

BRAIDWOOD CONSTRUCTION ASSESSMENT PROGRAM (BCAP)

MONTHLY BRIEFING

PRESENTED TO

REGIONAL OFFICE -- REGION III
U. S. NUCLEAR REGULATORY COMMISSION

N. N. KAUSHAL
BCAP DIRECTOR
DECEMBER 6, 1984

PRESENTATION OUTLINE

DOCUMENTATION STATUS

CSR PROGRESS

RPSR PROGRESS

RSCAP PROGRESS

MANPOWER STATUS

SUMMARY STATUS

BCAP DOCUMENTATION STATUS

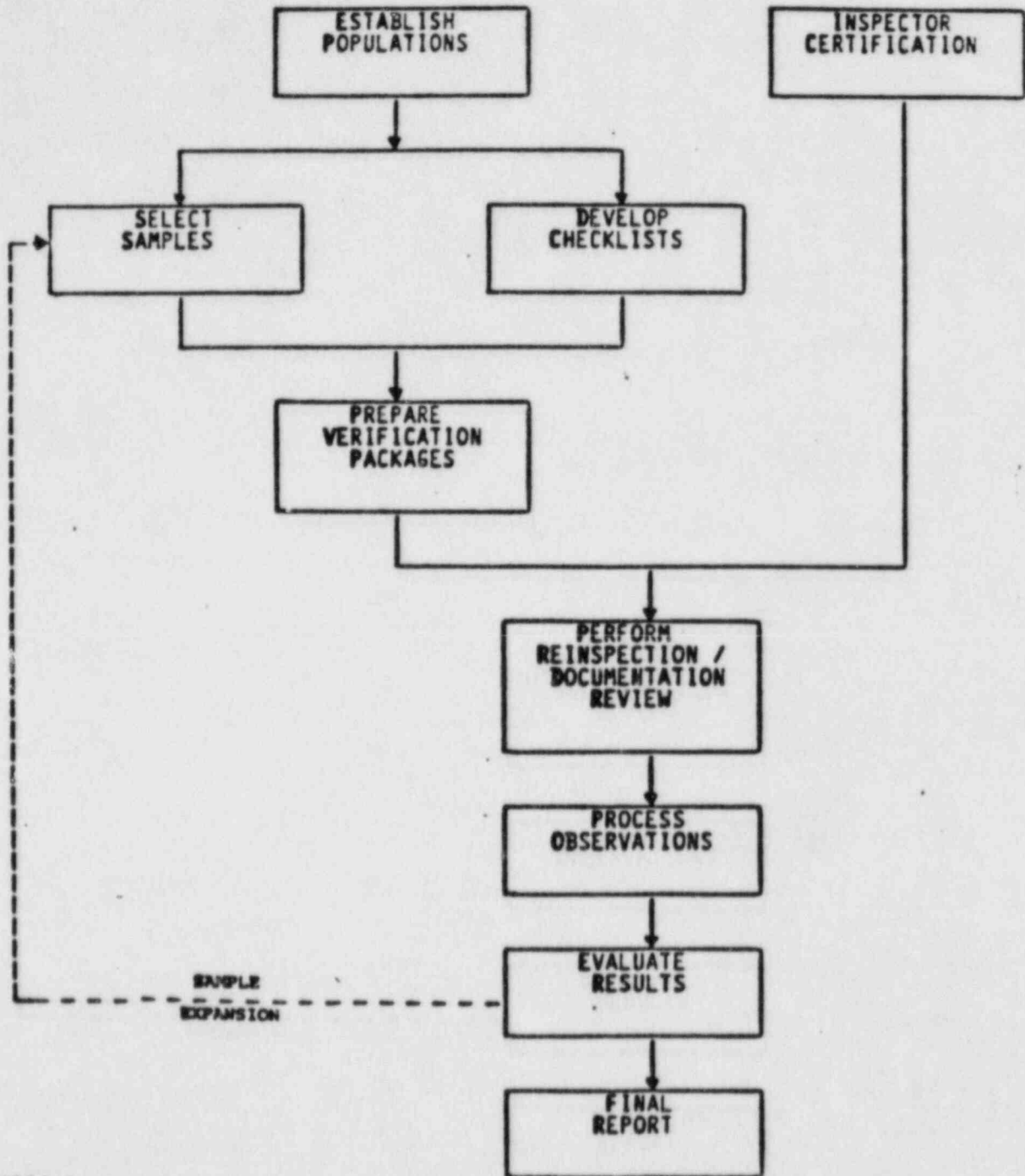
THE PROGRAM DOCUMENT HAS BEEN UPDATED TO INCLUDE:

- MINOR EDITORIAL CHANGES AND CORRECTIONS

- REVISED CRITERIA ON INSPECTION ATTRIBUTES FOR
SAMPLE EXPANSIONS (PER LETTER O'CONNOR TO KEPPLER,
AUGUST 30, 1984)

- ELIMINATION OF COMMONWEALTH EDISON DESIGNATED
REPRESENTATIVE POSITION

CSR MAJOR ACTIVITIES



(0500J)

CSR: ESTABLISHMENT OF POPULATIONS

IDENTIFICATION OF CONSTRUCTION CATEGORIES:

- ° 35 CATEGORIES (POPULATIONS) IDENTIFIED TO DATE
- ° 29 OF 35 POPULATION DESCRIPTIONS WRITTEN

IDENTIFICATION OF ITEMS IN POPULATION:

- ° 17 OF 35 COMPLETE

CSR: SAMPLE SELECTION

RANDOM PORTION:

- 13 OF 35 POPULATIONS COMPLETE

ENGINEERING JUDGEMENT PORTION:

- BACKGROUND INFORMATION REVIEW COMMENCED

CSR: DEVELOPMENT OF CHECKLISTS

POPULATION-SPECIFIC CHECKLISTS:

- 18 OF 35 REINSPECTION CHECKLISTS PREPARED
- 5 OF 35 DOCUMENTATION CHECKLISTS PREPARED
- 14 APPROVED FOR PACKAGE PREPARATION

GENERIC CHECKLISTS:

- 5 OF 10 GENERIC CHECKLISTS PREPARED
- 3 WELDING CHECKLISTS COMPLETED

CSR: PREPARATION OF VERIFICATION PACKAGES

- 310 PACKAGES IN 7 POPULATIONS ARE RELEASED FOR REINSPECTION

- 30 DOCUMENTATION REVIEW PACKAGES COMPLETED

CSR: INSPECTOR CERTIFICATION

LEVEL III

- 4 DISCIPLINES CERTIFIED
 - CIVIL/STRUCTURAL
 - MECHANICAL
 - WELDING
 - ELECTRICAL

LEVEL II

- 4 CIVIL/STRUCTURAL
- 9 MECHANICAL
- 10 WELDING
- 3 ELECTRICAL

22 INSPECTORS CERTIFIED

CSR: REINSPECTIONS AND DOCUMENTATION REVIEWS

REINSPECTIONS:

- COMMENCED OCTOBER 5, 1984
- 225 COMPLETE AS OF DECEMBER 4, 1984
- 392 OBSERVATION REPORTS WRITTEN

DOCUMENTATION REVIEWS:

- NOT STARTED

RPSR MAJOR ACTIVITES

OVERALL RPSR CONSISTS OF THREE PRINCIPAL STEPS:

- IDENTIFY APPLICABLE SARGENT & LUNDY SPECIFICATIONS AND CONTRACTOR PROCEDURES.

