UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

Your copy
as request

OCT 1 2 1983

MEMORANDUM FOR: R. F. Warnick, Director, Office of Special Cases

FROM: J. J. Harrison, Chief, Section II - Midland

SUBJECT: EVALUATION OF CONSUMERS POWER COMPANY'S (CPCO) CONSTRUCTION COMPLETION PROGRAM

The attached evaluation was performed by the NRC staff of CPCO's CCP to reinspect, status, and complete the construction of the Midland Nuclear Plant. The evaluation included reviewing the program for adequate content, scope and detail. The August 26, 1983, submittal was the final product on which this evaluation was based.

The staff concluded that the CCP is an adequate program to be utilized at the Midland Plant to identify problems, document them, afford corrective action and allow for the plant to be completed in a quality manner.

As you are aware a recent management decision was made to not utilize this evaluation to approve the CCP. The approval mechanism is going to be in the form of "Confirmatory Order". This evaluation therefore will not make the document route to the Public Document Room. I do believe that placement of this document in the Region III files is necessary to historically show such an evaluation was accomplished.

J. J. Harrison

J. J. Harrison, Chief
Section II - Midland

STAFF EVALUATION OF CONSUMERS POWER COMPANY'S CONSTRUCTION COMPLETION PROGRAM PROPOSAL TO REINSPECT, STATUS, AND COMPLETE THE CONSTRUCTION OF MIDLAND NUCLEAR PLANT, UNITS 1 AND 2

Purpose and Background

The Consumers Power Company (CPCo or licensee) holds Construction Permits No. CPPR-81 (Unit 1) and CPPR-82 (Unit 2) issued by the Atomic Energy Commission in 1972, which authorized construction of the Midland nuclear facility. The Midland nuclear facility is located in Midland, Michigan and consists of two pressurized water reactors of Babcock and Wilcox design and related facilities for use in the commercial generation of electric power.

Since the start of construction, Midland has experienced significant Quality Assurance (QA) problems. Following the identification of each of these problems, the licensee has taken action to correct the problems and to upgrade the QA program. In spite of the corrective actions taken, the licensee has continued to experience problems in the implementation of quality in construction. Corrective actions taken were directed toward each specific problem, and root cause determination and a program to review isolated events for their generic application were ineffective. Significant construction problems identified to date include:

1973 - cadweld splicing deficiencies

1976 - rebar omissions

1977 - bulge in the Unit 2 Containment Liner Plate

1977 - tendon sheath location errors

1978 - Diesel Generator Building settlement

1980 - Zack Company heating, ventilation, and air conditioning (HVAC) deficiencies

1980 - reactor pressure vessel anchor stud failures

1981 - piping suspension system installation deficiencies

1982 - electrical cable misinstallations

In 1980 Consumers Power Company (CPCo) reorganized the existing QA department so as to increase the involvement of high level CPCo management in onsite QA activities. The reorganized QA department was given the title of integrated Midland Project Quality Assurance Department (MPQAD). The responsibility for Quality Control (QC) of HVAC work was removed from the HVAC contractor, Zack, and assigned to MPQAD.

In May 1981 the NRC conducted a special indepth team inspection of the Midland site to examine the implementation status and effectiveness of the QA program. Based on this inspection, Region III concluded that the Midland QA program was acceptable (Inspection Report No. 50-329/81-12; 50-330/81-12).

The special team did, however, identify deficiencies in previous QC inspections of piping supports/restraints and electrical cable installations. As a result of staff discussions about the seriousness of these findings and of similar indications of deficiencies identified in the Systematic Assessment of Licensee Performance (SALP) Report issued in April 1982, a special Midland Section in Region III was formed in July 1982. The Midland Section devoted increased attention to inspection of the Midland facility, including upgrading the constructor's (Bechtel) QC program. In September 1982, the licensee integrated the Bechtel QC organization into the MPQAD. This reorganization reflected the recommendations of the NRC staff. As part of this change, the licensee also undertook to retrain and recertify all previously certified Bechtel QC inspectors.

As a result of Region III findings of significant problems with equipment in the diesel generator building developed from an inspection during the period of October 1982 through January 1983, and the subsequent identification of similar findings by the licensee in other portions of the plant, the licensee, in December 1982, halted the majority of the safety-related work activities. In view of the history of QA problems at the Midland plant and the lack of effectiveness of corrective actions to resolve these problems, the NRC required the licensee to develop a comprehensive program to verify the adequacy of previously installed components and to assure the adequacy of future component installations. On December 2, 1982, Consumers Power Company verbally proposed the concept of the CCP, followed by a formal submittal on January 10, 1983.

