidwood site at the point of installation but ASME verification was not documented to back up the Stores Requests.

Mr. Rainey of Hartford Steam Boiler added they have followed the program closely and are also satisfied that it meets Code requirements.

Ms. Knepper inquired on the implications the proposed meeting with the jurisdiction would have on Commonwealth Edison's meeting with

the NRC on June 20, 1985. Mr. Wallace stated the NRC called the meeting and it would take place regardless of the meeting with the jurisdiction but they would like to present the contents of this meeting and the proposed meeting to the NRC. He further advised that Commonwealth Edison has no discussion with the NRC inspector on their findings as the NRC has taken the position that this is not a non-conformity but an unresolved item.

Upon question, Mr. Sullivan stated the National Board audit, after follow-up, may be completed by the end of July. Mr. Hemzy emphasized that the material traceability verification is a specific issue they want to resolve now and the National Board is auditing many other items and Mr. Gallup added the National Board could possibly find other deficiencies. Mr. Sullivan stressed that the multi-party agreement does not supercede the Code and Commonwealth Edison would still have to meet Code compliance.

Mr. Allison of the National Board added that he felt Commonwealth Edison wants and plans to achieve Code compliance and approves of the program they now utilize.

After further discussion, a tentative meeting date was set for June 17, 1985 upon verification from the Department of Nuclear Safety's staff and it was agreed the meeting date would be set up through Mr. Gallup.

In his closing comments, Mr. Wallace thanked everyone for attending the meeting on such short notice as every day is important to them.

Mr. Gallup thanked them for the presentation and information presented.

The meeting was adjourned at approximately 12:00 p.m.

COMMONWEALTH EDISON COMPANY

BRAIDWOOD PROJECT

PRESENTATION TO

ILLINOIS DIVISION OF BOILER INSPECTION

AND

ILLINOIS DEPARTMENT OF NUCLEAR SAFETY

ON

MATERIALS INVOLVED IN

ASME CODE RELATED INSTALLATION WORK

MAY 30, 1985

SPRINGFIELD, ILLINOIS

I. INTRODUCTION

PRESENTED BY

MIKE WALLACE
PROJECT MANAGER

BRAIDWOOD PROJECT AGENDA

I. INTRODUCTION

MIKE WALLACE
PROJECT MANAGER

II. MECHANICAL ERECTION CONTRACTOR
MATERIAL TRACEABILITY PROGRAM
-- AND, MATERIAL TRACEABILITY
VERIFICATION (MTV) PROGRAM

DAN SHAMBLIN
CONSTRUCTION SUPT.

III. RESULTS AND SUMMARY OF
MTV PROGRAM

DAN SKOZA
MECHANICAL FIELD ENG.

IV. MTV PROGRAM FROM ASME
CODE PERSPECTIVE

ED HEMZY
CONSTRUCTION MANAGER,
AND ASME CODE PERSON
FOR COMMONWEALTH EDISON

V. SUMMARY

MIKE WALLACE
PROJECT MANAGER

BRAIDWOOD PROJECT

OVERALL SUMMARY

- A. THE MTV (MATERIAL TRACEABILITY VERIFICATION) PROGRAM COMPLETED BY PHILLIPS, GETSCHOW COMPANY CONFIRMS THAT THE OVERALL PROGRAM FOR PAST MECHANICAL INSTALLATION WORK MET THE ASME CODE MATERIAL TRACEABILITY REQUIREMENTS.

- B. THROUGH THE IMPLEMENTATION OF THE MTV PROGRAM, A UNIQUE, 30 MANYEAR, 100% WALKDOWN EFFORT, A LIMITED NUMBER OF POSSIBLE NONCONFORMANCES HAVE BEEN IDENTIFIED WHICH REQUIRE DISPOSITION.

- C. THE INVOLVED PARTIES MAY CONSIDER IT USEFUL TO UTILIZE A "MULTI-PARTY AGREEMENT" TO DOCUMENT RESOLUTION OF CERTAIN MTV ISSUES; IF SO, CONSIDER THE POTENTIAL PROCESS TO BE FOLLOWED.

II. MECHANICAL ERECTION CONTRACTOR MATERIAL
TRACEABILITY PROGRAM -- AND
MATERIAL TRACEABILITY VERIFICATION
(MTV) PROGRAM

PRESENTED BY

DAN SHAMBLIN
PROJECT CONSTRUCTION SUPERINTENDENT

PIPING MATERIAL TRACEABILITY

TOPICS

- ° PHILLIPS, GETSCHOW COMPANY MATERIAL TRACEABILITY SYSTEM
- ° INDEPENDENT REVIEWS OF PHILLIPS, GETSCHOW COMPANY MATERIAL TRACEABILITY SYSTEM
- ° NRC CONCERNS AND ISSUES -- JULY, 1983
- ° SAMPLING PROGRAM AND RESULTS -- AUGUST, 1983
- ° MTV PROGRAM PURPOSE AND DESCRIPTION
- ° MTV PROGRAM IMPLEMENTATION

PIPING MATERIAL TRACEABILITY

PHILLIPS, GETSCHOW COMPANY MATERIAL TRACEABILITY SYSTEM

- ° STORES REQUEST (SR)
 - MATERIAL TYPE AND GRADE, PIPING CLASS, SIZE, SCHEDULE AND QUANTITY
 - DRAWING NUMBER AND REVISION
 - HEAT OR SERIAL NUMBER OF WITHDRAWN MATERIAL
- ° STORES REQUEST INCLUDED IN INSTALLATION TRAVELER PACKAGE
- ° QUALITY CONTROL PERFORMED OFFICE AND FIELD MATERIAL VERIFICATIONS DURING INSTALLATION ACTIVITIES
- ° STORES REQUEST PART OF DOCUMENTATION USED TO SUPPORT N-5 REVIEW AND SIGNOFF

PHILLIPS, GETSCHOW CO.

REQ. BY JOE FITTER

STORES REQUEST

DATE 5-24-85

Q. A. CLASS B HT. NOS. REQ'D. ☒ YES ☐ NO

SYSTEM	QUANTITY	DESCRIPTION	HEAT NO.
OFF GAS	4'6"	3" S/40 SA-106 GR.B C.S. SMLS PIPE	366390
2A-06-60-1			(P355)
REV. 1	1	3" S/40 SA-234 GR. WPB B.W. L.R.	DH6M
		C.S. 90° ELL	(F605)

EXAMPLE

NUCLEAR

PREPARED BY
Joe Fitter
5-24-85

FIELD
ENGINEERING

M. Homburg 5/24/85

WAREHOUSEMAN

J. Fitter 5-24-85

Q. C. SIGNOFF

F. Hodge 5/24/85

PIPING MATERIAL TRACEABILITY

INDEPENDENT REVIEWS OF PHILLIPS, GETSCHOW COMPANY

MATERIAL TRACEABILITY SYSTEM

- ° ASME ACCREDITATION SURVEYS
 - ASME SECTION III, 1974 EDITION, SUMMER 1975
ADDENDA
 - THREE (3) SURVEYS PERFORMED, LATEST AUGUST,
1984
- ° PHILLIPS, GETSCHOW COMPANY INTERNAL AUDIT AND
SURVEILLANCE
- ° COMMONWEALTH EDISON COMPANY AUDIT AND SURVEILLANCE
- ° THIRD PARTY (AUTHORIZED NUCLEAR INSPECTOR)
INSPECTIONS
- ° ASME CODE COMMITTEE PERSONNEL -- FEBRUARY, 1984

PIPING MATERIAL TRACEABILITY

NRC CONCERNS AND ISSUES -- JULY, 1983

- ° NRC INSPECTOR STATED A DOCUMENTED QUALITY CONTROL INSPECTION MATERIAL VERIFICATION AT THE POINT OF INSTALLATION WAS REQUIRED IN ALL CASES TO MEET ASME CODE AND FEDERAL REGULATIONS
- ° NRC INSPECTORS QUESTIONED THE VALIDITY OF THE STORES REQUEST DOCUMENTATION AS AN ACCEPTABLE METHOD FOR MAINTENANCE OF HEAT NUMBER TRACEABILITY
- ° PHILLIPS, GETSCHOW COMPANY RESPONDED TO NRC CONCERN WITH PROCEDURAL CHANGES REQUIRING QUALITY CONTROL INSPECTORS TO BETTER DOCUMENT THEIR MATERIAL VERIFICATION INSPECTIONS DURING INSTALLATION ACTIVITIES (I.E. AT THE POINT OF INSTALLATION)
- ° PHILLIPS, GETSCHOW COMPANY UNDERTOOK A SAMPLE BASED MATERIAL TRACEABILITY VERIFICATION PROGRAM TO ESTABLISH CONFIDENCE IN PAST INSTALLATIONS

PIPING MATERIAL TRACEABILITY

SAMPLING PROGRAM AND RESULTS -- AUGUST, 1983

- ° RANDOM SAMPLE BASED ON MIL STANDARD 105D
- ° INCLUDED 1404 SMALL BORE PIPING ITEMS AND 551 LARGE BORE PIPING ITEMS
- ° TRACEABILITY VERIFIED BY MATERIAL MARKING AND/OR STORES REQUEST DOCUMENTATION
- ° STORES REQUEST DOCUMENTATION VALIDATED BY CORRELATION WITH MATERIAL MARKING
- ° RESULTS
 - POST-INSTALLATION MATERIAL TRACEABILITY WAS MAINTAINED FOR HIGH PERCENTAGE OF PIPING MATERIAL
 - STORES REQUEST DOCUMENTATION FOR MATERIAL TRACEABILITY VALIDATED THROUGH HIGH CORRELATION (GREATER THAN 99%) WITH MATERIAL MARKINGS

PIPING MATERIAL TRACEABILITY

MTV PROGRAM PURPOSE AND DESCRIPTION

- NRC REQUESTED ADDITIONAL ASSURANCE -- 100% VERIFICATION
- PURPOSE
 - ADDED ASSURANCE CORRECT PIPING MATERIALS INSTALLED
 - PROVIDE HIGH CONFIDENCE LEVEL IN STORES REQUEST DOCUMENTATION
- SCOPE
 - 100% ASME LARGE BORE PIPING INSTALLED PRIOR TO JANUARY 1, 1983
 - 100% ASME SMALL BORE PIPING INSTALLED PRIOR TO SEPTEMBER 6, 1983
- DESCRIPTION
 - SPECIAL PROCEDURES CONTROLLED PROGRAM
 - ENGINEERING PREPARATION OF VERIFICATION PACKAGES
 - INVOLVES FIELD AND OFFICE QUALITY CONTROL VERIFICATIONS
 - COMPUTER ENTRY OF DATA FOR SORTING