- PREPARE CHECKLISTS INCLUDING:
 - CONSTRUCTION REQUIREMENTS FROM FSAR AND SPECIFICATIONS

 - PERSONNEL QUALIFICATION/CERTIFICATION REQUIREMENTS

- REVIEW CONTRACTOR PROCEDURES AGAINST CHECKLIST REQUIREMENTS

RPSR PROGRESS - CONT'D

IDENTIFICATION OF APPLICABLE SARGENT & LUNDY SPECIFICATIONS:

- 9 SPECIFICATIONS APPLICABLE

IDENTIFICATION OF CONTRACTOR PROCEDURES:

- 500 PROCEDURES FROM 9 CONTRACTORS HAVE BEEN VERIFIED APPLICABLE

(1034D)

RPSR PROGRESS - CONT'D

- IDENTIFICATION OF CONSTRUCTION REQUIREMENTS IN FSAR:
 - REVIEW COMPLETED

- IDENTIFICATION OF CONSTRUCTION REQUIREMENTS IN NINE APPLICABLE SPECIFICATIONS:
 - APPROXIMATELY 80% COMPLETED

- IDENTIFICATION OF PERSONNEL QUALIFICATION/CERTIFICATION REQUIREMENTS:
 - COMPLETED

RPSR PROGRESS - CONT'D

- ° COMPARISON OF CHECKLIST REQUIREMENTS TO CONTRACTOR PROCEDURAL REQUIREMENTS:
 - WALKTHROUGH CONDUCTED TO CHECK WORKABILITY OF PROCEDURAL STEPS

- ° IDENTIFICATION OF CHECKLIST REQUIREMENTS NOT COVERED BY CONTRACTOR PROCEDURES:
 - WALKTHROUGH CONDUCTED TO CHECK WORKABILITY OF PROCEDURAL STEPS

RSCAP PROGRESS

ALL SCAPS (LISTED BELOW) ARE UNDER RSCAP REVIEW:

- QUALITY CONTROL STRUCTURAL STEEL REVIEW
- SAFETY RELATED PIPE SUPPORTS
- NSSS COMPONENT SUPPORTS
- QUALITY CONTROL INSPECTOR REINSPECTION (ON HOLD)
- ELECTRICAL INSTALLATION DOCUMENTATION REVIEW
- REINSPECTION OF SAFETY RELATED MECHANICAL EQUIPMENT
- HVAC WELDING, CONFIGURATION, STIFFENERS FITTINGS
- PIPING MATERIAL VERIFICATION AND TRACEABILITY
- INSTRUMENTATION INSTALLATION VERIFICATION

(1034D)

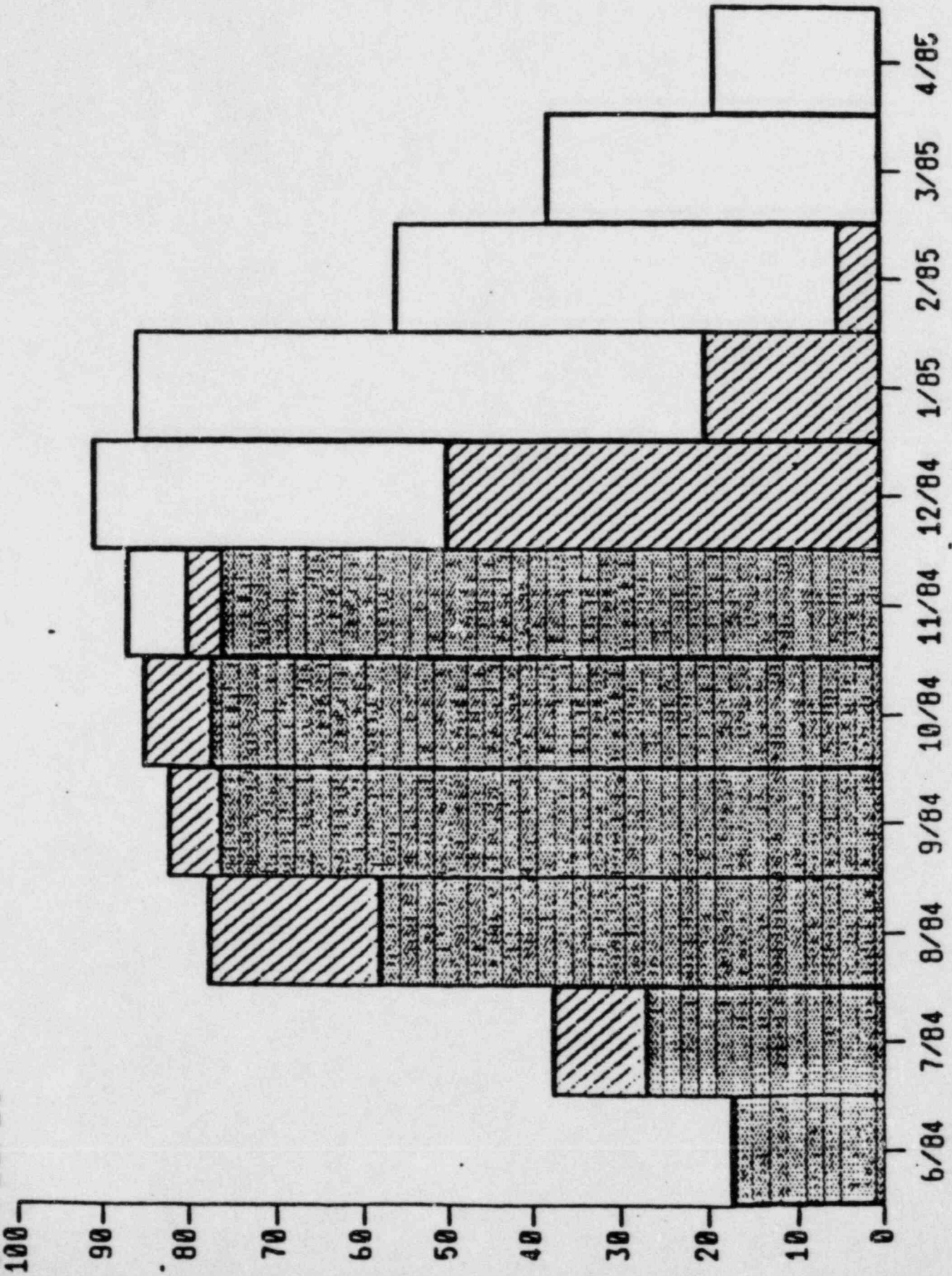
RSCAP PROGRESS - CONT'D

- RSCAP ELECTRICAL LEAD WHO WAS TEMPORARILY ASSIGNED TO CSR FOR CERTIFICATION AS LEVEL III ELECTRICAL INSPECTOR HAS BEEN RETURNED TO RSCAP

(1034D)

EQUIVALENT MANPOWER

OF PEOPLE



12-06-84

Enclosure 3
Page 1 of 9

CSR DISCREPANCIES BY CONTRACTOR

<u>CONTRACTOR</u>	<u>POPULATION</u>	<u>RECEIVED</u>	<u>COMPLETED</u>
COMSTOCK	CABLE PAN HANGERS	1	0
PULLMAN	DUCTS	30	5
	EQUIPMENT INSTALLATION	1	1
	DUCT HANGERS	27	6
PHILLIPS GETSCHOW	SMALL BORE PIPING	3	2
NEWBURG	CONCRETE PLACEMENT	11	5
		—	—
	TOTALS	73	19

12-06-84

Enclosure 3
Page 2 of 9

CSR DISCREPANCIES BY CATEGORY

<u>CATEGORY</u>	<u>RECEIVED</u>	<u>COMPLETED</u>
<u>WELDING</u> - UNDERCUT, UNDERSIZE, POROSITY	31	4
<u>DIMENSIONAL</u> - LOCATION, LENGTH	9	4
<u>BOLTING</u> - LOOSE, MISSING, PATTERN	7	2
<u>CONCRETE SURFACE DEFECT</u>	6	1
<u>DUCT DAMAGE</u> - DENTS, HOLES	3	1
<u>WRONG MATERIAL</u> - GAUGE, SIZE	4	-
<u>INCOMPLETE HVAC</u> - SEALANT, CONNECTION	2	-
<u>EMBEDMENTS</u>	3	1
<u>HVAC FIT-UP</u> - DUCT, HANGERS, DAMPER	2	1
<u>FABRICATION</u> - CABLE PAN HANGER FIELD FAB	1	-
<u>INVALID</u> - NOT DISCREPANT, NOT SAFETY RELATED	5	5
	<hr/>	<hr/>
	73	19