Subsequent to the January 10, 1983 submittal, the NRC requested additional information on March 28, 1983. CPCo provided additional responses on April 6 and 22, 1983. The CCP underwent revisions and was resubmitted to the NRC on June 3 and 10, 1983. The NRC issued a final set of comments and questions on the CCP on August 19, 1983. This was followed by a final resubmittal of the CCP by CPCo on August 26, 1983. This evaluation concludes the NRC staff review of the above documents.

CCP Overview

The CCP is CPCo's plan to provide guidance in the planning and management of the construction and quality activities necessary for completion of the construction of the Midland Nuclear Plant. To date the CCP has undergone several alterations in response to comments from the NRC and members of the public. As finally revised and submitted on August 26, 1983, the CCP includes: (1) NRC hold points, (2) the requirement for 100% reinspection of accessible installations; (3) the integration of Bechtel QC with MPQAD; (4) the retraining and recertification of QC inspectors; (5) the general training of licensee and contractor personnel in quality requirements for nuclear work, requirements of the CCP, safety orientation, and inspection and work procedures; (6) the revision, as necessary, of Project Quality Control Instructions; (7) CCP team training; and (8) an independent third party overview of CCP activities.

The CCP is divided into two phases. Phase 1 is a systematic review of the safety-related systems and areas of the plant. This review will be carried out on an area-by-area basis and will be done by teams with responsibility for particular systems. The purpose of Phase 1 is to provide: (1) a clear identification of remaining installation work, including any necessary rework, and (2) an up-to-date inspection status to verify the quality of existing work.

Phase 2 will take the results of the Phase 1 review and complete the necessary work or rework. The teams organized for Phase 1 activities will continue as the responsible organizational units to complete the work in Phase 2. All new work and rework on pipe hangers and electrical cable will be part of CCP Phase 2.

The CCP is designed to address the generic applicability of the problems identified by the NRC's inspection of the diesel generator building. If other significant problems are identified during the course of the CCP, the CCP will be expanded to track their resolution. The objective of the CCP is to look at the plant hardware and equipment, identify existing problems, correct all the problems, and complete construction of the plant.

The CCP does not include the remedial soils program, nuclear steam supply system installation, HVAC installations, and the reinspection of pipe hangers and electrical cable. The remedial soils activities are being overviewed by an independent third party and closely inspected by the NRC under the conditions of the Construction Permits which implement the Licensing Board's April 30, 1982 order and a Work Authorization Procedure. The staff does not consider it necessary to require further review of the remedial soils activities to be included in the CCP because of separate commitments made to the NRC. Nuclear Steam Supply System (NSSS) installation and HVAC installation were not drawn into question by the diesel generator building inspection due to the fact that the installation and the QC inspection were accomplished by organizations other than Bechtel. The staff has not developed facts to indicate that installation of these systems should be included in the CCP. Reinspection of the pipe hangers and electrical cable were not included in the CCP because that reinspection is being done under a separate commitment to the NRC. See letters from Keppler (NRC) to Cook (CPCo) dated August 30 and September 2, 1982.

Evaluation

The NRC staff has conducted an indepth review of each revision of the CCP. The staff generated comments and questions on each revision, and subsequently, CPCo resolved each issue and resubmitted a final acceptable document. In addition, the NRC conducted several meetings at the staff working levels to better understand the methodology being utilized in the CCP. In addition, comments were received from members of the public, intervenors, and a representative of the Government Accountability Project (GAP). These comments were considered by the NRC in their review and evaluation of the CCP. Public meetings were held in Midland, Michigan on February 8, and August 11, 1983. A meeting was also held with the intervenors, GAP, and members of the Lone Tree Council on August 11, 1983. In addition, the staff has had meetings or telephone conversations with the intervenors and GAP. All views were given due consideration prior to the NRC's final decision to approve the CCP.

Summary and Conclusion

Based on our review of the program submitted by CPCo, and consideration of comments made by members of the public, we conclude that the CCP is an adequate program to provide for the reinspection, statusing, and proper completion of construction of the Midland Nuclear Plant.