PIPING MATERIAL TRACEABILITY

MTV PROGRAM IMPLEMENTATION

- ° 57 PHILLIPS, GETSCHOW COMPANY QUALITY CONTROL PERSONNEL RECEIVED SPECIALIZED TRAINING AND CERTIFICATION IN MATERIAL INSPECTIONS AND EVALUATIONS
- ° 44 PHILLIPS, GETSCHOW COMPANY QUALITY CONTROL FIELD PERSONNEL PERFORMED A 100% INSPECTION OF APPROXIMATELY 26,000 INSTALLED (ACCESSIBLE) CODE ITEMS IN A PERIOD OF 14 MONTHS
- ° 13 PHILLIPS, GETSCHOW COMPANY QUALITY CONTROL OFFICE PERSONNEL REVIEWED OVER 60,000 QUALITY CONTROL DOCUMENTS
- ° TO DATE APPROXIMATELY 61,000 MANHOURS HAVE BEEN EXPENDED BY PHILLIPS, GETSCHOW COMPANY TO IMPLEMENT THIS PROGRAM (43,000 FIELD; 18,000 OFFICE)
- ° NUMEROUS AUDITS AND SURVEILLANCES COMPLETED BY INDEPENDENT PARTIES -- FAVORABLE RESULTS

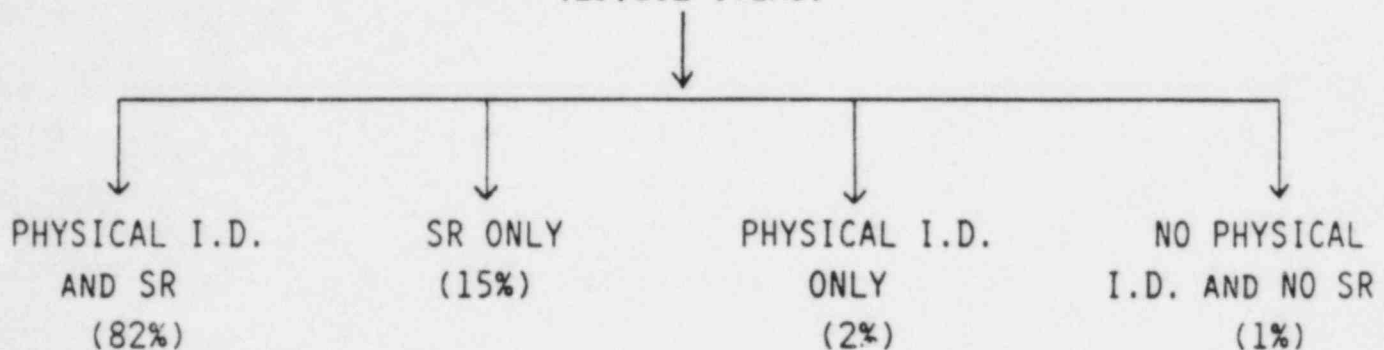
III. RESULTS AND SUMMARY OF MTV PROGRAM

PRESENTED BY

DAN SKOZA
MECHANICAL FIELD ENGINEER

MATERIAL TRACEABILITY VERIFICATION (MTV)

ITEMS VERIFIED BY REVIEW OF STORES REQUEST (SR)
AND PHYSICAL INSPECTION
(25,862 ITEMS)



PHYSICAL I.D. AND SR PRESENT
(21,164 ITEMS)

- 99% -- THE STORES REQUEST AND PHYSICAL I.D. AGREE,
ESTABLISHING POSITIVE TRACEABILITY.
- 1% -- THE STORES REQUEST AND PHYSICAL I.D. DO NOT AGREE
RESULTING IN POSSIBLE NONCONFORMANCES.

SR ONLY
(AS REQUIRED BY THE PHILLIPS, GETSCHOW COMPANY PROGRAM)
(3,998 ITEMS)

3,643 -- CODE ACCEPTABLE ITEMS

3,197 -- THE ASME CODE DOES NOT REQUIRE UNIQUE
TRACEABILITY AND THE ITEM HAS AN
ACCEPTABLE SR WITH A TRACEABLE NUMBER.

446 -- THE ASME CODE REQUIRES UNIQUE TRACEABILITY
AND THE ITEM HAS AN ACCEPTABLE SR WITH A
TRACEABLE NUMBER.

355 -- POSSIBLE NONCONFORMANCES

ADDITIONALLY:

DIGITAL THICKNESS MEASUREMENTS HAVE BEEN PERFORMED ON
ACCESSIBLE ITEMS TO CONFIRM THE SPECIFIED SCHEDULE OR
POUNDAGE WAS INSTALLED.

PHYSICAL I.D. ONLY
(581 ITEMS)

531 -- CODE ACCEPTABLE ITEMS

278 -- MANUFACTURER'S MILL MARKING EXISTS

145 -- THE ASME CODE DOES NOT REQUIRE UNIQUE
TRACEABILITY AND THE PHYSICAL I.D. INDICATES
A TRACEABLE NUMBER.

108 -- THE ASME CODE REQUIRES UNIQUE TRACEABILITY
AND THE PHYSICAL I.D. INDICATES A TRACEABLE
NUMBER.

50 -- POSSIBLE NONCONFORMANCES

NO PHYSICAL I.D. OR SR
(119 ITEMS)

NCR'S HAVE BEEN WRITTEN ON ALL ITEMS:

50 -- ITEMS ALREADY DISPOSITIONED AS CUTOUTS.

69 -- ITEMS UNDER REVIEW TO DETERMINE IF CODE
COMPLIANCE CAN BE ACHIEVED.

SUMMARY

- ° THE 100% VERIFICATION EFFORT CONFIRMS THE ORIGINAL PHILLIPS, GETSCHOW COMPANY SAMPLE PROGRAM.
- ° THE CORRELATION BETWEEN THE SR AND PHYSICAL I.D. IS 99%. THIS CORRELATION, BASED ON AN AFTER THE FACT LOOK, IS EXCEPTIONALLY HIGH.
- ° AT A MINIMUM, WE CONCLUDE THAT 97% OF THE MATERIAL MET THE ASME MATERIAL TRACEABILITY REQUIREMENTS.
- ° NCR'S WILL BE DISPOSITIONED ASSURING ASME CODE COMPLIANCE.

IV. MTV PROGRAM FROM ASME CODE PERSPECTIVE

PRESENTED BY

ED HEMZY
CONSTRUCTION MANAGER
AND ASME CODE PERSON FOR
COMMONWEALTH EDISON COMPANY

ASME CODE/MTV PROGRAM CORRELATION

- ASME SECTION III MATERIAL
- PHILLIPS, GETSCHOW COMPANY -- SECTION III
MATERIALS TRACEABILITY
- AUTHORIZED NUCLEAR INSPECTION
- COMMONWEALTH EDISON COMPANY ASME CODE COMMITMENT
- MTV VS. CURRENT TRACEABILITY
- NONCONFORMANCES AND ASME POSITION STATEMENT

ASME CODE/MTV PROGRAM CORRELATION

CONCERNS INVOLVING MATERIAL CONTROL FOR SECTION III CONSTRUCTION IS NOT UNIQUE TO THE BRAIDWOOD SITE. THE SUBJECT OF ASME SECTION III MATERIAL INVOLVING DOCUMENTATION AND TRACEABILITY HAS BEEN DEBATED AND DISCUSSED AT LENGTH IN COMMITTEE MEETINGS, OVER COMMITTEE ACTIONS AND MOST CERTAINLY BY COMMITTEE PERSONNEL OUTSIDE OF COMMITTEE ACTIVITIES. THE BOTTOM LINE, HOWEVER, IS THAT THERE IS REASONABLE AGREEMENT THAT CODE RULES SUPPORT THE IDEA THAT TRACEABILITY TO THE POINT WHERE MATERIAL IS CONSUMED OR INSTALLED IN SYSTEMS OR COMPONENTS SATISFIES ASME SECTION III CODE RULES (NX-4122).

THE QUESTION OF THE PHILLIPS, GETSCHOW STORES REQUEST SYSTEM FOR MAINTAINING TRACEABILITY DURING INSTALLATION ACTIVITIES AT THE BRAIDWOOD SITE WAS REVIEWED AT LENGTH AT A MEETING IN EARLY 1984 WITH NRC, AIA, SARGENT AND LUNDY AND COMMONWEALTH COMPANY PERSONNEL. AT THIS MEETING, CODE KNOWLEDGEABLE PERSONNEL OF ALL PARTIES INVOLVED REVIEWED THE SYSTEM IN DEPTH AND CONCLUDED THAT IT WAS A VIABLE SYSTEM AND THAT THE PHILLIPS, GETSCHOW PROCEDURES INCLUDED THE NECESSARY STEPS TO MEET THE ASME SECTION III CODE RULES. FURTHERMORE, THE PHILLIPS, GETSCHOW BRAIDWOOD SITE QUALITY ASSURANCE PROGRAM HAS BEEN SURVEYED BY ASME ON THREE OCCASIONS AND IT HAS BEEN JUDGED ACCEPTABLE FROM BOTH PROGRAMMATIC AND IMPLEMENTATION ASPECTS. ASME CERTIFICATES WERE ISSUED IN ALL CASES. I WAS PERSONALLY INVOLVED IN MEETINGS AND DISCUSSIONS OF THE PHILLIPS, GETSCHOW STORES REQUEST SYSTEM USED AT BRAIDWOOD AND I AGREE WITH THE CONCLUSIONS THAT IT WAS AN ACCEPTABLE PROGRAM.

IN ADDITION TO SCRUTINY BY ASME SURVEY TEAMS, THE PHILLIPS, GETSCHOW BRAIDWOOD SITE ACTIVITIES HAVE BEEN UNDER CONTINUOUS SURVEILLANCE BY AUTHORIZED NUCLEAR INSPECTORS FOR CODE COMPLIANCE. IT HAS ALWAYS BEEN MY CONSIDERED OPINION THAT THE THIRD PARTY INSPECTION IS THE STRENGTH AND BACKBONE OF THE ASME BOILER AND PRESSURE VESSEL CODE FOR ASSURING COMPLIANCE WITH CODE RULES.

FURTHER TO THE POINT OF ADHERENCE TO THE REQUIREMENTS OF ASME CODE CONSTRUCTION, IT IS FACT THAT COMMONWEALTH EDISON COMPANY HAS HAD ASME NUCLEAR ACCREDITATION FOR OVERALL CODE RESPONSIBILITY OF ITS NUCLEAR STATION CONSTRUCTION SINCE EARLY 1975. TOP MANAGEMENT HAS ALWAYS MAINTAINED A COMMITMENT TO SUPPORT THE ASME BOILER AND PRESSURE VESSEL CODE AND I HAVE EXPERIENCED THIS COMMITMENT FROM A CLOSE VANTAGE POINT.