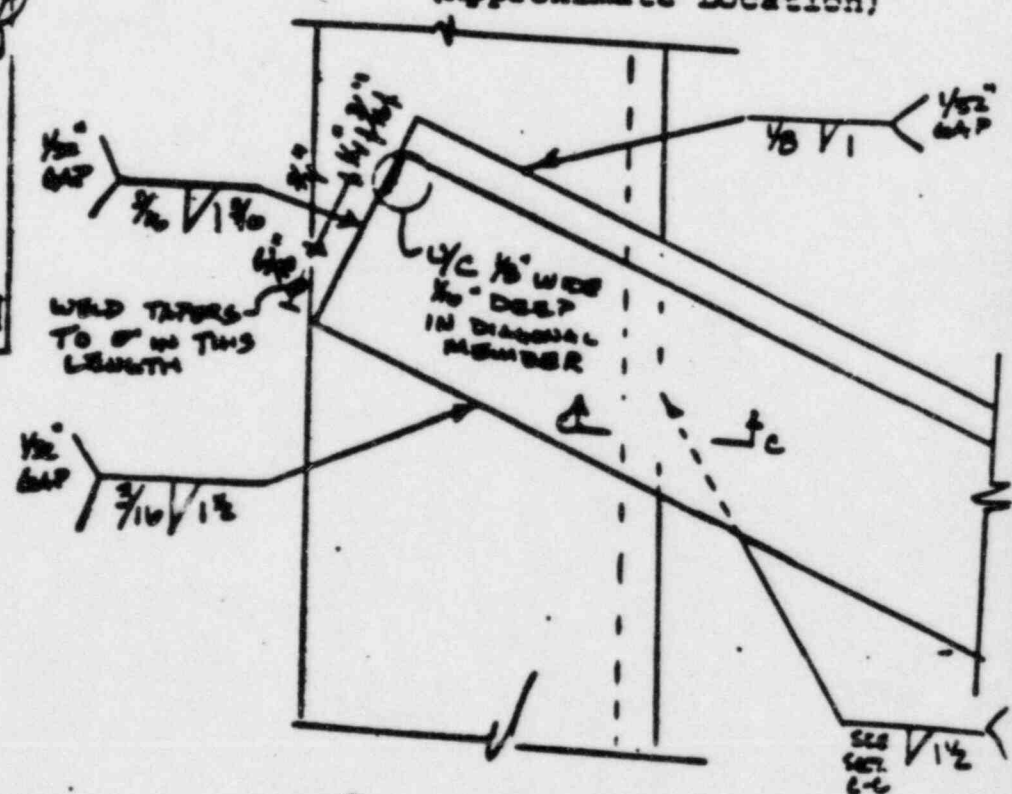
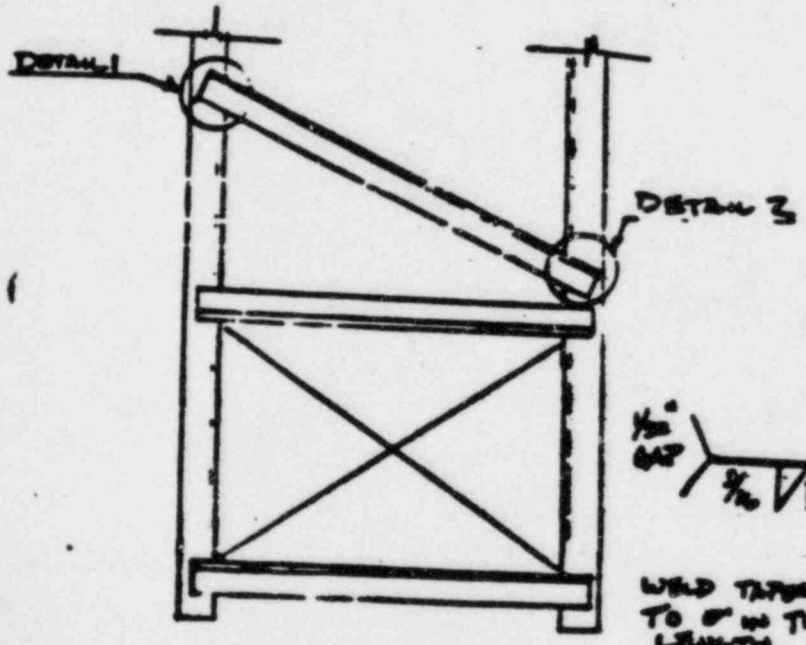
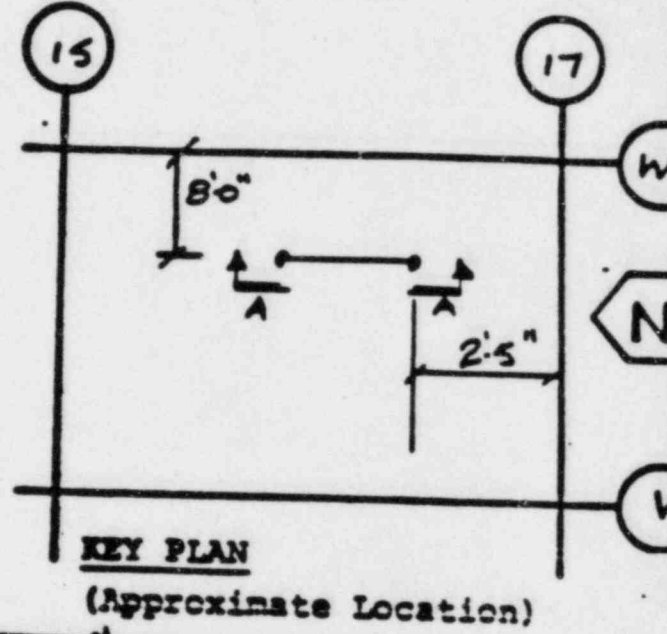
BRAIDWOOD CONSTRUCTION ASSESSMENT PROGRAM

CSR WELD MAP

Population: HVAC HANGERS & AUX SH.
Identification No: CSR-I-H-03
Observation Record No: CSR-I-H-03003-112
Package No: CSR-I-H-03003
Drawing No: M-1310-1 REV N
Approximate Elevation: 359'-6
Equipment Description: HVAC HANGER
Component No: 107

Braidwood Station Units 1&2
Project 4683/4684
Commonwealth Edison Company
Safety Related
Calculation No. _____
Revision No. _____
Page _____ of _____

Inspector
Signature: [Signature]
Inspector: Keith Daniels
Date Inspected: 11-1-84
PAGE 1004