UNITED STATES
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799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

Warnick

APR 3 1984

Docket No. 50-329
Docket No. 50-330

Consumers Power Company
ATTN: Mr. D. L. Quamme
Site Manager
P. O. Box 1963
Midland, MI 48640

Gentlemen:

The NRC staff has concluded a review of your letter dated March 27, 1984, requesting NRC concurrence with the release of additional portions of the plant for Construction Completion Program (CCP) Phase 1 Status Assessment and Quality Verification activities. In regards to your request for additional modules, we have concluded that the following portions of the plant may be released for CCP Phase 1 Status Assessment and Quality Verification activities:

Module Number	Description
150, 151	EL. 634' Auxiliary Building
160, 161, 162	El. 646' and 652' Auxiliary Building
320	RB II N. D-Ring
240	EL. 659' Control Tower
330	RB II S. D-Ring
820	Diesel Generator Building

This letter, therefore, authorizes Consumers Power Company to proceed with CCP Phase 1 Status Assessment and Quality Verification activities for the above portion of the plant.

Our decision to limit the release of additional portions to those identified above is based on our perception of the progress which you have made in accomplishing Phase 1 activities for these modules previously released and the continuing deficiencies which have been identified in the areas of team training and document control. Further releases of modules will be based on work accomplished and the effectiveness of your QA program in dealing with identified deficiencies.

We have reviewed the clarifications to the CCP process as delineated in your letter, including attachments 3, 4, and 5, and concur in the incorporation of these clarifications into the CCP process.

Finally, we concur that the disposition of inaccessible items is not a restraint for release into Phase 2.

8404090290

Should you have any questions regarding this matter, please contact me at (312) 790-5635.

Sincerely,

John J. Harrison, Chief
Midland Section

Enclosure: Ltr dtd 3/27/84

cc w/encl:
DMB/Document Control Desk (RIDS)
Resident Inspector, RIII
The Honorable Charles Bechhoefer, ASLB
The Honorable Jerry Harbour, ASLB
The Honorable Frederick P. Cowan, ASLB
William Paton, ELD
Michael Miller
Ronald Callen, Michigan
Public Service Commission
Myron M. Cherry
Barbara Stamiris
Mary Sinclair
Wendell Marshall
Colonel Steve J. Gadler (P.E.)
Howard Levin (IERA)
Billie P. Garde, Government
Accountability Project
Lynne Bernabei, Government
Accountability Project
Stone and Webster Michigan, Inc.

RIII	RIII	RIII	RIII	RIII	RIII	RIII
Gardner/bl	Harrison	Warnick	Norelius	Lewis	Davis	Keppler
03/30/84	3/30/84	3/30/84	4/2/84			4/2/84

Consumers Power Company

Dean L Quamme
Site Manager
Midland Project

Midland Project PO Box 1963, Midland MI 48640 • (517) 631-8660

March 27, 1984

Mr John J Harrison, Chief
Midland Section, Region III
Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

MIDLAND ENERGY CENTER CNO 7020
CONSTRUCTION COMPLETION PROGRAM IMPLEMENTATION
ADDITIONAL MODULE RELEASES
File: 0655 UFI: 99*08 Serial: CSC-7526

The purpose of this letter is to request NRC concurrence with the release of additional portions of the plant for Construction Completion Program (CCP) Phase 1 Status Assessment and Quality Verification activities. This subject was discussed with you, and members of your staff on March 21, 1984. A copy of the presentation materials used in that discussion is provided in Attachment 1.

As discussed in our meeting, additional module releases are necessary to facilitate a continuation of the logical Status Assessment and Quality Verification Program (QVP) process to support Phase 2 releases for work needed to support system turnover milestones, and to maintain effective utilization of the trained and qualified personnel assembled for Status Assessment and QVP. A listing of additional modules, for which this release is requested, is provided in Attachment 2. This listing is in order of priority, and this specific request is for priority numbers 6 through 21.

In addition, it was noted that clarifications to certain CCP processes are desirable in order to resolve inefficiencies we have encountered while performing Status Assessment and QVP on commodities and inspection records spanning several modules. This is particularly true when a complete determination of the acceptability of the installation depends on attributes that are outside the module boundary. Specifically, we request an extension of these cross over commodities into other modules to allow completion of Phase 1 activities to logical limits. For Installation Status Assessment, the extension would include three categories:

1. The completion of all portions of uniquely identified and tracked items that cross boundaries such as conduit and instrument tubing runs.

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2. The completion of civil commodities that form a single identifiable unit that cross modules boundaries such as a complete block wall or structural steel platform.