THE CURRENT BRAIDWOOD MTV PROGRAM FOR 100% REVIEW OF DOCUMENTED RECORDS IS SUFFICIENTLY LONG AFTER WHEN THE WORK WAS PERFORMED TO RENDER POSITIVE CONCLUSIONS ABOUT LOST MATERIAL TRACEABILITY SOMEWHAT MOOT IN MY OPINION. THE CODE RULES IN EFFECT FOR THE BRAIDWOOD CONSTRUCTION ONLY REQUIRED THAT MARKING BE MAINTAINED ON A MATERIAL UNTIL INSTALLATION. THESE WORDS CAN BE FOUND IN PARAGRAPH 4122 FOR ALL CLASSES. IN THE MANY MONTHS -- IN SOME CASES YEARS -- SINCE INSTALLATION OF MANY ITEMS, IT IS INEVITABLE THAT SOME OF THE MARKINGS APPEAR TO HAVE BEEN DISTORTED OR LOST BECAUSE OF SUBSEQUENT INSTALLATION ACTIVITIES. THIS DOES NOT, IN MY OPINION, RENDER SUPPORT TO ANY CONTENTIONS OR CONCERNS THAT NON-COMPLIANCE TO CODE CONSTRUCTION EXISTS. THE RE-REVIEWS OF THE RECORDS STRONGLY SUPPORT AND HAVE SHOWN WITH LITTLE DOUBT IN MY MIND THAT THE PHILLIPS, GETSCHOW COMPANY STORES REQUEST SYSTEM ASSURED ADEQUATE TRACEABILITY TO THE POINT OF INSTALLATION.

WE MUST REALIZE THAT THE CODE RULES HAVE ALWAYS RECOGNIZED THAT NOTHING IS PERFECT AND ALLOW FOR THE EXISTENCE OF NONCONFORMANCES. TO THAT POINT, AN HISTORIC MEETING WAS CONVENED IN FEBRUARY OF 1984 AT DALLAS, TEXAS AND ATTENDED BY MANY ASME CODE KNOWLEDGEABLE PEOPLE. MANY OF THOSE IN ATTENDANCE HAD "HANDS-ON" EXPERIENCE WITH SECTION III NUCLEAR PLANT CONSTRUCTION. PERSONNEL REPRESENTED NRC, JURISDICTIONS, ARCHITECT/ENGINEERS, MANUFACTURERS, INSTALLERS, FABRICATORS, AND OWNERS. I ATTENDED THAT MEETING AND THERE WAS STRONG CONCERN THAT SPECIFIC SITE PROBLEMS ARE BLOWN OUT OF CONTEXT. AT THAT MEETING IT WAS GENERALLY AGREED THAT CONCERNS ARE BEST HANDLED BY CONTAINING THEM AT THE SITE AND RESOLVING THESE WITH THE INVOLVED PARTIES. FURTHER TO THIS POINT, AN ASME POSITION STATEMENT WAS DEVELOPED AND PUBLISHED IN THE SEPTEMBER, 1984 EDITION OF MECHANICAL ENGINEER. I WOULD LIKE TO QUOTE ONE VERY SIGNIFICANT PARAGRAPH FROM THAT ARTICLE.

"NONCONFORMANCE IS DEFINED IN NCA-9000 OF SECTION III, GENERAL REQUIREMENTS, AS A "DEFICIENCY IN CHARACTERISTIC, DOCUMENTATION, PROCEDURE THAT RENDERS AN ITEM OR ACTIVITY UNACCEPTABLE OR INDETERMINATE". THIS DEFINITION OF NONCONFORMANCE CAN CONCEIVABLY ENCOMPASS A WIDE RANGE OF POSSIBILITIES, BOTH IN VARIETY AND LEVEL OF SIGNIFICANCE TO SAFETY AND ADEQUACY OF THE EQUIPMENT. THE POSITION STATEMENT SIMPLY STATES THAT THE BEST APPROACH IN DECIDING WHAT NEEDS TO BE DONE TO VERIFY CODE COMPLIANCE WHEN A REPORTED DEFICIENCY MAKES THE QUALITY OF THE ITEM QUESTIONABLE, OR TO CORRECT A KNOWN DEFICIENCY, IS TO HAVE THE RESPONSIBLE PARTIES AGREE ON THE PLAN OF ACTION TO ENSURE THAT THE EQUIPMENT MEETS THE CODE."

THE ASME POLICY STATEMENT HAS LED TO RECOGNITION OF WHAT MIGHT BEST BE DESCRIBED AS THE MULTIPLE PARTY AGREEMENT OR MPA. IT IS MY CONSIDERED OPINION THAT THE MATERIAL TRACEABILITY VERIFICATION (MTV) EFFORT AT BRAIDWOOD SUPPORTS THE CONTENTION THAT THE PHILLIPS, GETSCHOW STORES REQUEST PROCEDURE ASSURED TRACEABILITY TO THE POINT OF INSTALLATION AND MET THE INTENT OF ASME SECTION III CODE RULES. WHERE SOME QUESTIONS MAY EXIST FOR SPECIFIC CASES, I BELIEVE THE CONCEPT OF MPA CAN BE USED AS A FINAL STEP TO SATISFY ALL INVOLVED PARTIES.

V. SUMMARY

PRESENTED BY

MIKE WALLACE
PROJECT MANAGER

STEPS TO ASSURE CODE COMPLIANCE

- ° DISPOSITION BY PHILLIPS, GETSCHOW COMPANY WITH CONCURRENCE OF THE AUTHORIZED NUCLEAR INSPECTION AGENCY.
- ° ADDITIONAL DISPOSITIONS APPROVED BY SARGENT AND LUNDY AND COMMONWEALTH EDISON COMPANY WITH CONCURRENCE OF PHILLIPS, GETSCHOW COMPANY AND THE AUTHORIZED NUCLEAR INSPECTION AGENCY.
- ° A MEETING IS PROPOSED FOR JUNE 13 OR JUNE 14, 1985 AT BRAIDWOOD SITE WITH REPRESENTATIVES OF JURISDICTIONAL AUTHORITIES TO DISCUSS IF A MULTI-PARTY AGREEMENT IS NECESSARY.

NATIONAL BOARD OF BOILER PRESSURE VESSEL INSPECTORS ARE PRESENTLY MONITORING ASME CODE CONSTRUCTION.

OUR GOAL IS TO ASSURE ASME CODE COMPLIANCE HAS BEEN MET.



Commonwealth Edison

One First National Plaza, Chicago, Illinois

Address Reply to: Post Office Box 767
Chicago, Illinois 60690

July 3, 1985

Mr. James G. Keppler
Regional Administrator
U. S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

SUBJECT: Material Traceability Verification Program - Correspondence
from Ill. State Fire Marshal's Office.
Braidwood Station Units 1 and 2
NRC Docket Nos. 50-456/457

Dear Mr. Keppler:

On June 25, 1985, Tom Maiman and Mike Wallace, and others of Commonwealth Edison Company met with you and members of the your staff to present and discuss the Material Traceability Verification (MTV) program. As a part of that presentation, we indicated that the Division of Boiler and Pressure Vessel Safety of the Illinois State Fire Marshal's Office has been involved in a review of the MTV Program. Specifically, that group, along with the Illinois Department of Nuclear Safety, was present at meetings held in Springfield on May 31, 1985 and at Braidwood on June 17, 1985. In the course of those meetings, the State agencies had opportunities to discuss the MTV Program with Commonwealth Edison Company personnel, the ASME Authorized Inspection Agency, and the ASME National Board.

Commonwealth Edison Company received the attached letter from the Division of Boiler and Pressure Vessel Safety of the Illinois State Fire Marshal's Office. Knowing of the interest that the NRC has on this topic, this letter is being forwarded to you.

Please address any questions that you or your staff may have concerning this matter to this office.

Very truly yours,

A. D. Miosi
Nuclear Licensing Administrator

cc: NRC Resident Inspector - Braidwood

Director of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

0331K



Office of the Illinois
State Fire Marshal

DIVISION OF BOILER AND PRESSURE VESSEL SAFETY

June 21, 1985

Michael J. Wallace
Project Manager
Commonwealth Edison Company
Braidwood Nuclear Power Station
Rt. 1, Box 81
Braceville, Illinois 60407

Dear Mr. Wallace:

The purpose of this letter is to extend to you my appreciation for your keeping this office advised of the results of your Material Traceability Verification Program (MTV). As a result of our meeting on June 17, 1985, I am satisfied that the corrective action program of Commonwealth Edison Company (CECO) has undertaken will result in assuring the piping systems at the Braidwood site will be in compliance with the requirements of the ASME Code.

Again, I would like to reiterate my position which I stated at the June 17, 1985 meeting; all decisions and acceptances of CECO's corrective action programs will be based on the advise and counsel of the National Board of Boiler and Pressure Vessel Inspectors' audit team presently on the Braidwood site.

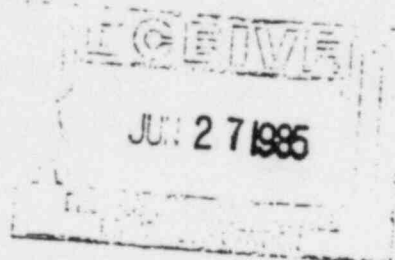
Very truly yours,

Duane R. Gallup

Supt. of Boiler & Pressure
Vessel Safety

DRG:lab

cc: Mike Parker, Department of Nuclear Safety
Harold L. Schmeilski, State Fire Marshal
Thomas W. Ortziger, Deputy Director





Commonwealth Edison

One First National Plaza, Chicago, Illinois

Address Reply to: Post Office Box 767

Chicago, Illinois 60690

July 8, 1985

Mr. James G. Keppler
Regional Administrator
U. S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

SUBJECT: Material Traceability Verification
(MTV) Program Presentation
Braidwood Station Units 1 and 2
NRC Docket Nos. 50-456/457

Dear Mr. Keppler:

On June 25, 1985 a presentation was made of the Braidwood Material Traceability Verification (MTV) Program. The purpose of this letter is to provide a summary of that presentation.

An Interim Report updating 10 CFR 50.55(e) No. 83-07 will be issued within a few weeks. It was delayed pending results of this meeting. The progress and findings of the MTV Program will be specified at that time.

Please address any questions that you or your staff may have concerning this matter to this office.

Very truly yours,

L. O. DelGeorge
Assistant Vice-President

LOD/dak

cc: NRC Resident Inspector - Braidwood

Director of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

(1643d)

ATTACHMENT 1

SUMMARY OF COMMENTS MADE BY COMMONWEALTH EDISON COMPANY PERSONNEL

July 11, 1985

INTRODUCTION

- In the summer of 1983, NRC personnel had a concern about traceability of piping materials. Simply stated, their concern was whether, for a particular field location, the specified or correct material was checked out of the Warehouse and installed, and whether our documentation of the material used is correct.