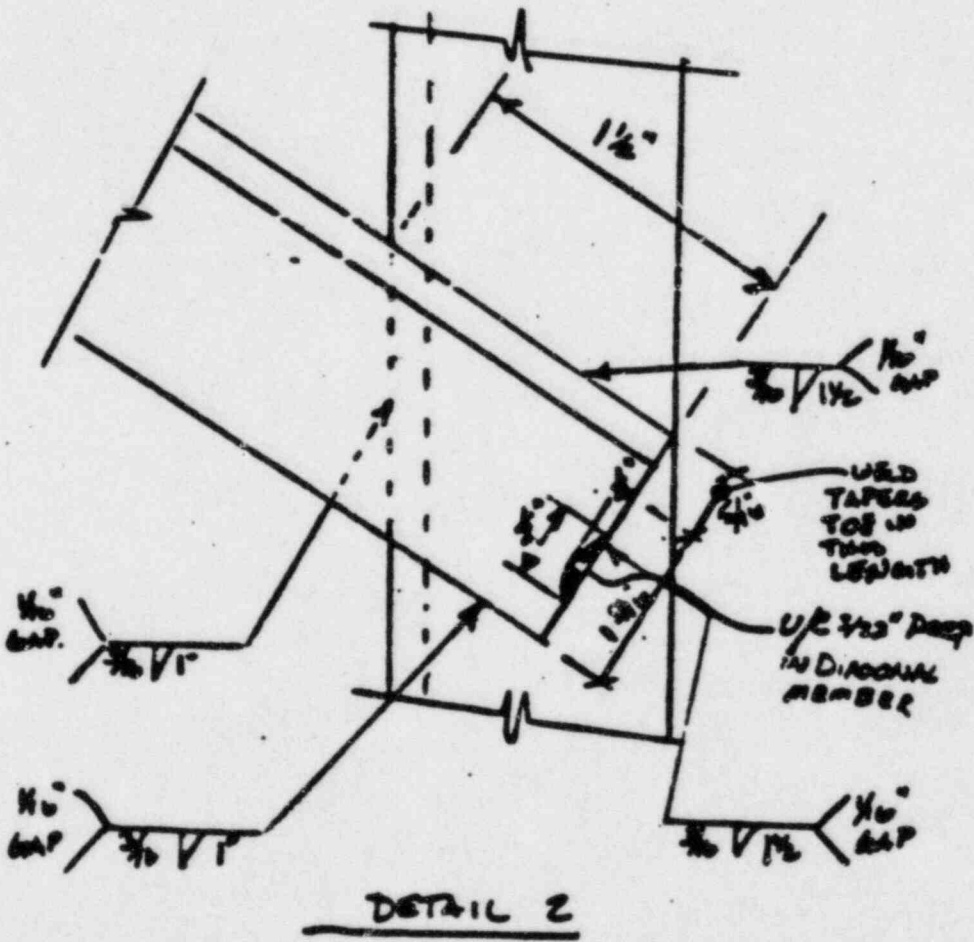
BRAIDWOOD CONSTRUCTION ASSESSMENT PROGRAM

CSR WELD MAP

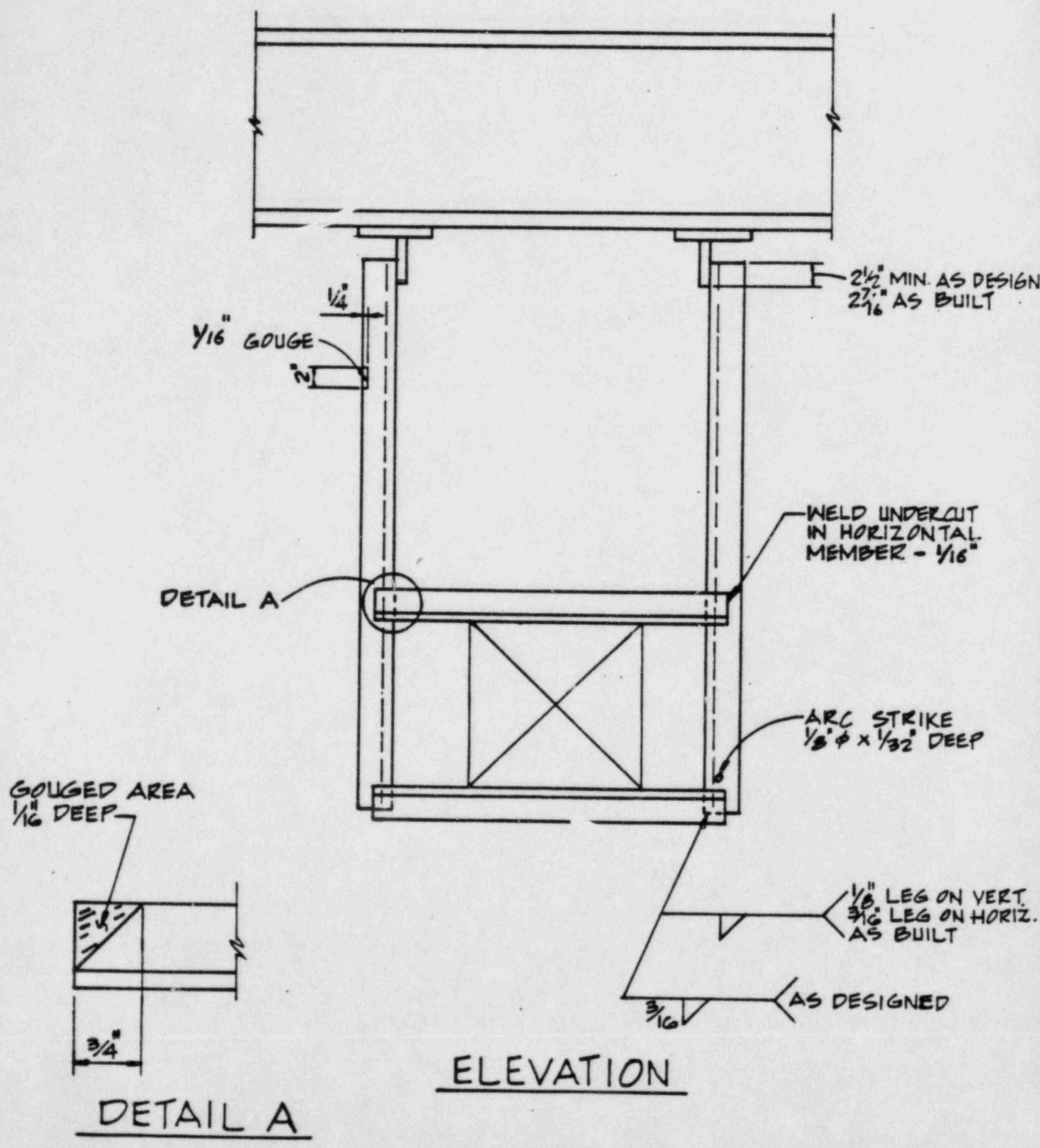
Weld Map Continuation

Identification No: CSR-I-H-03
Observation Record No: CSR-I-H-03-003-142
Package No: CSR-I-H-03-003
Component No: 107
Drawing No: M-1310-1 REV H
Inspector Signature: *[Signature]*
Date Inspected: 11-1-94
Page 5 of 7

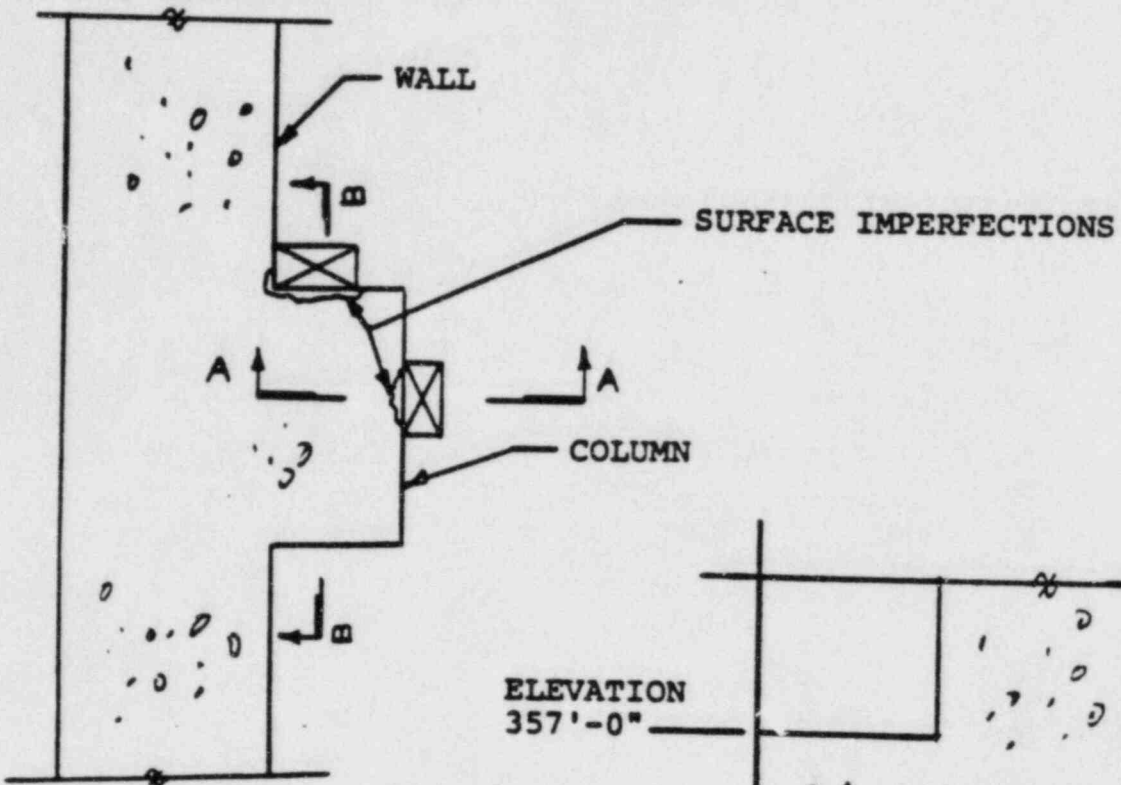
Braidwood Station Units 1
Project 4683/4684
Commonwealth Edison Company
Safety Related
Calculation No: _____
Revision No: _____
Page _____ of _____