3. Functionally interrelated items that must be verified as a whole to assess all applicable attributes such as a pipe, pipe hangers and associated in-line devices.

Attachments 3, 4 and 5 provide specific definition for each category. This request for boundary extension applies to both the five (5) modules currently released for Phase 1 activities, and those additional modules requested in this letter.

For the Quality Verification Program (QVP) inspections, this involves allowing reinspections to follow the scope of the existing ("old") Inspection Records (IR), in order to reinspect all portions covered by the existing IR, even though it may extend beyond the boundary of the module.

Finally, we request your concurrence with regard to the dispositioning of inaccessible items. As discussed earlier with you, and members of your staff, we do not consider this dispositioning to be a restraint for release into Phase 2, since

1. the items are already inaccessible, and

2. supporting data for these verifications will not be available, in most cases, until we have developed a quality history through reinspection of accessible items.

Please contact us should you require additional information in replying to this request.

DLQ/EMP/klv

Attachments

CC RJCook, Midland Resident Inspector
DSHood, USNRC
JGKeppler, Regional Administrator, Region III

MODULE RELEASE SEQUENCE

PRIORITY NUMBER	SCHEDULE NUMBER	DESCRIPTION
1	340	RB II Outside D-Ring*
2	800	Service Water Pump Structure
3	102	East Wing Wall Auxiliary Building*
4	120	El. 584' Auxiliary Building
5	410	El. 614' Unit II Turbine*
		RELEASED
6	150 (151 included)	El. 634' Auxiliary Building*
7	160 (161 & 162 included)	El. 646' & 652' Auxiliary Building*
8	320	RB II N. D-Ring*
9	240	El 659' Control Tower*
10	330	RB II S. D-Ring*
11	820	Diesel Generator Building
12	280	El. 659' Unit II Electrical Penetration
13	210	El. 614' Control Tower*
14	250	El. 674'-8" Control Tower*
15	170 (175 included)	El. 659' & 674'-6 Auxiliary Building*
16	140	El. 614' Auxiliary Building*
17	230	El. 646' Control Tower*
18	130	599' Auxiliary Building*
19	101	Auxiliary Building Pipeway and Valve Gallery*
20	180	Auxiliary Building Roof*
21	110	El. 568' Auxiliary Building*
		2E MILESTONE
22	260	El. 685' Control Tower and Roof
23	310	RB II Fuel Pool
24	103	West Wing Wall
25	290	Unit I El. 685' N. Penetration
26	220	El. 634' Labs Control Tower
27	860	Tank Farm
28	420	El. 634' Turbine II
29	430	El. 659' Turbine II
30	440	El. 695' and 715 Turbine II
31	190	Radwaste Building
32	900	Miscellaneous Structures
33	850	Health Physics Cal. Facility
34	880	River Intake Structure
35	810	Circulating Water Building
36	890	pond Blowdown Structure
37	830	Guard House
38	870	Oily Waste Building
39	610	El. 614' Turbine I
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41	630	El. 659' Turbine I
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43	540	RB I Outside D-Ring
44	530	RB I S. D-Ring
45	520	RB I N. D-Ring
46	510	RB I Fuel Pool
47	700	Evaporator Building
48	710	Steam Tunnel
49	720	Con. Return Pumphouse

* = Require for Aux. Flush - 2E Milestone

Revision 1

Uniquely identified and tracked crossover commodities that may be status assessed or quality verified as a unit.

COMMODITY	EXTENSION LIMIT
Electrical Slots (floor penetration)	Complete uniquely identified unit
Cable Tray	Complete uniquely identified unit
Exposed Conduit	Complete uniquely identified unit
Wireway	Complete uniquely identified unit
Embed Conduit/Ductbanks	Each end
Trenches	Complete uniquely identified unit
Instrumentation Tubing	Complete isometric drawing. (To be included with module containing instrument)
Mechanical Equipment	The entire piece of equipment as supplied by the equipment vendor will be assessed on both rotating and nonrotating equipment, even if field work or assembly was performed within the component or skid.
Equipment Supports	Both integral and non-intregral equipment supports will be assessed in their entirety, not including the permanent building frame or structure.
Special Doors & Airlocks	Complete door with hardware and fram

Uniquely identified commodities that form a single identifiable unit and may be status assessed or quality verified as a unit.