COMMONWEALTH EDISON COMPANY RESPONSE

- To address the NRC concern and confirm our confidence in a system which the Phillips, Getschow Company had used for many years in doing ASME work, we implemented a sampling review of the material traceability system. That review included a field walkdown of piping for identity of pipe markings, and a comparison of those markings to office documentation supporting material traceability. In February of 1984 we called in a team of ASME Code experts to review the Phillips, Getschow Company material traceability system, its implementation, and the results of the sampling effort. That team consisted of the following individuals:

- Ed Hemzy -- Commonwealth Edison Company
- Ernie Branch -- Sargent and Lundy
- Howard Dubell -- Hartford Steam Boiler

It was the opinion of the ASME Code knowledgeable persons that the Phillips, Getschow system, as established, was adequate, and, as implemented was adequate to meet ASME Code Material Traceability requirements.

- Commonwealth Edison Company personnel and the team of Code experts, presented those conclusions to NRC personnel in February of 1984. Despite the conclusions presented, NRC personnel requested additional assurance that the material traceability system had been adequately implemented.

MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

- In responding to the NRC's concern on this issue, Commonwealth Edison Company implemented the Material Traceability Verification Program, a 100% review of system implementation.

ACTIONS SUBSEQUENT TO MTV PROGRAM IMPLEMENTATION

- In addition to Ed Hemzy, Edison's Code knowledgeable person, the Project retained the services of another ASME Code knowledgeable person -- Mr. Bill Gibbons. Mr. Gibbons' expertise is in the materials area and materials application to ASME Code.
- The ASME National Board was invited to Braidwood by Edison, in response to discussions with the NRC. They have been at Braidwood since February 18, 1985. The National Board has been involved in the disposition of all non-conformances (NCR's) since about June 1, 1985, and is auditing NCR's dispositioned prior to their involvement. They are also auditing material traceability implementation after the 1983 cutoff dates.
- Based on discussions with us, it is our understanding that they believe:
 1. That the Phillips, Getschow System, as implemented, provided adequate traceability of material and that the Stores Request System complies with the ASME Code.
 2. That in dispositioning NCR's, Edison is taking a conservative approach and meeting ASME Code requirements.
 3. That, given our approach to resolving MTV related issues, Edison will end up with a piping installation in full compliance with the ASME Code.
 4. That the Code recognizes the occurrence of non-conformances as common, and therefore provides for non-conformance disposition and corrective action efforts, with involvement by the authorized inspection agency, as standard methods for assuring adequate resolution of the problems and compliance with the ASME Code.

- Commonwealth Edison Company, by it's own initiative, requested an opportunity to discuss the MTV Program and it's results with the ASME Local jurisdiction -- the Division of Boiler and Pressure Vessel Safety of the Illinois State Fire Marshal's Office. A meeting was arranged in Springfield on May 31, 1985 with representation also from the Illinois Department of Nuclear Safety. Subsequently, an additional meeting was held on June 17, 1985, at Braidwood. At the second meeting the results of the MTV Program were discussed in more detail, and the State of Illinois agencies had an opportunity again to discuss our efforts with the authorized inspection agency and the ASME National Board personnel.

Following the above meetings, Edison was informed that the personnel from the Illinois State Fire Marshal's Office were satisfied that our Program will result in assuring the piping systems at Braidwood site will be in compliance with the ASME Code. Further, they indicated that all decisions and acceptances of Edison's Program will be based on the advice and counsel of the ASME National Board personnel presently on the Braidwood site.

ATTACHMENT 2

COMMONWEALTH EDISON COMPANY

BRAIDWOOD STATION

MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

JUNE 25, 1985

NRC REGION III

GLEN ELLYN, ILLINOIS

MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

AGENDA

- | | | |
|------|---|---|
| I. | INTRODUCTION | MIKE WALLACE
PROJECT MANAGER |
| II. | PIPING MATERIAL TRACEABILITY
SYSTEM -- AND, MATERIAL
TRACEABILITY VERIFICATION
(MTV) PROGRAM | DAN SHAMBLIN
CONSTRUCTION SUPT. |
| III. | RESULTS AND SUMMARY OF
MTV PROGRAM | DAN SKOZA
MECHANICAL FIELD ENG. |
| IV. | MTV PROGRAM FROM ASME
CODE PERSPECTIVE | ED HEMZY
ASME B & PV COMMITTEE |
| V. | MTV PROGRAM OVERSIGHT | TOM QUAKA
SITE QUALITY ASSURANCE
SUPERINTENDENT |
| VI. | SUMMARY | MIKE WALLACE
PROJECT MANAGER |

BIOGRAPHICAL

DATA OF

PRESENTERS

BIOGRAPHICAL DATA

Michael J. Wallace
Assistant Manager of Projects (3 Years)
Project Manager ---- Braidwood Nuclear Power Station (2 Years)

Education

B.S. Electrical Engineering	Marquette University
MBA (Specialization: Finance)	University of Chicago
Nuclear Power School	United States Navy

Experience

Navy Nuclear Program (Qualified Engineer Officer)	5 years	U.S. Navy
Quality Assurance Engineer	3 years	Clinch River Breeder Reactor Project
Field Cost Engineer	1 year	LaSalle, Byron, and Braidwood
Project Coordinator	1 year	Byron Project
Asst. Station Superintendent	1 year	State Line Station
Station Superintendent	1 year	Waukegan Station

Registered Professional Engineer - Illinois
Member, American Nuclear Society
Member, Industry Review Group for Construction Project Evaluation
Division, Institute of Nuclear Power Operations (INPO)

BIOGRAPHICAL DATA

Edwin J. Hemzy
Construction Manager (3 1/2 Years)
Station Construction Department

Education

B.S.M.E. Mechanical Engineering	Illinois Institute of Technology
MBA	University of Chicago

Experience

Industrial/Utility Experience (Welding/Materials Engineering/ Manufacturing/Quality Assurance)	39 years	
Station Construction Department Quality Assurance Engineering Staff	16 years	Commonwealth Edison Company

For the past 12 years I have been deeply involved with ASME Boiler and Pressure Vessel Committee Activities including:

- Sub-Committee on Nuclear Accreditation
- Sub-Committee on Nuclear Power
- Main Committee
- Board of Nuclear Codes and Standards
- Board of Accreditation

BIOGRAPHICAL DATA

Daniel L. Shamblin
Project Construction Superintendent
Braidwood Nuclear Power Station (1 Year)

Education

B.S. Civil Engineering
MBA

Michigan Technological University
University of Chicago

Experience

Construction Engineer	6 years	Zion and LaSalle
Project Coordinator	2 years	LaSalle Project
Assistant to Project Manager	2 years	LaSalle Project
Construction Superintendent	1 year	LaSalle Project
Field Engineering Manager	1 year	Braidwood Project

Registered Professional Engineer - Illinois

BIOGRAPHICAL DATA

Daniel J. Skoza
Special Projects Supervisor
Project Field Engineering
Braidwood Nuclear Power Station (1 Year)

Education

B.S. Astronomy
M.S. Physics
M.S. Nuclear Engineering

University of Illinois
Louisiana State University
Iowa State University

Experience

Quality Assurance Engineer	3 1/2 years	LaSalle Project
Construction Engineer	3 years	LaSalle Project
Tech Staff Engineer	3 months	LaSalle Project

BIOGRAPHICAL DATA

Thomas E. Quaka
Quality Assurance Superintendent
Braidwood Nuclear Power Station (1 Year)

Education

B.S. Mechanical Engineering
MBA

University of Illinois
University of Chicago

Experience

Mechanical Engineer Dresden
& Quad Cities Project Group

6 years

Station Nuclear
Engineering Dept.

Quality Assurance Supervisor

2.5 years

LaSalle

Quality Assurance Superintendent

4.5 years

LaSalle/Braidwood

PROFESSIONAL AFFILIATIONS

Member of ASME Radwaste Committee - 9 years (1975-1983)
Chairman of Operations Sub-Committee - 5 years (1977-1983)
of the Radwaste Committee
Member Alternate - Sub-Committee - 2.5 years (1983 to present)
on Nuclear Accreditation

SUMMARY:

Mr. Gibbons has worked in manufacturing and the power industry since 1951. His domestic and overseas experience includes foundry engineering, materials engineering of power plant components and fuel, process development, supplier and contractor evaluation and development, quality systems, quality assurance, inspection and site erection and construction. Mr. Gibbons is a recognized expert in quality for Regulatory and ASME Boiler and Pressure Vessel Code Applications.

He has been involved in engineering review, licensing programs, and training. Since 1970, Mr. Gibbons has been an active participant as a member and chairman of Codes and Standards Committees in the development of requirements for power plant components. He has served utilities, architect/engineers, and manufacturers as a consultant on design, construction, and quality systems.

EDUCATION:

M.B.A., University of California, Berkeley 1958

B.S., Metallurgical Engineering, University of California, Berkeley, 1952

PROFESSIONAL BACKGROUND:

American Society of Mechanical Engineers

- o Member, Subgroup on General Requirements (SC III)
- o Co-Chairman, Working Group on Quality Assurance and Stamping (SC III)
- o Member, Subcommittee on Nuclear Accreditation
- o Task Group on Material Manufacturers and Suppliers (SC III)
- o ASME-COURSE DIRECTOR, Quality Assurance

ANSI/ASME NQA

- O Committee on Nuclear Quality Assurance

AMERICAN SOCIETY FOR QUALITY CONTROL

Past Member

- o ANSI B31.1, Power Piping
- o ANSI B31.7, Nuclear Power Piping
- o ASME Subgroup on Materials (SC III)
- o ASME Subgroup on Fabrication and Examination (SC III)
- o ASTM Materials Committees

PROFESSIONAL REGISTRATION:

Metallurgical Engineer (State of California)

Quality Engineer (State of California)

Qualified Lead Auditor, ANSI-N-45.2.23

EXPERIENCE:

1981-present

GIBBONS & ASSOCIATES

Los Gatos, California

President

Currently Consulting with utilities, manufacturers and architect-engineers

1980-1981

NUCLEAR TECHNOLOGY, INCORPORATED

San Jose, California

Chief Consultant, Quality

1969-1980

BECETEL POWER CORPORATION

San Francisco, California

Successively Supervising Metallurgical Engineer, Quality Assurance Manager, and Procurement/Supplier Quality Deputy Manager

1959-1969

GENERAL ELECTRIC COMPANY

San Jose, California

Successively Engineer, Manager, Quality Assurance Europe

1958-1959

SYLVANIA (GTE)

Mountain View, California

Contracts Administration Analyst

1956-1958

RIDGE FOUNDRY COMPANY

San Leandro, California

Metallurgist

1954-1956

U.S. ARMY

Fort Sill, Oklahoma

Instructor

1952-1954

WESTINGHOUSE ELECTRIC CORPORATION

Pittsburgh, Pennsylvania

Manufacturing Engineer

SECTION I
INTRODUCTION

PRESENTED BY

M. J. WALLACE

MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

OVERVIEW

NRC CONCERN

- ADEQUACY OF CONTROLS FOR ASSURING THE INSTALLATION OF CORRECT ASME CODE PIPING MATERIALS.