WELD DISCREPANCIES ON HVAC SUPPORTS

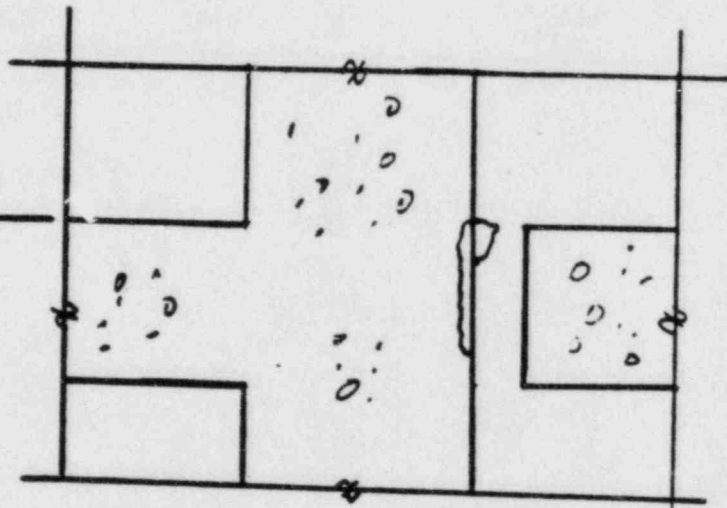


IN
CONCRETE WALL AND COLUMN

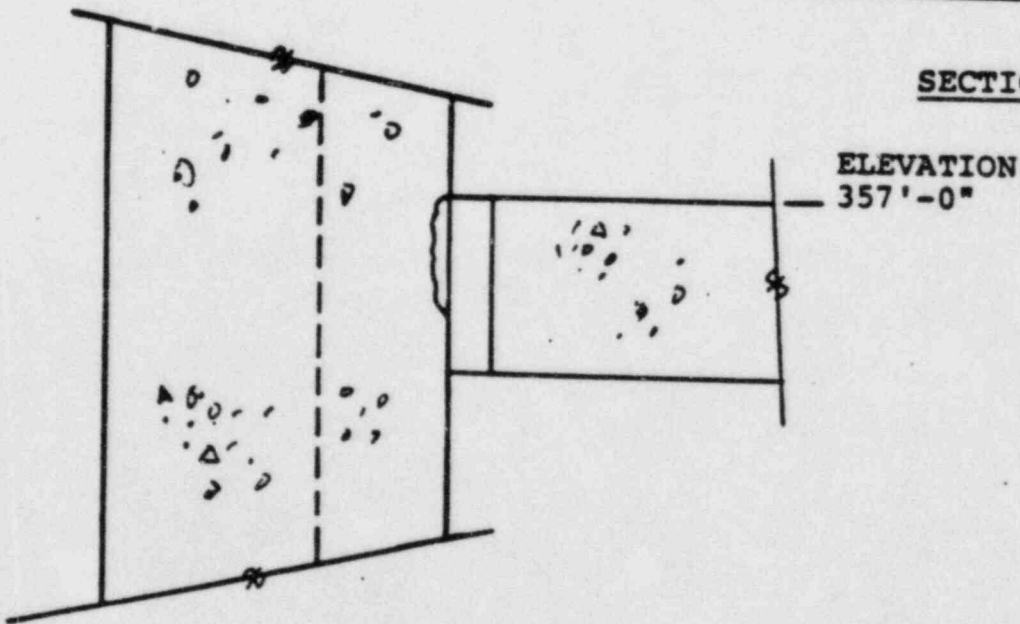


PLAN

ELEVATION
357'-0"

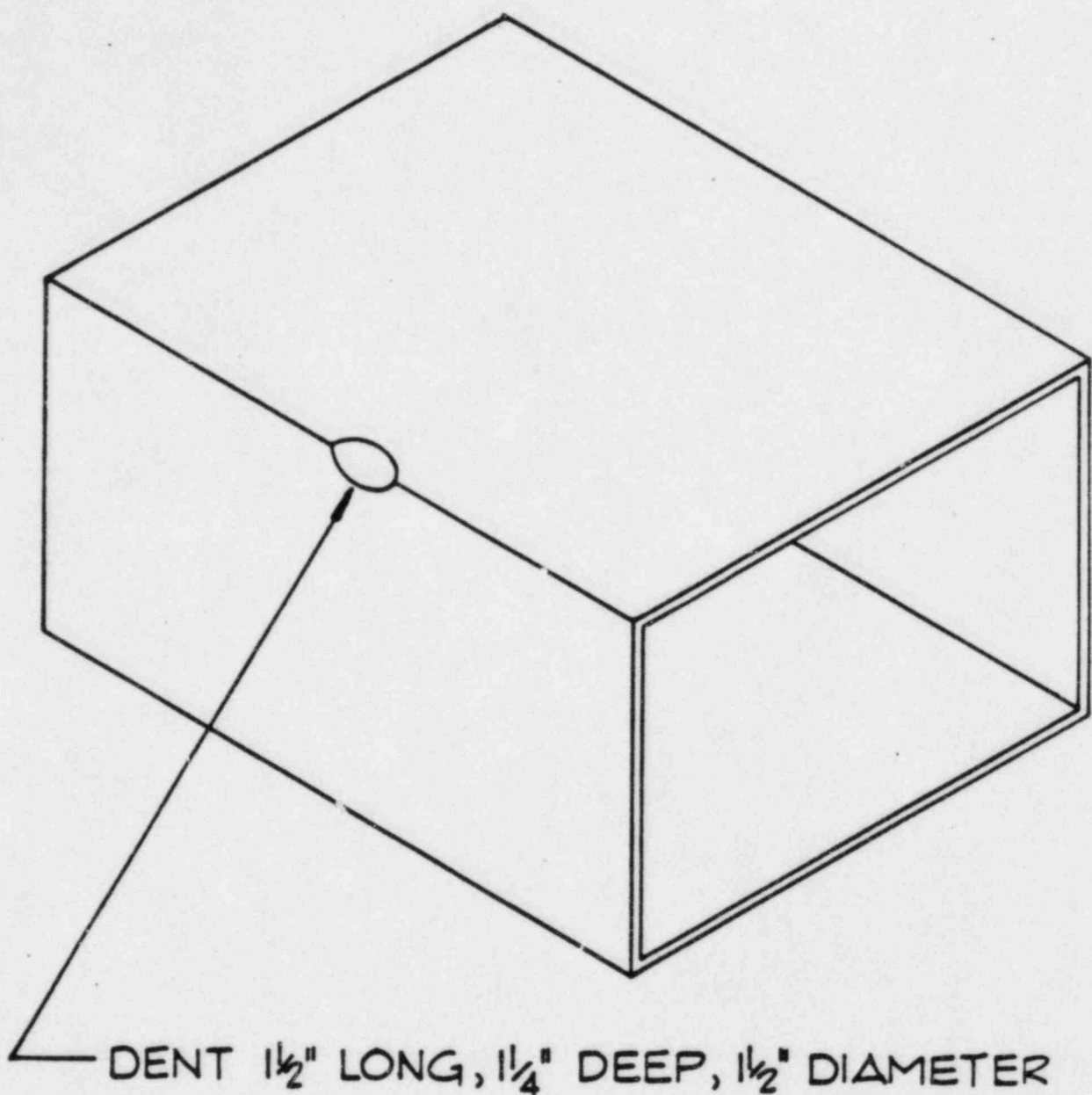


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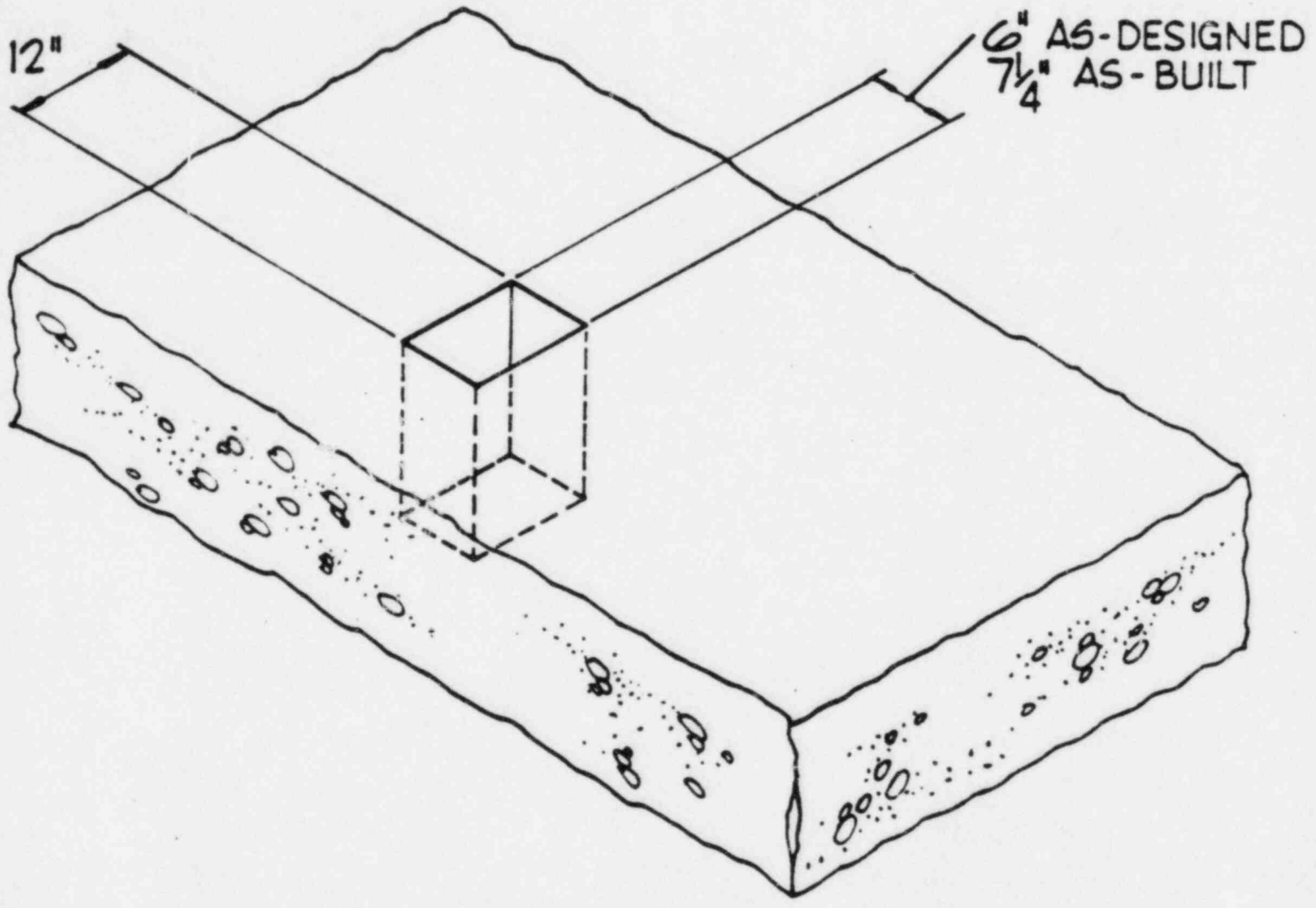