COMMODITY	EXTENSION LIMIT*
Structural Framing	to and including the next connection or support point
Blockwalls	Both sides of wall, including attachments and penetrations to end of the span (tie-in to the next structural support point)
Structural Concrete Walls	both sides of the wall, including penetrations, up to the module boundary
Decontaminable Coatings	any coatings on the commodities shown on this extension list
Miscellaneous Q Coatings	Any coatings on the commodities shown on this extension list

Functionally interrelated crossover commodities that may be status assessed or quality verified as a whole item.

COMMODITY	EXTENSION LIMIT
Large Pipe	Assess to the point outside the module which represents the boundary of the stress analysis. This will not exceed the first anchor point, ie: anchor, pump, tank nozzle, etc.
Small Pipe	Assess to the limits of the piping as shown on the isometric. Note: QVP on piping which was accepted on PW-1.00 and PF-1.10 PQCI's must extend to the next "field break," ie: field weld or flange joint, beyond these limits.
In-Line Commodities: Flued Heads Flange Joints Weld Joints Valves (Mechanical and Welded) Orifice Plates	Assess all of these commodities which are installed within the boundaries of the piping being assessed (as described above).
Electrical Penetration Assembly	Manufactured electrical pressure boundary assembly as a complete unit

Warnick

CONSUMERS POWER COMPANY

Dean L Quamme
Site Manager
Midland Project

Midland Project: PO Box 1963, Midland MI 48640 • (517) 631-8650

PRINCIPAL STAFF			
RA		DPRP	
D/RA		DE	
A/RA		DRMSP	
RC		DRMA	
PAO		SCS ✓	orig + 3
SGA		ML	
ENF		File	

March 27, 1984

Mr John J Harrison, Chief
Midland Section, Region III
Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

MIDLAND ENERGY CENTER GWO 7020
CONSTRUCTION COMPLETION PROGRAM IMPLEMENTATION
ADDITIONAL MODULE RELEASES
File: 0655 UFI: 99*08 Serial: CSC-7526

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* = Require for Aux. Flush - 2B Milestone

Revision 1
3/27/81
BHPeck

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Electrical Penetration Assembly	Manufactured electrical pressure boundary assembly as a complete unit

BCC JWCook, P-26-336B
SHHowell, M-1180B
TABuczwinski, Midland-207
LGraber, LIS
JNLeech, P-24-506
DFLewis, Bechtel
FJLevandoski, B&W
GALow, P-12-237A
DASommers, P-14-106
PPSteptoe, IL&B, Chicago
DJVandeWalle, P-24-614B
BJWalraven, P-24-517
RAWells, Midland
FCWilliams, IL&B, Washington, DC
DTPerry, Midland
NRC Correspondence File, P-24-517
UFI, P-24-511
CMS-Midland
JEKarr, Stone & Webster

RC DMBudzik, P-24-517A
RJErhardt, P-14-113A
LSGibson, P-24-618A
P-24-505 (Last)

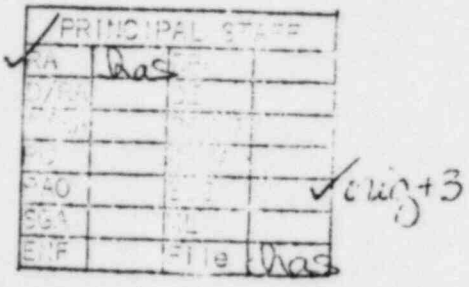
Wesnick

Consumers Power Company

Dean L Quamme
Site Manager
Midland Project

Midland Project: PO Box 1963, Midland, MI 48640 • (517) 631-8650

March 27, 1984



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File: 0655 UFI: 99*08 Serial: CSC-7526

The purpose of this letter is to request NRC concurrence with the release of additional portions of the plant for Construction Completion Program (CCP) Phase 1 Status Assessment and Quality Verification activities. This subject was discussed with you, and members of your staff on March 21, 1984. A copy of the presentation materials used in that discussion is provided in Attachment 1.

As discussed in our meeting, additional module releases are necessary to facilitate a continuation of the logical Status Assessment and Quality Verification Program (QVP) process to support Phase 2 releases for work needed to support system turnover milestones, and to maintain effective utilization of the trained and qualified personnel assembled for Status Assessment and QVP. A listing of additional modules, for which this release is requested, is provided in Attachment 2. This listing is in order of priority, and this specific request is for priority numbers 6 through 21.