COMMONWEALTH EDISON COMPANY RESPONSE

- SAMPLING REVIEW OF SYSTEM IMPLEMENTATION (AUGUST, 1983 -- FEBRUARY, 1984)
- REVIEW OF SYSTEM FOR PROVIDING MATERIAL TRACEABILITY BY ASME CODE EXPERTS (FEBRUARY, 1984).
- 100% REVIEW OF SYSTEM IMPLEMENTATION THROUGH MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM (JUNE, 1985)

MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

MTV PROGRAM

- A UNIQUE, 30 MANYEAR, 100% PIPING WALKDOWN EFFORT
- VERIFIED MATERIAL TRACEABILITY THROUGH COMPARISON OF DOCUMENTATION WITH FIELD MARKINGS ON PIPE

OVERALL OBJECTIVE

- ASSURE THAT BRAIDWOOD PIPING INSTALLATION IS FULLY IN COMPLIANCE WITH THE ASME CODE

MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

SUMMARY OF CONCLUSIONS

- THE MATERIAL TRACEABILITY SYSTEM (PROCEDURES AND PRACTICES), ESTABLISHED BY PHILLIPS, GETSCHOW COMPANY, MET ASME CODE REQUIREMENTS.
- THE MTV PROGRAM CONFIRMS THAT THE SYSTEM ASSURED:
 - ADEQUATE TRACEABILITY OF MATERIALS
 - ADEQUATE INSTALLATION OF CORRECT MATERIAL
- ASME CODE COMPLIANCE IS BEING ACHIEVED

SECTION II

PIPING MATERIAL
TRACEABILITY SYSTEM
AND
MATERIAL TRACEABILITY
(MTV) PROGRAM

PRESENTED BY

D. L. SHAMBLIN

MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

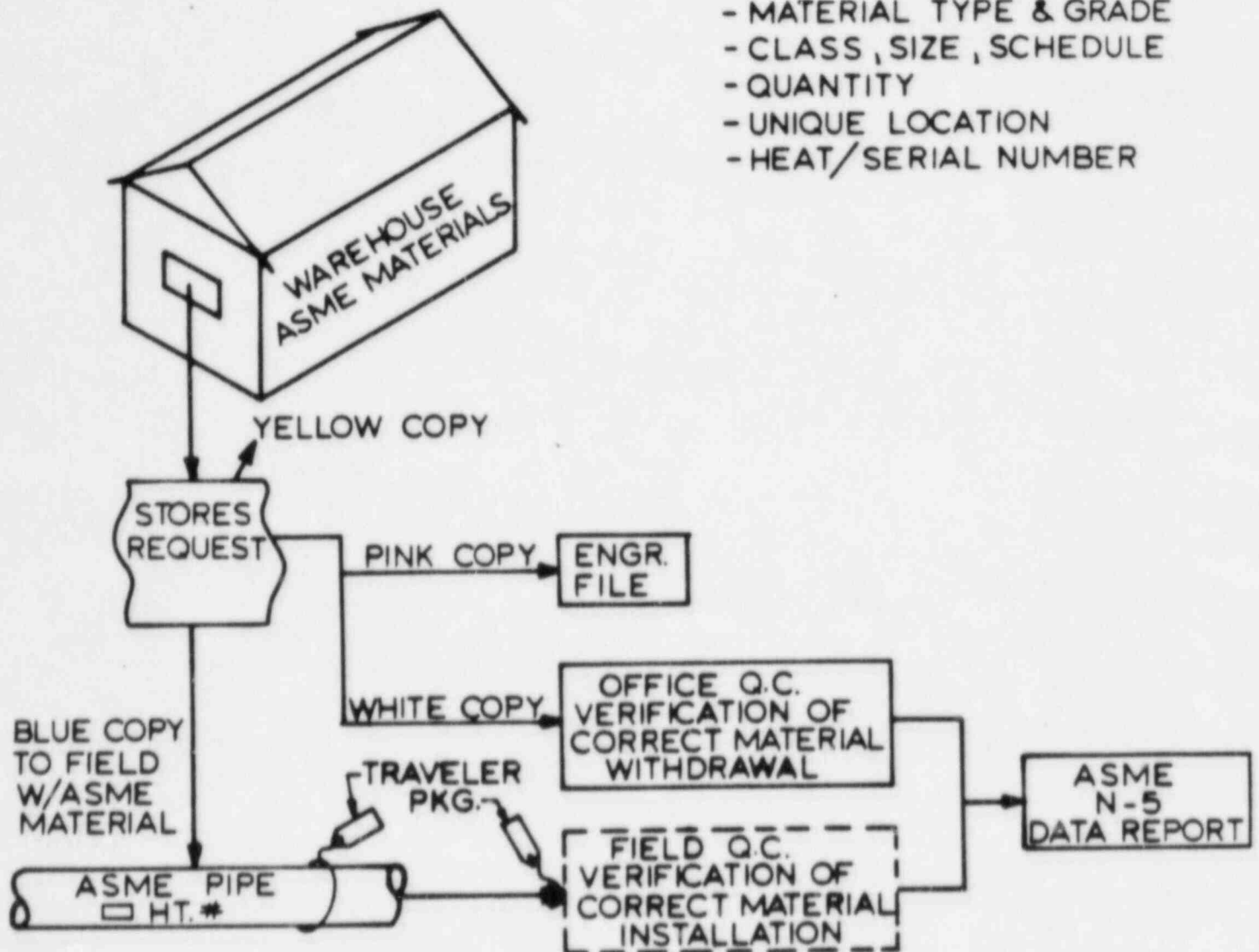
TOPICS

- PHILLIPS, GETSCHOW COMPANY MATERIAL TRACEABILITY SYSTEM
- NRC CONCERNS AND ISSUES -- JULY, 1983
- COMMONWEALTH EDISON COMPANY RESPONSES
- MTV PROGRAM PURPOSE AND DESCRIPTION
- MTV PROGRAM IMPLEMENTATION

MATERIAL STORES REQUEST SYSTEM

STORES REQUEST DENOTES:

- MATERIAL TYPE & GRADE
- CLASS, SIZE, SCHEDULE
- QUANTITY
- UNIQUE LOCATION
- HEAT/SERIAL NUMBER



MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

NRC CONCERNS AND ISSUES -- JULY, 1983

- ° A DOCUMENTED QUALITY CONTROL MATERIAL VERIFICATION AT THE POINT OF INSTALLATION SHOULD BE PERFORMED

- ° WITHOUT THE DOCUMENTED QUALITY CONTROL MATERIAL VERIFICATION, THE VALIDITY OF THE STORES REQUEST DOCUMENTATION AS AN ACCEPTABLE METHOD FOR MAINTENANCE OF HEAT NUMBER TRACEABILITY WAS QUESTIONABLE

MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

COMMONWEALTH EDISON COMPANY RESPONSE

- PHILLIPS, GETSCHOW COMPANY WAS DIRECTED TO IMPLEMENT PROCEDURAL CHANGES REQUIRING QUALITY CONTROL INSPECTORS TO BETTER DOCUMENT THEIR MATERIAL VERIFICATION INSPECTIONS DURING INSTALLATION ACTIVITIES (I.E. AT THE POINT OF INSTALLATION)
- PHILLIPS, GETSCHOW COMPANY WAS DIRECTED TO UNDERTAKE A SAMPLE BASED MATERIAL TRACEABILITY VERIFICATION PROGRAM TO ESTABLISH CONFIDENCE IN PAST INSTALLATIONS

SAMPLE PROGRAM RESULTS

- MATERIAL TRACEABILITY WAS VERIFIED FOR AN EXCEPTIONALLY HIGH PERCENTAGE OF PIPING MATERIAL BY MATERIAL MARKING AND/OR STORES REQUEST DOCUMENTATION
- STORES REQUEST DOCUMENTATION WAS VALIDATED THROUGH EXCEPTIONALLY HIGH CORRELATION WITH MATERIAL MARKINGS
- ASME CODE COMMITTEE MEMBERS REVIEW OF THE MATERIAL TRACEABILITY SYSTEM CONFIRMED THAT ASME CODE REQUIREMENTS WERE MET.
- NRC REQUESTED ADDITIONAL ASSURANCE -- 100% REVIEW OF INSTALLED ASME PIPING AND ATTACHMENTS

MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

MTV PROGRAM PURPOSE AND DESCRIPTION

° PURPOSE

- PROVIDE ADDED ASSURANCE THAT CORRECT PIPING MATERIALS WERE INSTALLED
- CONFIRM THE VALIDITY OF THE STORES REQUEST DOCUMENTATION

° SCOPE

- 100% ASME LARGE BORE PIPING AND ATTACHMENTS INSTALLED PRIOR TO JANUARY 1, 1983
- 100% ASME SMALL BORE PIPING AND ATTACHMENTS INSTALLED PRIOR TO SEPTEMBER 6, 1983

° DESCRIPTION

- SPECIAL PROCEDURES CONTROLLED PROGRAM
- ENGINEERING PREPARATION OF VERIFICATION PACKAGES
- INVOLVES FIELD AND OFFICE QUALITY CONTROL VERIFICATIONS
- COMPUTER ENTRY OF DATA FOR SORTING