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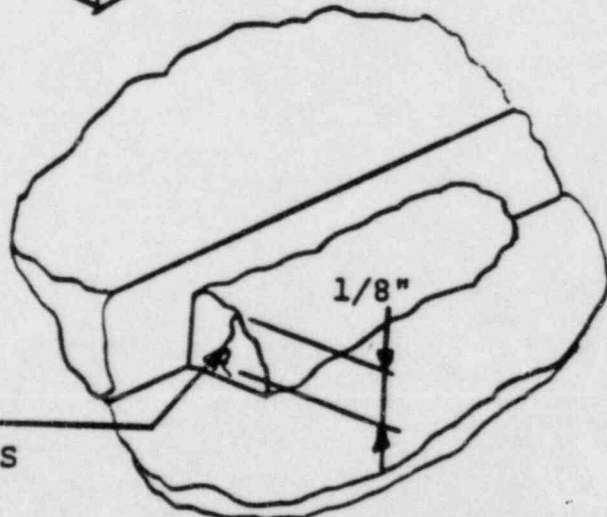
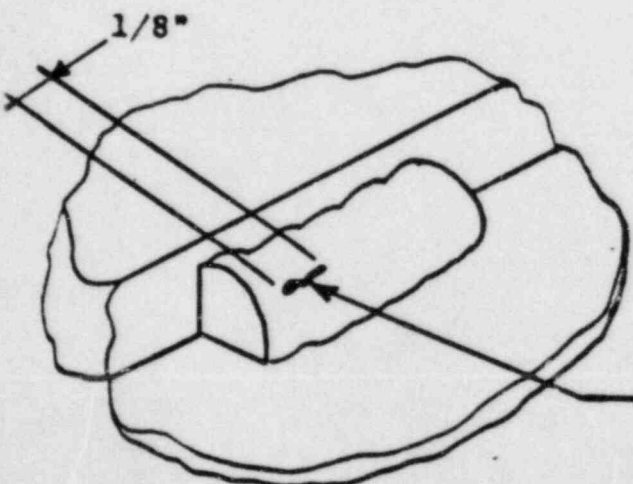
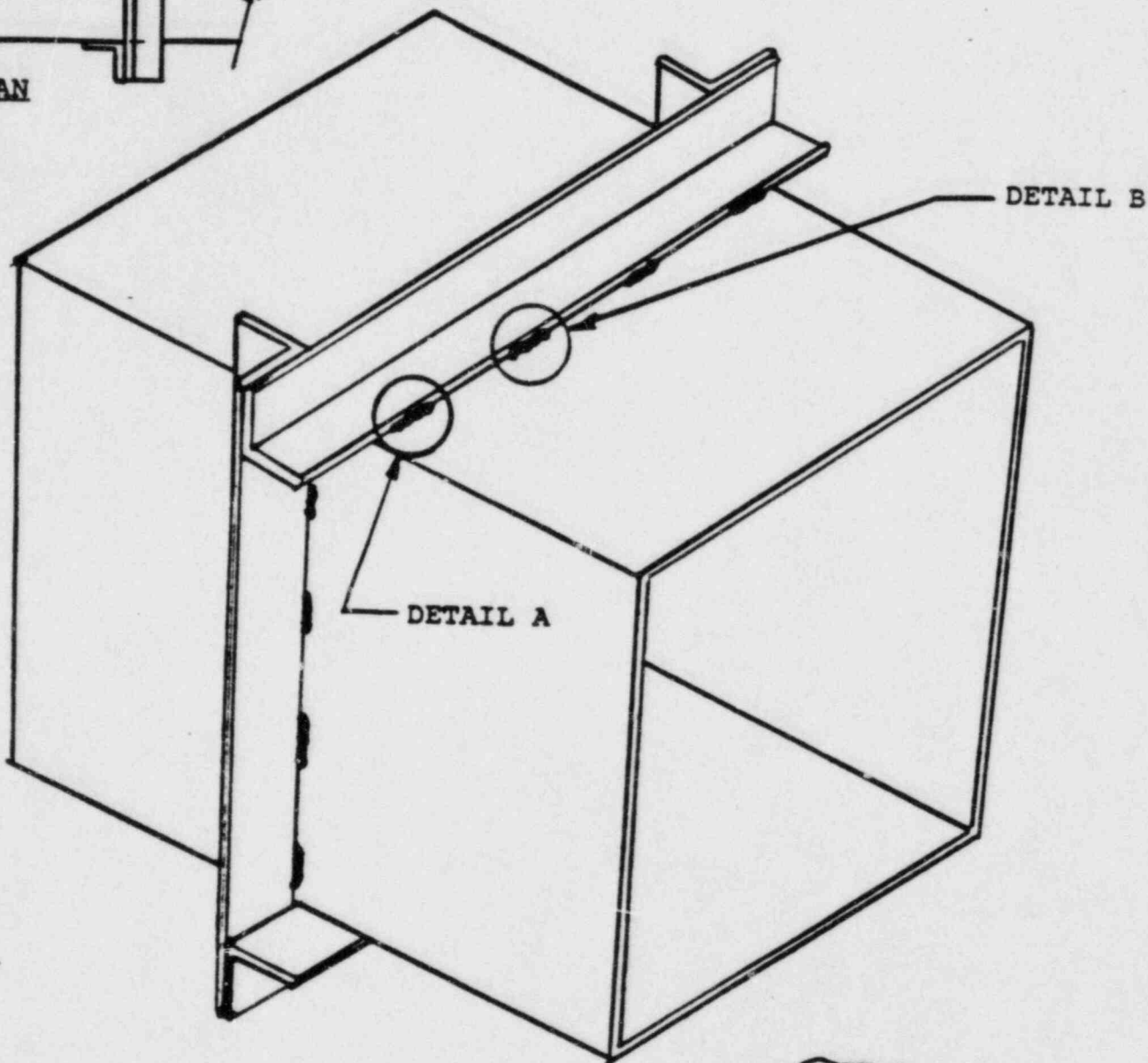
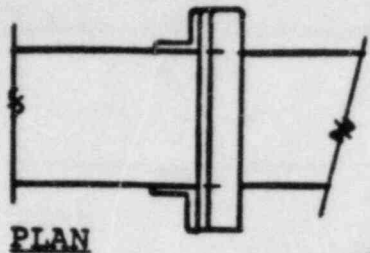
CORNER DAMAGE ON AN HVAC
DUCT



DIMENSIONAL DISCREPANCIES OF A FORMED OPENING IN A CONCRETE SLAB



LINEAR INDICATION IN
HVAC DUCT TO STIFFENER WELDS



LINEAR INDICATIONS

DETAIL A

DETAIL B

BCAP Q.A.