In addition, it was noted that clarifications to certain CCP processes are desirable in order to resolve inefficiencies we have encountered while performing Status Assessment and QVP on commodities and Inspection Records spanning several modules. This is particularly true when a complete determination of the acceptability of the installation depends on attributes that are outside the module boundary. Specifically, we request an extension of these cross over commodities into other modules to allow completion of Phase 1 activities to logical limits. For Installation Status Assessment, the extension would include three categories:

1. The completion of all portions of uniquely identified and tracked items that cross boundaries such as conduit and instrument tubing runs.

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MAR 30 1984

2. The completion of civil commodities that form a single identifiable unit that cross modules boundaries such as a complete block wall or structural steel platform.

3. Functionally interrelated items that must be verified as a whole to assess all applicable attributes such as a pipe, pipe hangers and associated in-line devices.

Attachments 3, 4 and 5 provide specific definition for each category. This request for boundary extension applies to both the five (5) modules currently released for Phase 1 activities, and those additional modules requested in this letter.

For the Quality Verification Program (QVP) inspections, this involves allowing reinspections to follow the scope of the existing ("old") Inspection Records (IR), in order to reinspect all portions covered by the existing IR, even though it may extend beyond the boundary of the module.

Finally, we request your concurrence with regard to the dispositioning of inaccessible items. As discussed earlier with you, and members of your staff, we do not consider this dispositioning to be a restraint for release into Phase 2, since

1. the items are already inaccessible, and

2. supporting data for these verifications will not be available, in most cases, until we have developed a quality history through reinspection of accessible items.

Please contact us should you require additional information in replying to this request.

for DLQ/BHP/klw

Attachments

CC RJCook, Midland Resident Inspector
DSHood, USNRC
JGKeppler, Regional Administrator, Region III

Attachment 1

PRESENTATION

TO

NUCLEAR REGULATORY COMMISSION

ON

ADDITIONAL MODULE RELEASES

CONSUMERS POWER COMPANY
MIDLAND PROJECT
MARCH 21, 1984

PRESENTATION TO NRC ON ADDITIONAL MODULE RELEASES

I. Introduction - BHPeck

II. Current Status of CCP Phase I Activities

a. Review logic diagram - BHPeck

b. Status Assessment - TValenzano

Manpower, areas/disciplines being worked, manhours expended, current short-term forecast, training, procedures

c. Quality Verification Program (QVP) - BPalmer

Manpower, manhours expended, current short-term forecast, training, procedures

III. Results Achieved to Date

a. Status Assessment - TValenzano

Summary statement

b. QVP - BPalmer

Summary statement

c. Summary of NCRs written - BPalmer

d. Management Evaluations - BHPeck

Describe how Management is overviewing the CCP

IV. Lessons Learned

a. Status Assessment - TMinor

Review SAT packages, changes made, difficulties encountered and resolutions recommended.

b. QVP - BPalmer

Review QVP packages, changes made, difficulties encountered and resolutions recommended.