SECTION III

RESULTS AND SUMMARY
OF THE
MTV PROGRAM

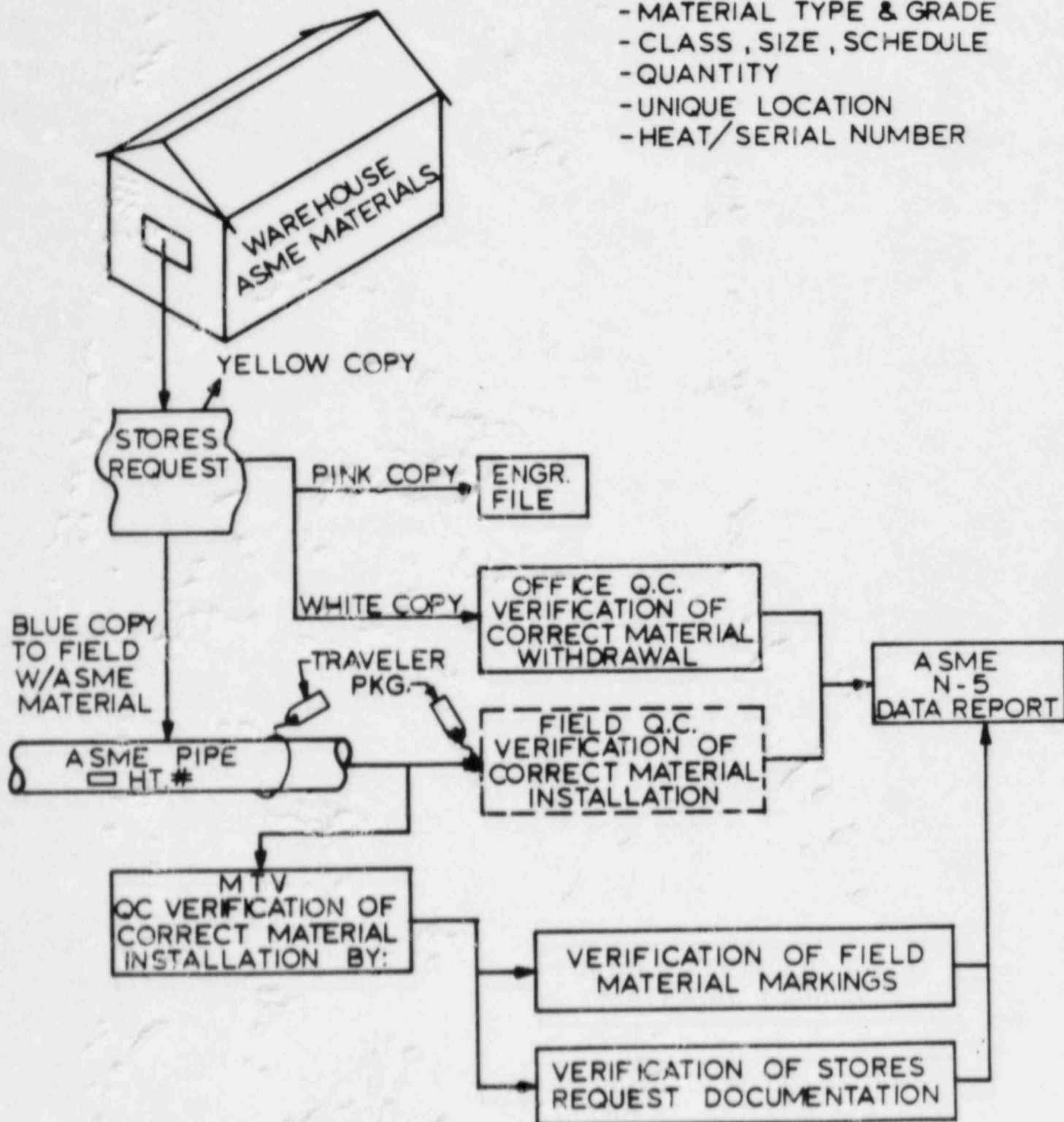
PRESENTED BY

D. J. SKOZA

MATERIAL STORES REQUEST SYSTEM

STORES REQUEST DENOTES:

- MATERIAL TYPE & GRADE
- CLASS, SIZE, SCHEDULE
- QUANTITY
- UNIQUE LOCATION
- HEAT/SERIAL NUMBER



MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

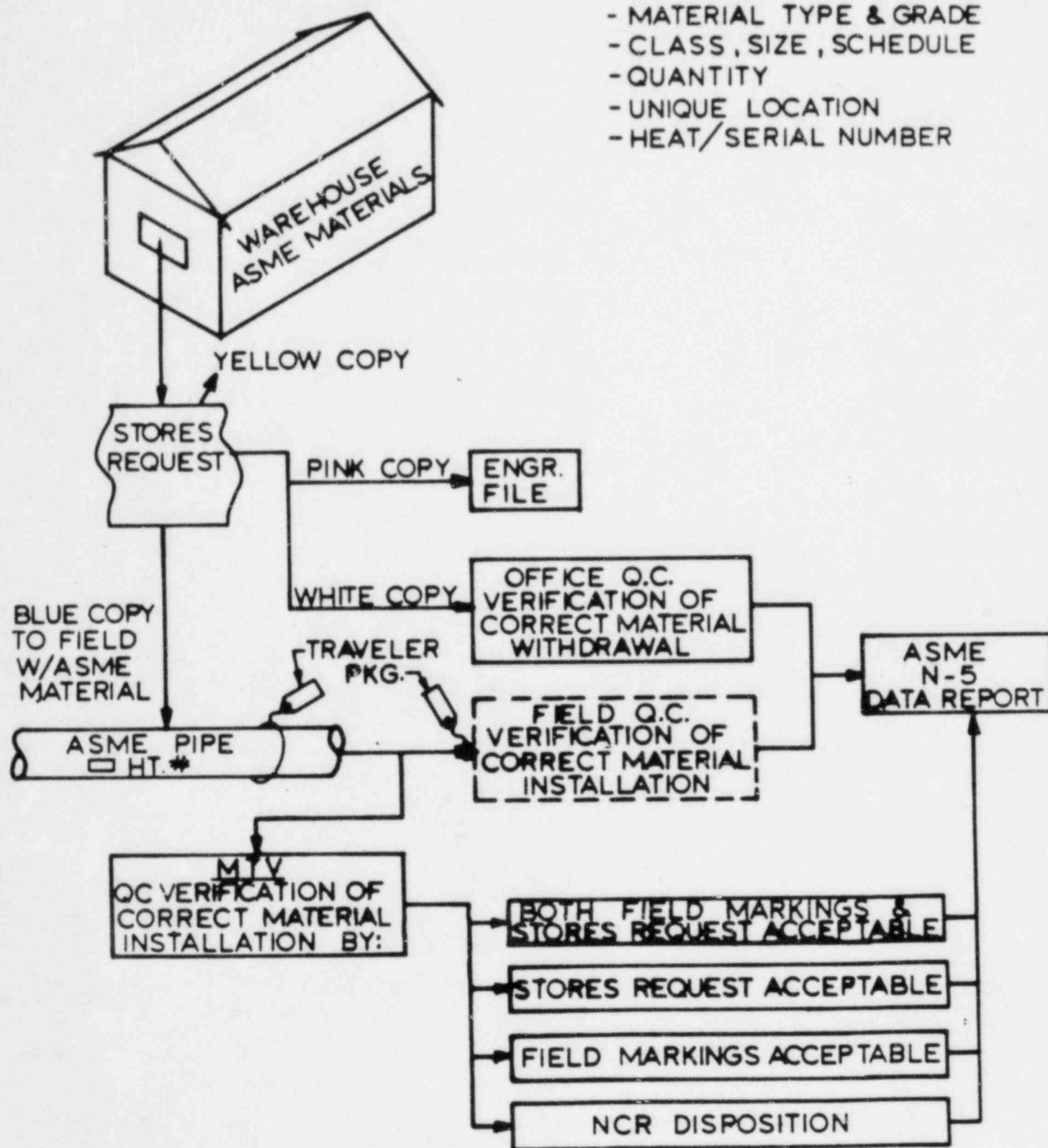
MTV PROGRAM IMPLEMENTATION

- 57 PHILLIPS, GETSCHOW COMPANY QUALITY CONTROL PERSONNEL RECEIVED SPECIALIZED TRAINING AND CERTIFICATION IN MATERIAL INSPECTIONS AND EVALUATIONS
- 44 PHILLIPS, GETSCHOW COMPANY QUALITY CONTROL FIELD PERSONNEL PERFORMED A 100% INSPECTION OF APPROXIMATELY 25,000 INSTALLED (ACCESSIBLE) CODE ITEMS IN A PERIOD OF 14 MONTHS
- 13 PHILLIPS, GETSCHOW COMPANY QUALITY CONTROL OFFICE PERSONNEL REVIEWED OVER 60,000 QUALITY CONTROL DOCUMENTS
- TO DATE APPROXIMATELY 61,000 MANHOURS HAVE BEEN EXPENDED BY PHILLIPS, GETSCHOW COMPANY TO IMPLEMENT THIS PROGRAM. (43,000 FIELD; 18,000 OFFICE)
- NUMEROUS AUDITS AND SURVEILLANCES COMPLETED BY INDEPENDENT PARTIES DURING PROGRAM IMPLEMENTATION

MATERIAL STORES REQUEST SYSTEM

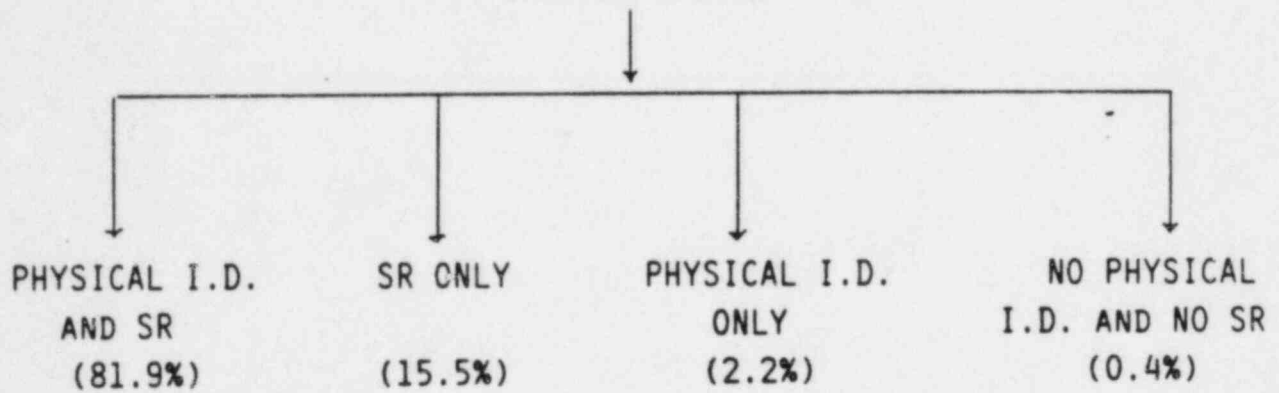
STORES REQUEST DENOTES:

- MATERIAL TYPE & GRADE
- CLASS, SIZE, SCHEDULE
- QUANTITY
- UNIQUE LOCATION
- HEAT/SERIAL NUMBER



MATERIAL TRACEABILITY VERIFICATION (MTV)

ITEMS VERIFIED BY PHYSICAL INSPECTION AND/OR
REVIEW OF STORES REQUEST (SR) DOCUMENTATION
(25,853 ITEMS)



PHYSICAL I.D. AND SR PRESENT
(21,164 ITEMS)

99% -- THE SR AND PHYSICAL I.D. AGREE ESTABLISHING
POSITIVE TRACEABILITY.

1% -- THE SR AND PHYSICAL I.D. DO NOT AGREE. FURTHERMORE,
(218 ITEMS) DISPOSITION OF THE NONCONFORMANCES INDICATES 165
ITEMS MEET ASME CODE REQUIREMENTS.