MONTHLY BRIEFING

N. P. SMITH

DECEMBER 6, 1984

- 0 ORGANIZATION/PERSONNEL

- 0 DEVELOPMENT EFFORTS

- 0 DOCUMENT REVIEWS

- 0 AUDIT/SURVEILLANCE SCHEDULES AND RESULTS

- 0 Q.A. OVERINSPECTION/OVERVIEW

- 0 HOLD POINTS

ORGANIZATION/PERSONNEL

0 LEAD CSR POSITION HAS BEEN FILLED

0 ONE ENGINEER HAS BEEN ADDED

PERSONNEL

EXPERIENCE LEVELS

(AVERAGE YEARS)

POSITIONS	OVERALL		NUCLEAR		Q.A.	
	NOV. 5	DEC. 6	NOV. 5	DEC. 6	NOV. 5	DEC. 6
GENERAL SUPERVISOR - Q.A. LEAD ELEMENT ENGINEERS OVERINSPECTION SUPERVISOR Q.A. ENGINEERS/SPECIALISTS	22.9	22.4	15.9	14.2	5.0	4.6
INSPECTORS	17.4	17.4	8.3	8.3	N/A	N/A

+ 1 ENGINEER ASSIGNED

DEVELOPMENT EFFORTS

(NOVEMBER)

0 REVISED 1 Q.A. SPECIAL INSTRUCTION

(0183B)

DOCUMENT REVIEWS
(NOVEMBER)

REVISIONS TO POLICY/PLANS	3
REVISIONS TO PROCEDURES/INSTRUCTIONS	10
LESSON PLANS	0
EXAMINATION QUESTION BANKS	0
CERTIFICATION EXAMINATIONS	0
REINSPECTION CHECKLISTS/INSTRUCTIONS	22
INSPECTOR CERTIFICATION PACKAGES	6
	<hr/>
	41

BCAP Q.A. SURVEILLANCE SCHEDULE
(ANNUAL)

SHEET 1 OF 1

- SCHEDULED SURVEILLANCE

- COMPLETED SURVEILLANCE

ACTIVITY/ SUBJECT AREA	YEAR	1984															
	MONTH	SEPTEMBER			OCTOBER				NOVEMBER				DECEMBER				
	WEEK ENDING	14	21	28	05	12	19	26	02	09	16	23	30	07	14	21	28
CSR - PROCEDURES																	
BCAP-20				X X		X X		X X		X X				X			
BCAP-21			X X	X X	X X	X X		X X		X X				X			
BCAP-22					X X		X X		X X		X X				X		
BCAP-23			X X	X X	X X	X X		X X		X X				X			
BCAP-24					X X	X X	X X		X X		X X					X	
RPSR - PROCEDURES																	
BCAP-41					X X	X X	X X		X X		X X				X		
BCAP-42					X X	X X	X X		X X		X X				X		
BCAP-43					X X	X X		X X		X X							
RSCAP - PROCEDURES																	
BCAP-60					X X	X X	X X		X X		X X				X		
ADMIN. - PROCEDURES																	
BCAP-01					X X		X X		X X		X X				X		
BCAP-02					X X		X X		X X		X X				X		
BCAP-03					X X		X X		X X		X X				X		
BCAP-04					X X		X X		X X		X X				X		
BCAP-06						X X		X X		X X		X X				X	
BCAP-07						X X		X X		X X		X X				X	
BCAP-08						X X		X X		X X		X X				X	

BCAP Q.A. AUDIT SCHEDULE
(ANNUAL)

- SCHEDULED AUDIT

- COMPLETED AUDIT

ACTIVITY/ SUBJECT AREA	YEAR	1984															
	MONTH	SEPTEMBER			OCTOBER				NOVEMBER				DECEMBER				
	WEEK ENDING	14	21	28	05	12	19	26	02	09	16	23	30	07	14	21	28
CSR - PROCEDURES																	
BCAP-20			X X									X X					
BCAP-21			X X									X X					
BCAP-22				X X									X X				
BCAP-23					X X									X			
BCAP-24						X X									X		
RPSR - PROCEDURES																	
BCAP-41				X X									X X				
BCAP-42				X X									X X				
BCAP-43				X X										X			
RSCAP - PROCEDURES																	
BCAP-60				X X									X X				
ADMIN. - PROCEDURES																	
BCAP-01			X X									X X					
BCAP-02			X X									X X					
BCAP-03			X X									X X					
BCAP-04			X X									X X					
BCAP-06			X X										X X				
BCAP-07			X X										X X				
BCAP-08			X X										X X				

Week of December 14, 1984 new procedure BCAP-25 will be audited.

AUDIT AND SURVEILLANCE RESULTS
(NOVEMBER)

<u>PROCEDURES</u>	<u>FINDINGS AND ITEMS</u>	
	<u>OPENED</u>	<u>CLOSED</u>
BCAP ADMIN PROCEDURES	2	1
BCAP CSR PROCEDURES	0	1
BCAP RSCAP PROCEDURES	0	0
BCAP RPSR PROCEDURES	0	0
	<hr/>	
TOTAL	2	2

- 1 ITEM OPENED INVOLVED FAILURE TO FOLLOW PROCEDURES
- 1 ITEM OPENED INVOLVED PROCEDURE INADEQUACY

AUDIT AND SURVEILLANCE RESULTS
(TO-DATE)

<u>PROCEDURES</u>	<u>FINDINGS AND ITEMS</u>	
	<u>OPENED</u>	<u>CLOSED</u>
BCAP ADMIN PROCEDURES	11	9
BCAP CSR PROCEDURES	9	7
BCAP RSCAP PROCEDURES	1	1
BCAP RPSR PROCEDURES	0	0
	<hr/>	
TOTAL	21	17

Q.A. OVERINSPECTION/OVERVIEW

- 0 OVERINSPECTIONS TO RECORD HAVE NOT BEGUN

- 0 REVISED Q.A. OVERINSPECTION PROCEDURE

- 0 RECERTIFYING Q.A. OVERVIEW INSPECTORS TO PTL'S
RECENTLY REVISED PROCEDURE PRIOR TO START OF
INSPECTIONS

Q.A. OVERINSPECTION/OVERVIEW

VALIDATION METHOD

- 0 THE VALIDATION METHOD REQUIRES A COMPLETE OVERINSPECTION
- 0 PROVIDES A SIGNAL TO THE OVERINSPECTOR AS TO POTENTIAL PROBLEM AREAS
- 0 ALLOWS THE OVERINSPECTOR TO FOCUS ON AREAS WHERE DIFFERENCES IN INSPECTION RESULTS EXIST
- 0 PROVIDES FOR EFFICIENT USE OF OVERINSPECTION TIME

HOLD POINTS

PURPOSE: TO PUT BCAP-Q.A. IN A PRO-ACTIVE MODE IN ASSURING
QUALITY

O BCAP Q.A. LETTER OF SEPTEMBER 6, 1984 PLACED HOLD POINT ON

- IMPLEMENTATION OF COMPLETED CHECKLISTS FOR CSR

- INSPECTOR PERFORMANCE OF FIELD INSPECTIONS

O CSR CHECKLISTS - HOLD RELEASED BY SPECIFIC POPULATION
FOLLOWING Q.A. APPROVAL

O INSPECTORS - HOLD RELEASED FOR INDIVIDUAL
INSPECTORS FOLLOWING Q.A. CERTIFICATION REVIEW

BCAP STATUS

MEETING

for

November, 1984

INDEPENDENT EXPERT OVERVIEW GROUP

December 6, 1984

TOPICS

- o Executive Summary
- o Overview Activities
- o Closed Issues and Concerns
- o Open Issues and Concerns

EXECUTIVE SUMMARY

o BCAP OVERVIEW

Functioning as designed with checks and balances in place.

o CSR ELEMENT

Refinement of rough edges still in progress. Activities focusing on retraining of personnel and revisions to some checklists. Electrical inspections initiated. ERC's electrical inspector reported November 26, 1984.

o RPSR ELEMENT

Checklists nearing completion. Actual review of procedures near commencement.

o RSCAP ELEMENT

Determination of relevant commitments still in progress.

o BCAP QA

Increased number of Lead Auditors from one to five for better distribution of audit load.

OVERVIEW ACTIVITIES

REINSPECTIONS

- o Surfaced two concerns in civil/
structural area
 - Control points for reinspections
 - Reinspection of embeds on Class 2
side of Turbine Isolation Wall
- o Monitoring resolution of "Hold Tag"
for areas to be reinspected by BCAP
inspectors

AUDITS

- o Monitored BCAP QA audits

DOCUMENTATION REVIEW

- o Initiated reviews of BCAP observations
and S&L Design Significant Evaluations
- o Maintained reviews of checklists,
procedures and plans

CLOSED ISSUES/CONCERNS

ISSUES

- 1) Revision of documents:
 - a) BCAP QA Plan
- 2) Response to Observataions BCAP-OBS-003 and BCAP-OBS-004

CONCERNS

- 1) Inspector certifications - Level III
Electrical has been certified

OPEN ISSUES/CONCERNS

ISSUES

- 1) Revisions of documents:
 - a) BCAP Program Document

CONCERNS

- 1) Control points for reinspections
- 2) Resolution on "Hold Tags" for areas to be reinspected by BCAP inspectors
- 3) Resolution of inspector reinspection element of RSCAP
- 4) Evaluation of CSR discrepancies to the most adverse location within the population

Enclosure 6

Items Discussed at the NRC/CECo/ERC Meeting

December 6, 1984, 9:00 A. M.