V. Third Party Observations - BHPeck

VI. Additional Module Releases - BHPeck

Priority Listing

VII. Summary - BHPeck

BHPeck
3/14/84

SECTION I

INTRODUCTION

SECTION II

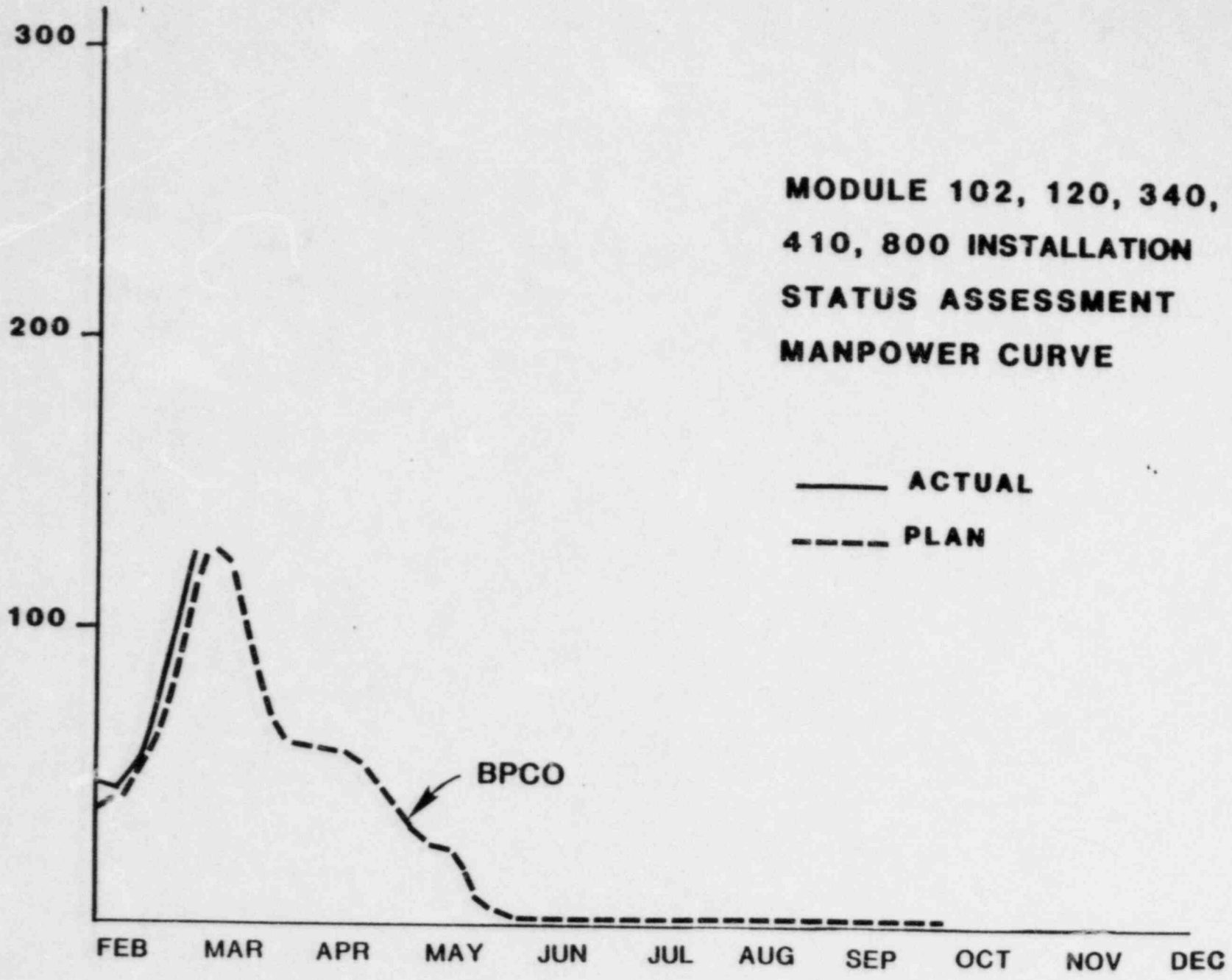
CURRENT STATUS OF CCP PHASE I

INSTALLATION STATUS ASSESSMENT MANHOURS *
1ST FIVE MODULES

MODULE	CIVIL	MECH	ELECT	INSTR	TOTAL
102	1080	5480	1800	180	8540
120	4090	5980	4080	710	14,860
340	11,490	4730	2470	990	19,680
410	20	0	0	0	20
800	750	30	1710	0	2490
TOTAL	17,430	16,220	10,060	1880	45,590

EXPENDED THRU 3/8 15,000

* ROUNDED


300
200
100
MODULE 102, 120, 340,
410, 800 INSTALLATION
STATUS ASSESSMENT
MANPOWER CURVE
ACTUAL
PLAN
BPCO
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