- THE CORRELATION OF 99% BETWEEN THE SR AND PHYSICAL I.D. IS
EXCEPTIONALLY HIGH.
- THIS CONFIRMS THE ACCEPTABILITY OF THE PGCO MATERIAL
TRACEABILITY SYSTEM.

SR ONLY
(AS REQUIRED BY THE PHILLIPS, GETSCHOW COMPANY PROGRAM)
(4,006 ITEMS)

3980 -- TRACEABLE ASME CODE ITEMS

3374 -- THE ITEM HAS AN ACCEPTABLE SR WITH A
TRACEABLE NUMBER, ALTHOUGH THE ASME CODE
DOES NOT REQUIRE HEAT TRACEABILITY.

606 -- THE ITEM HAS AN ACCEPTABLE SR WITH A
TRACEABLE NUMBER, WHEN THE ASME CODE
REQUIRES HEAT TRACEABILITY.

26 -- ITEMS DISPOSITIONED FOR REPLACEMENT BECAUSE
TRACEABILITY CANNOT BE ESTABLISHED.

PHYSICAL I.D. ONLY
(579 ITEMS)

557 -- TRACEABLE ASME CODE ITEMS

273 -- MANUFACTURER'S MILL MARKING EXISTS
ESTABLISHING TRACEABILITY

161 -- THE PHYSICAL I.D. INDICATES A TRACEABLE
NUMBER ALTHOUGH THE ASME CODE DOES NOT
REQUIRE HEAT TRACEABILITY

123 -- THE PHYSICAL I.D. INDICATES A TRACEABLE
NUMBER WHEN THE ASME CODE REQUIRES HEAT
TRACEABILITY

22 -- ITEMS DISPOSITIONED FOR REPLACEMENT BECAUSE
TRACEABILITY CANNOT BE ESTABLISHED.

MORE THAN 99% OF THE TIME, THE PHYSICAL I.D. NUMBERS TRANSFERRED
BY PGCO HAVE BEEN DETERMINED TO BE CORRECT.

NO PHYSICAL I.D. OR SR
(104 ITEMS)

73 -- TRACEABLE ASME CODE ITEMS

64 -- ITEMS DISPOSITIONED AS ACCEPTABLE
(THE ASME CODE DOES NOT REQUIRE HEAT
TRACEABILITY)

9 -- ITEMS DISPOSITIONED AS ACCEPTABLE
(THE ASME CODE REQUIRED HEAT
TRACEABILITY)

31 -- ITEMS DISPOSITIONED FOR REPLACEMENT BECAUSE
TRACEABILITY CANNOT BE ESTABLISHED.

NCR DISPOSITION OF MTV ITEMS TO ASSURE ASME CODE
TRACEABILITY REQUIREMENTS

- I. ITEMS INITIALLY DETERMINED TO BE NONCONFORMING WERE DISPOSITIONED AS ACCEPTABLE WHEN THE FOLLOWING EXISTS TO PROVIDE HEAT TRACEABILITY:

MILL MARKING

ADDITIONAL ASME CODE ACCEPTABLE PGCO DOCUMENTATION

- II. THE S&L SPECIFICATION AND PGCO PIPING MATERIAL TRACEABILITY PROGRAM REQUIRES HEAT TRACEABILITY TO THE SPECIFIED LOCATION FOR ASME CLASS 1, 2, AND 3 PIPING. IN CASES LISTED BELOW, THIS IS MORE RESTRICTIVE THAN ASME CODE RULES.

THE FOLLOWING ITEMS ARE DISPOSITIONED AS ACCEPTABLE WHEN THE PGCO DOCUMENTATION INDICATES THE S&L SPECIFIED MATERIAL TYPE AND GRADE WAS INSTALLED.

- CLASS 1 AND 2 PIPING AND FITTINGS $\leq 3/4"$ ϕ PER NA-3767.4(B)
- CLASS 2 AND 3 INTEGRAL ATTACHMENTS PER NC/ND-2130 AND 2190
- CLASS 3 CONSTRUCTION PER ND-2150

- III. ITEMS DETERMINED AS NOT MEETING THE ASME CODE REQUIREMENTS ARE REMOVED AND REPLACED.

MTV SUMMARY

- THE ACCEPTABILITY OF THE PGCO SR SYSTEM HAS BEEN CONFIRMED.
- PHYSICAL IDENTIFICATION OR PGCO DOCUMENTATION EXISTS TO ESTABLISH MATERIAL TRACEABILITY.
- OF THE .5% (132) OF THE 25,853 ITEMS THAT REQUIRE REPLACEMENT DUE TO MATERIAL TRACEABILITY, PRELIMINARY ANALYSIS INDICATES
 - FOR 122 ITEMS THE MATERIAL TYPE AND THICKNESS WERE KNOWN AND WERE CORRECT.
 - ACTUAL STRESS LEVELS ARE LOW.
 - NO DESIGN SIGNIFICANT DISCREPANCIES EXISTED.
- DISPOSITION OF ANY ITEMS UNRELATED TO MATERIAL TRACEABILITY, WHICH WOULD LIKELY BE FOUND IN A N-5 REVIEW, IS IN PROCESS AND WILL RESULT IN ACCEPTABLE MATERIAL.

SECTION IV

MTV PROGRAM
FROM ASME CODE
PERSPECTIVE

PRESENTED BY

E. J. HEMZY

ASME CODE/MTV PROGRAM CORRELATION

CONCERNS INVOLVING MATERIAL CONTROL FOR ASME SECTION III CONSTRUCTION IS NOT UNIQUE TO THE BRAIDWOOD SITE. THE SUBJECT OF ASME SECTION III MATERIAL INVOLVING DOCUMENTATION AND TRACEABILITY HAS BEEN DEBATED AND DISCUSSED AT LENGTH IN ASME COMMITTEE MEETINGS, OVER COMMITTEE ACTIONS AND MOST CERTAINLY BY COMMITTEE PERSONNEL OUTSIDE OF ASME COMMITTEE ACTIVITIES. THE BOTTOM LINE, HOWEVER, IS THAT ASME CODE RULES SUPPORT THE IDEA THAT TRACEABILITY TO THE POINT WHERE MATERIAL IS CONSUMED OR INSTALLED IN SYSTEMS OR COMPONENTS DURING INSTALLATION SATISFIES ASME SECTION III CODE RULES.

THE QUESTION OF THE PHILLIPS, GETSCHOW STORES REQUEST PROCEDURE FOR MAINTAINING TRACEABILITY DURING INSTALLATION ACTIVITIES AT THE BRAIDWOOD SITE WAS REVIEWED AT LENGTH AT A MEETING IN EARLY 1984 WITH NRC, AUTHORIZED INSPECTION AGENCY, SARGENT AND LUNDY AND COMMONWEALTH EDISON COMPANY PERSONNEL. AT THIS MEETING, CODE KNOWLEDGEABLE PERSONNEL OF THE PARTIES INVOLVED REVIEWED THE SYSTEM IN DEPTH AND CONCLUDED THAT IT WAS A VIABLE SYSTEM AND THAT THE PHILLIPS, GETSCHOW PROCEDURES INCLUDED THE MINIMUM NECESSARY STEPS TO MEET THE ASME SECTION III CODE RULES. FURTHERMORE, THE PHILLIPS, GETSCHOW BRAIDWOOD SITE QUALITY ASSURANCE PROGRAM, WHICH INCLUDED THE STORES REQUEST PROCEDURES, HAS BEEN SURVEYED BY ASME ON THREE OCCASIONS AND HAS BEEN JUDGED ACCEPTABLE FROM BOTH PROGRAMMATIC AND IMPLEMENTATION ASPECTS FOR MEETING ASME CODE RULES. ASME CERTIFICATES OF AUTHORIZATION WERE ISSUED IN ALL CASES. FURTHERMORE, I HAVE BEEN PERSONALLY INVOLVED IN MEETINGS AND DISCUSSIONS OF THE PHILLIPS, GETSCHOW STORES REQUEST SYSTEM USED AT BRAIDWOOD AND I AGREE THAT IT WAS AND CONTINUES TO BE AN ACCEPTABLE PROGRAM AND CONFORMS TO ASME CODE RULES IN EFFECT FOR THE BRAIDWOOD SITE CONSTRUCTION.

IN ADDITION TO SCRUTINY BY ASME SURVEY TEAMS, THE PHILLIPS, GETSCHOW BRAIDWOOD SITE PIPING INSTALLATION ACTIVITIES HAVE BEEN UNDER CONTINUOUS SURVEILLANCE BY AUTHORIZED NUCLEAR INSPECTORS FOR ASME CODE COMPLIANCE. IT HAS ALWAYS BEEN MY CONSIDERED OPINION THAT THE INDEPENDENT THIRD PARTY INSPECTION BY AUTHORIZED INSPECTORS IS THE STRENGTH AND BACKBONE OF THE ASME BOILER AND PRESSURE VESSEL CODE FOR ASSURING COMPLIANCE WITH ASME CODE RULES. I BELIEVE I HAVE STRONG SUPPORT FOR THAT OPINION.

FURTHER TO THE POINT OF ADHERENCE TO THE REQUIREMENTS OF ASME CODE CONSTRUCTION, COMMONWEALTH EDISON COMPANY HAS HAD ASME NUCLEAR ACCREDITATION FOR ASSUMING OVERALL CODE RESPONSIBILITY FOR CONSTRUCTION OF ITS NUCLEAR POWER GENERATING STATIONS SINCE EARLY 1975. TOP MANAGEMENT HAS ALWAYS MAINTAINED A COMMITMENT TO SUPPORT THE ASME BOILER AND PRESSURE VESSEL CODE AND COMPLIANCE WITH ITS RULES.

THE CURRENT BRAIDWOOD MTV PROGRAM FOR 100% REVIEW OF DOCUMENTED RECORDS IS SUFFICIENTLY LONG AFTER WHEN THE WORK WAS PERFORMED TO RENDER POSITIVE CONCLUSIONS ABOUT INCOMPLETE MATERIAL TRACEABILITY BASED ON REVIEW OF MATERIAL MARKING SOMEWHAT MOOT IN MY OPINION. THE CODE RULES IN EFFECT FOR THE BRAIDWOOD CONSTRUCTION ONLY REQUIRED THAT MARKING BE MAINTAINED ON A MATERIAL UNTIL INSTALLATION. THESE WORDS CAN BE FOUND IN PARAGRAPH 4122 FOR ALL CLASSES OF CONSTRUCTION IN THE 1974 EDITION, 1975 SUMMER ADDENDA RULES WHICH ARE IN EFFECT FOR THE BRAIDWOOD CONSTRUCTION. IN THE TIME SPAN SINCE ACTUAL INSTALLATION OF MANY ITEMS, IT IS APPARENT THAT SOME OF THE IDENTIFICATION MARKINGS HAVE BEEN DISTORTED OR LOST BECAUSE OF SUBSEQUENT INSTALLATION ACTIVITIES. THIS DOES NOT, IN MY OPINION, REPRESENT NON-COMPLIANCE WITH CODE RULES.