- Q. Has BCAP determined how they will address hardware inspections for the RSCAP Element of the program?
- A. BCAP feels that this will be satisfied once the Engineering Judgement Sample has been selected for the CSR element. Engineering Judgement portion of the samples has not been as yet identified.
- Q. When will the document review portion of CSR inspections start?
- A. It is expected to start the week of 12-10-84.
- Q. Does Sargent & Lundy ever need to obtain more information before they can disposition discrepancy reports?
- A. Yes, when additional information is required Sargent and Lundy requests it. An example of this is the detailed weld maps requested from BCAP.
- Q. When will BCAP Q.A. be ready to discuss the results of their inspection review?
- A. BCAP Q.A. will be prepared to discuss the inspection review with the NRC during the week of 12-10-84.
- Q. Does the IEOG plan to review all the Non Design Significant discrepancies?
- A. They plan to review all of the early ones and will adjust the number reviewed as the program develops.

The NRC stated that the presentation of Observations evaluated to date was good and asked that this presentation be continued in the next meeting.

The NRC stated that they would continue to follow the establishment of the hardware inspections pertaining to the RSCAP Element of the BCAP. They will discuss it further once the method has been established.

In conclusion the NRC stated that they feel that the BCAP is going along well. They felt that all personnel associated with the effort are doing a very good job, and that they were comfortable with the effort at this time.

The next meeting was set for January 3, 1985, 9:00 a.m. at the Mazon E.O.F.

This concluded the presentation from CECO to the NRC. At this time the NRC opened the meeting for questions to the NRC from the public.

There was a comment from a member of the public regarding the need to include the consideration of highly stressed items in the reinspection sample. In response discussion it was stated that Commonwealth Edison can be expected to be prepared to address this issue.

There being no further questions. the meeting was adjourned.

Enclosure 7
List of Attendees

<u>NAME</u>	<u>POSITION</u>	<u>ORGANIZATION</u>
R. A. Gardner	Reactor Inspector	Region III, NRC
R. F. Warnick	Chief, Branch 1	Region III, NRC
A. B. Davis	Deputy Regional Admin.	Region III, NRC
R. D. Schulz	Sr. Resident - Braidwood	Region III, NRC
L. G. McGregor	SRI Braidwood	Region III, NRC
W. L. Forney	Chief, Projects Section 1 A	Region III, NRC
B. Heishman	Branch Chief Reactor Prog. Branch	Region III, NRC
R. J. Lauer	Attorney	Isham, Lincoln & Beal
E. D. Swartz	Nuclear Licensing Admin.	CECO
D. Cassel	Attorney	PBI
C. W. Schroeder	Proj. Lic. & Compliance Supt.	CECO
P. A. Lau	BCAP Q.A.	CECO
D. H. Smith	Nuclear Licensing Adm.	CECO
J. D. Deress	Proj. Eng. Mgr, BY/BR	CECO
V. A. Hoffman	Site Manager of SWEC	SWEC
M. I. Miller	Attorney	Isham, Lincoln & Beal
A. Scaccia	Off Site Emer. Planner	CECO
D. L. Leone	Projects Eng. Mgr. - BY & BR	CECO
G. F. Marcus	Director of Quality Assurance	CECO
G. M. Orlov	Asst. Director BCAP	CECO
R. L. Byers	Asst. Director BCAP	CECO
K. T. Kostal	Project Director Braidwood	S & L
R. E. Ham	IEOG, Asst. Project Manager	ERC
B. R. Shelton	Projects Eng. MGR	CECO
N. P. Smith	General Supervisor - QA	CECO
D. L. Shamblin	Proj. Const. Superintendent	CECO
E. E. Fitzpatrick	Asst. Manager QA	CECO
T. J. Maiman	Manager of Projects	CECO
N. N. Kaushal	BCAP Director	CECO
L. S. Weiss	BCAP - SWEC Deputy Mg.	SWEC
D. L. Farrar	Nuclear Licensing	CECO
W. L. Chase	Consultant	ERC
R. B. Laney	Consultant	ERC
I. M. Johnson	Nuclear Communications	CECO
M. J. Wallace	Project Mgr.	CECO

BRAIDWOOD STATION
BRAIDWOOD CONSTRUCTION ASSESSMENT PROGRAM
REPORT PERIOD NOVEMBER 1, - NOVEMBER 30, 1984

I. SUMMARY/STATUS

This is the fifth monthly Progress Report on the Braidwood Construction Assessment Program (BCAP), covering the period from November 1, through November 30, 1984.

During this period, CSR inspections have progressed on six populations and preparation of additional inspection packages has continued. In the RPSR effort, checklist preparation continued with the accumulation of construction requirements from FSAR and Sargent and Lundy specification sources. Progress continues on all active programs in the RSCAP element.

As of November 30, the number of personnel assigned to the BCAP effort has risen to 96. Satisfactory office and clerical support continues to be available to the BCAP workforce.

II. SCHEDULE ANALYSIS

The rescheduling effort initiated in November continues. A final draft of the Project Summary Schedule has been completed, reflecting current status, and established resources. Final review is expected to be completed during the first week of December.

III. PERSONNEL AND EQUIPMENT STATUS

BCAP manpower totaled 96 as of November 30, 1984. A total of five Inspectors (Level II and Level III) were certified during November. Inspection personnel activities included training, accessibility walkdowns, reinspections and weld mapping.

The Mapper Data Base, for tracking observations and verification packages, is being updated regularly. Reports are issued monthly, and interim reports are available on an "as required" basis.

IV. BCAP ELEMENT STATUS

A. CSR STATUS

During this period, preparation of visual inspection packages and performance of inspections continued. New and revised checklists and instructions were issued. At this time, six populations are being inspected: HVAC Ducts, Duct Hangers, Concrete Placements, Small Bore Pipe Configurations, Large Bore Pipe Configurations and Conduits.

In addition to the six populations now being inspected, packages for the random portion of the sample are being assembled in preparation for inspection for the following populations: Large Bore Pipe Supports (Rigid), Large Bore Pipe Supports (Non Rigid), Small Bore Pipe Supports, Small Bore Pipe Configuration - Documentation Review, HVAC Equipment, and Conduit Hangers. Technical review of 29 of 70 checklists and instructions has been completed; 16 have been signed out and are in various stages of review by Q.A., Sargent and Lundy, and IEOG. Checklists and instructions for the remaining populations in each discipline are being developed.

Work has started on identifying portions of the samples based on engineering judgement.

During November, the number of certified inspectors increased to a total of 22. This total reflects the addition of one Electrical Level III and three Electrical Level II inspectors. To date 226 inspections have been completed with 343 observations recorded.

B. RPSR STATUS

During November, the RPSR group continued to be primarily involved in listing construction requirements from the FSAR and applicable Sargent & Lundy specifications on checklists. Two additional specifications were identified during the month as within the scope of the RPSR effort, This increased the number of specifications involved from seven to nine and the number of anticipated checklists from 21 to 23. Nineteen of the 23 checklists have been partially finished. Resolution of seven items affecting the applicability of construction requirements and final reviews remain to be done. All checklists are scheduled to be completed by December 21, 1984.

Procedural reviews are scheduled to start in mid December. This involves comparing construction and personnel qualification/certification requirements on checklists with those in contractor procedures. This work is scheduled to be completed in February.

The overall RPSR effort is now expected to be completed in February 1985. This delay in expected completion of RPSR resulted from an increase in (1) the number of specifications requiring review, (2) the number of codes and standards requiring incorporation in checklists, (3) the anticipated effort to resolve items affecting the content of checklists, and (4) the anticipated time to review FSAR and Requirement/Procedure checklists.

C. RSCAP STATUS

During this period, the RSCAP plan and schedules were updated and the procedure governing RSCAP activities (BCAP-60) was revised to reflect working experience to date. All RSCAP programs have proceeded past the commitment approval cycle.

The nine RSCAP programs have progressed as follows:

- a. Quality Control Structural Steel Review - 85%.
- b. Safety Related Pipe Supports - 80%.
- c. NSSS Component Supports - 60%.
- d. Electrical Installation Documentation Review - 40%.
- e. Quality Control Inspector Reinspection Program has been placed on hold.
- f. Reinspection of Safety Related Mechanical Equipment - 25%
- g. HVAC Welding, configuration, stiffeners, fittings - 40%.
- h. Piping Heat Number Traceability - 30%.
- i. Instrumentation Installation Verification - 25%

V. PROBLEMS/DISCREPENCY FINDINGS

A. Implementation Problems

Certification of a Level III inspector for the electrical discipline, which was reported as a potential problem last month, was accomplished in November. Inspections in the electrical discipline are now underway.

B. Discrepancy Findings

As reported in Section IV a total of 343 observation reports have been written as of Nov 30, 1984. Of these the review for validity has been completed on 94. Of these, 91 have been determined to be valid discrepancies and have been forwarded to Sargent & Lundy for review for design significance.

To date S&L has not identified any discrepancy as design significant.

VI. RECOMMENDATIONS

No specific recommendations are offered at this time.

N. N. Kaushal
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BCAP Director