THE ASME CODE RULES DO NOT ADDRESS THE NEED FOR MAINTAINING MATERIAL MARKING BEYOND THE TIME OF INSTALLATION. THE RE-REVIEWS OF THE RECORDS STRONGLY SUPPORT AND HAVE SHOWN, WITH LITTLE DOUBT IN MY MIND, THAT THE PHILLIPS, GETSCHOW COMPANY STORES REQUEST SYSTEM ASSURED ADEQUATE TRACEABILITY TO THE POINT OF INSTALLATION.

THE ASME CODE RULES HAVE ALWAYS RECOGNIZED THAT NOTHING IS PERFECT AND ALLOW FOR THE EXISTENCE OF NONCONFORMANCES. TO THAT POINT, AN HISTORIC MEETING WAS CONVENED IN FEBRUARY OF 1984 AT DALLAS, TEXAS AND ATTENDED BY MANY ASME CODE KNOWLEDGEABLE PEOPLE. MANY OF THOSE IN ATTENDANCE HAD "HANDS-ON" EXPERIENCE WITH ASME SECTION III NUCLEAR PLANT CONSTRUCTION. PERSONNEL REPRESENTED NRC, JURISDICTIONS, ARCHITECT/ENGINEERS, MANUFACTURERS, INSTALLERS, FABRICATORS, AND OWNERS. I ATTENDED THAT MEETING AND THERE WAS STRONG CONCERN THAT SPECIFIC SITE PROBLEMS ARE BLOWN OUT OF CONTEXT. AT THAT MEETING IT WAS AGREED THAT CONCERNS ARE BEST HANDLED BY CONTAINING THEM AT THE SITE AND RESOLVING THESE WITH THE INVOLVED PARTIES. FURTHER TO THIS POINT, AN ASME POSITION STATEMENT WAS DEVELOPED AS A RESULT OF THAT MEETING AND PUBLISHED IN THE SEPTEMBER, 1984 EDITION OF MECHANICAL ENGINEER, THE OFFICIAL PUBLICATION OF ASME. I WOULD LIKE TO QUOTE ONE VERY SIGNIFICANT PARAGRAPH FROM THAT ARTICLE.

"NONCONFORMANCE IS DEFINED IN NCA-9000 OF SECTION III, GENERAL REQUIREMENTS, AS A DEFICIENCY IN CHARACTERISTIC, DOCUMENTATION, OR PROCEDURE THAT RENDERS AN ITEM OR ACTIVITY UNACCEPTABLE OR INDETERMINATE. THIS DEFINITION OF NONCONFORMANCE CAN CONCEIVABLY ENCOMPASS A WIDE RANGE OF POSSIBILITIES, BOTH IN VARIETY AND LEVEL OF SIGNIFICANCE TO SAFETY AND ADEQUACY OF THE EQUIPMENT.

THE POSITION STATEMENT SIMPLY STATES THAT THE BEST APPROACH IN DECIDING WHAT NEEDS TO BE DONE TO VERIFY CODE COMPLIANCE WHEN A REPORTED DEFICIENCY MAKES THE QUALITY OF THE ITEM QUESTIONABLE, OR TO CORRECT A KNOWN DEFICIENCY, IS TO HAVE THE RESPONSIBLE PARTIES AGREE ON THE PLAN OF ACTION TO ENSURE THAT THE EQUIPMENT MEETS THE CODE."

IT IS MY CONSIDERED OPINION THAT THE MATERIAL TRACEABILITY VERIFICATION EFFORT AT BRAIDWOOD VERIFIES THAT THE PHILLIPS, GETSCHOW STORES REQUEST PROCEDURE ASSURED TRACEABILITY TO THE POINT OF INSTALLATION AND MET THE ASME SECTION III CODE RULES. TO REACH THIS CONCLUSION I HAVE REVIEWED THE WORK OF SITE PERSONNEL USED IN COMPILING THE DATA FOR THE MTV PROGRAM AND DISPOSITIONING OF NONCONFORMANCES AND I AM CONVINCED THAT THERE HAS BEEN, AND WILL BE, PROPER RESOLUTION OF MATERIAL INSTALLATION. THIS REVIEW HAS REINFORCED MY CONFIDENCE IN THE PHILLIPS, GETSCHOW STORES REQUEST SYSTEM FOR ASSURING INSTALLATION OF REQUIRED MATERIAL IN ASME SECTION III CONSTRUCTION AT BRAIDWOOD. THIS IS CONSISTENT WITH THE POSITION WHICH I STATED IN EARLY 1984 AT THE MEETING OF COMMONWEALTH EDISON COMPANY, NRC REGION III PERSONNEL, AND OTHER INVOLVED PARTIES. THE QUALITY RECORDS ON FILE AT THE SITE ALONG WITH RELATED DOCUMENTATION STRONGLY SUPPORT THAT CORRECT MATERIAL WAS INSTALLED IN PIPING SYSTEMS AT THE BRAIDWOOD NUCLEAR PLANT.

MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

ASME CODE/BRAIDWOOD MTV PROGRAM CORRELATION

- ASME SECTION III RULES ARE SATISFIED BY MATERIAL TRACEABILITY TO POINT OF CONSUMPTION OR INSTALLATION
- PHILLIPS, GETSCHOW COMPANY STORES REQUEST PROCEDURE MEETS ASME CODE RULES
- AUTHORIZED NUCLEAR INSPECTION IS INDEPENDENT OVERVIEW AND VERIFICATION OF CONFORMANCE TO CODE RULES
- COMMONWEALTH EDISON COMPANY MANAGEMENT IS COMMITTED TO ASME CODE COMPLIANCE
- BRAIDWOOD MTV PROGRAM VERIFIES THAT PHILLIPS, GETSCHOW COMPANY STORES REQUEST PROCEDURE PROVIDED METHOD FOR TRACKING REQUIRED MATERIAL TO POINT OF INSTALLATION
- ASME POSITION STATEMENT RECOGNIZES NONCONFORMANCES AND RESOLUTION TO MEET ASME CODE RULES

SECTION V

MTV
PROGRAM
OVERSIGHT

PRESENTED BY

T. E. QUAKA

OVERVIEW OF THE MTV PROGRAM
BY EDISON SITE QUALITY ASSURANCE

- 0 PARTICIPATED IN THE PROGRAM DEVELOPMENT
- 0 REVIEWED AND APPROVED IMPLEMENTING PROCEDURES
- 0 PERFORMED AUDITS AND SURVEILLANCES OF BOTH FIELD AND OFFICE ACTIVITIES. ONLY MINOR ITEMS WERE IDENTIFIED.
- 0 REVIEWED ALL MTV RELATED NCR'S GENERATED (ON-GOING) TO:
 - ASSURE PROPOSED DISPOSITIONS WERE APPROPRIATE
 - VERIFY THAT CORRECTIVE ACTIONS ARE PROPERLY COMPLETED

INDEPENDENT OVERVIEWS

MTV PROGRAM AND ITS IMPLEMENTATION WAS MONITORED/REVIEWED
BY

- O EDISON QUALITY ASSURANCE
- O PHILLIPS, GETSCHOW QUALITY ASSURANCE
- O AUTHORIZED NUCLEAR INSPECTORS
- O NATIONAL BOARD
- O INSTITUTE OF NUCLEAR POWER OPERATIONS (INPO)
- O BRAIDWOOD CONSTRUCTION ASSESSMENT PROGRAM (BCAP)

EXAMPLES OF Q.A. ITEMS IDENTIFIED

- 0 RESOLVE LOG INCONSISTENCIES DUE TO PROCEDURAL CHANGES.
- 0 PROCEDURE REVISION ADDED A FORM AND DETERMINATION OF NEED FOR BACKFIT WAS TO BE PERFORMED.
- 0 ADD COMMENTS ON THE CHECKLISTS TO PROVIDE CLARITY WHEN CORRECTIONS ARE MADE.

OVERVIEW BY OTHER GROUPS

- 0 EDISON CORPORATE QUALITY ASSURANCE PERFORMED AN EVALUATION OF THE MTV PROGRAM AND CONCLUDED THAT THE ESTABLISHED PROGRAM ADEQUATELY ADDRESSED THE ORIGINAL NRC CONCERNS.
- 0 AUTHORIZED NUCLEAR INSPECTORS HAVE MONITORED THE PROGRAM ON AN ON-GOING BASIS.
- 0 PGCO QUALITY ASSURANCE MONITORED THEIR PORTION OF THE MTV PROGRAM THROUGH AUDIT AND SURVEILLANCE.
- 0 OTHER ORGANIZATIONS LOOKING AT THE PROGRAM INCLUDED INPO, BCAP, AND MOST RECENTLY THE NATIONAL BOARD AUDIT TEAM. THEIR COMMENTS HAVE BEEN ADDRESSED AND HAVE PROVIDED ADDED ASSURANCE THAT THE MTV PROGRAM WAS PROPERLY EXECUTED.

GENERAL CONCLUSION:

SITE QUALITY ASSURANCE INVOLVEMENT IN CONJUNCTION WITH THE COMMENTS FROM THE OTHER ORGANIZATIONS LEAD TO OUR CONCLUSION THAT THE MTV PROGRAM HAS BEEN PROPERLY IMPLEMENTED AND DOCUMENTED.

SECTION VI

SUMMARY

PRESENTED BY

M. J. WALLACE

MATERIAL TRACEABILITY VERIFICATION (MTV) PROGRAM

SUMMARY

OVERALL OBJECTIVE

- ° ASSURE THAT BRAIDWOOD PIPING INSTALLATION IS FULLY IN COMPLIANCE WITH THE ASME CODE

ACTIONS SUBSEQUENT TO MTV PROGRAM IMPLEMENTATION

- ° REVIEW BY ASME CODE EXPERTS
- ° REVIEW BY ASME NATIONAL BOARD
- ° MEETINGS AND DISCUSSIONS WITH ILLINOIS DIVISION OF BOILER INSPECTION, ATTENDED BY ILLINOIS DEPARTMENT OF NUCLEAR SAFETY

CONCLUSIONS

- ° THE BRAIDWOOD PIPING INSTALLATION COMPLIES WITH THE ASME CODE
- ° COMMONWEALTH EDISON'S INTENTION IS TO CONTINUE TO ASSURE COMPLIANCE WITH THE ASME CODE REGARDING RESOLUTION OF ANY PROBLEMS IDENTIFIED AND COMPLETION OF NEW INSTALLATIONS