TRAINING

PHASE I

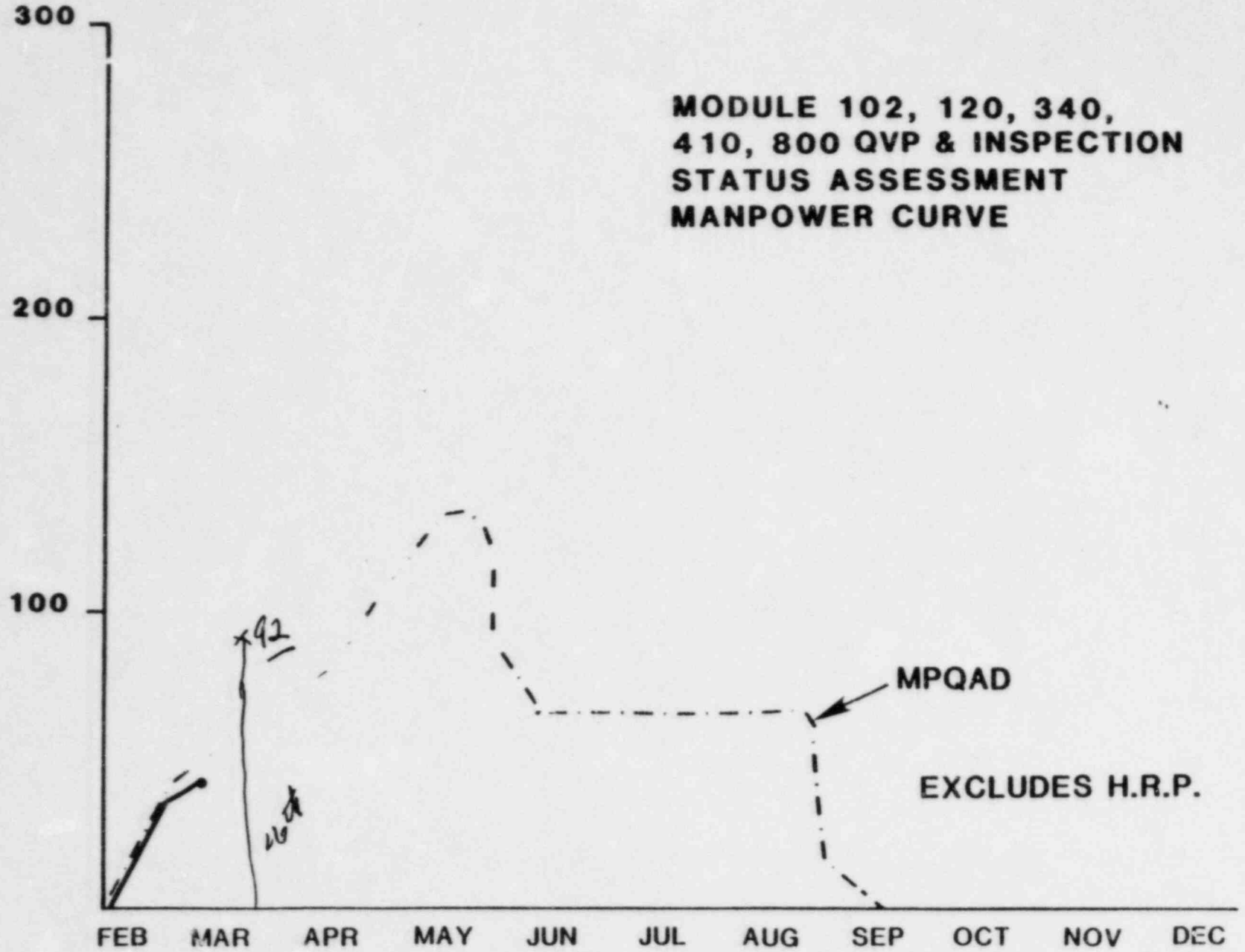
	APPROX. NO. OF PEOPLE	APPROX. NO. OF PROC., DWG. & SPECS
MECHANICAL	100	80
INSTRUMENTATION	10	60
ELECTRICAL	90	70
CIVIL	70	70
WELDING	40	40
	310	

TOOL BOX REVIEW SESSIONS FOR THE CRAFTS 6

QVP/SA MANHOURS*
1ST FIVE MODULES

MODULE	CIVIL	MECH.	ELECT.	TOTAL
102	5270	8930	7800	22,000
120	5270	9730	7770	22,770
340	31,170	30,430	7170	68,770
410	3550	2120	8200	10,930
800	880	2270	3930	7080
TOTAL	46,140	53,480	31,930	131,550
EXPENDED THRU 3/9				5300

* ROUNDED


300
200
100
MODULE 102, 120, 340,
410, 800 QVP & INSPECTION
STATUS ASSESSMENT
MANPOWER CURVE
MPQAD
EXCLUDES H.R.P.
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

MPQAD TRAINING

	TRAINED THRU 3/9
QVP (N-SERIES)	300
INSPECTION STATUS ASSESSMENT (T-SERIES)	83

MPQAD

INSPECTOR CERTIFICATION STATUS

CERTIFICATION GOAL (ALL WORK):

1,239 (ESTIMATE AS OF 2/22/84) avgs + Sheets.

TOTAL NO. CERTIFICATIONS ACCOMPLISHED:

688 (AS OF 2/22/84)

$$\% \text{ GOAL ACCOMPLISHED} = \frac{688}{1239} \times 100 = 55.5\%$$

QUALITY VERIFICATION PROGRAM (QVP) PROCEDURES

- ELEVEN PROCEDURES REQUIRED (N-SERIES)
- ALL REQUIRED PROCEDURES ISSUED

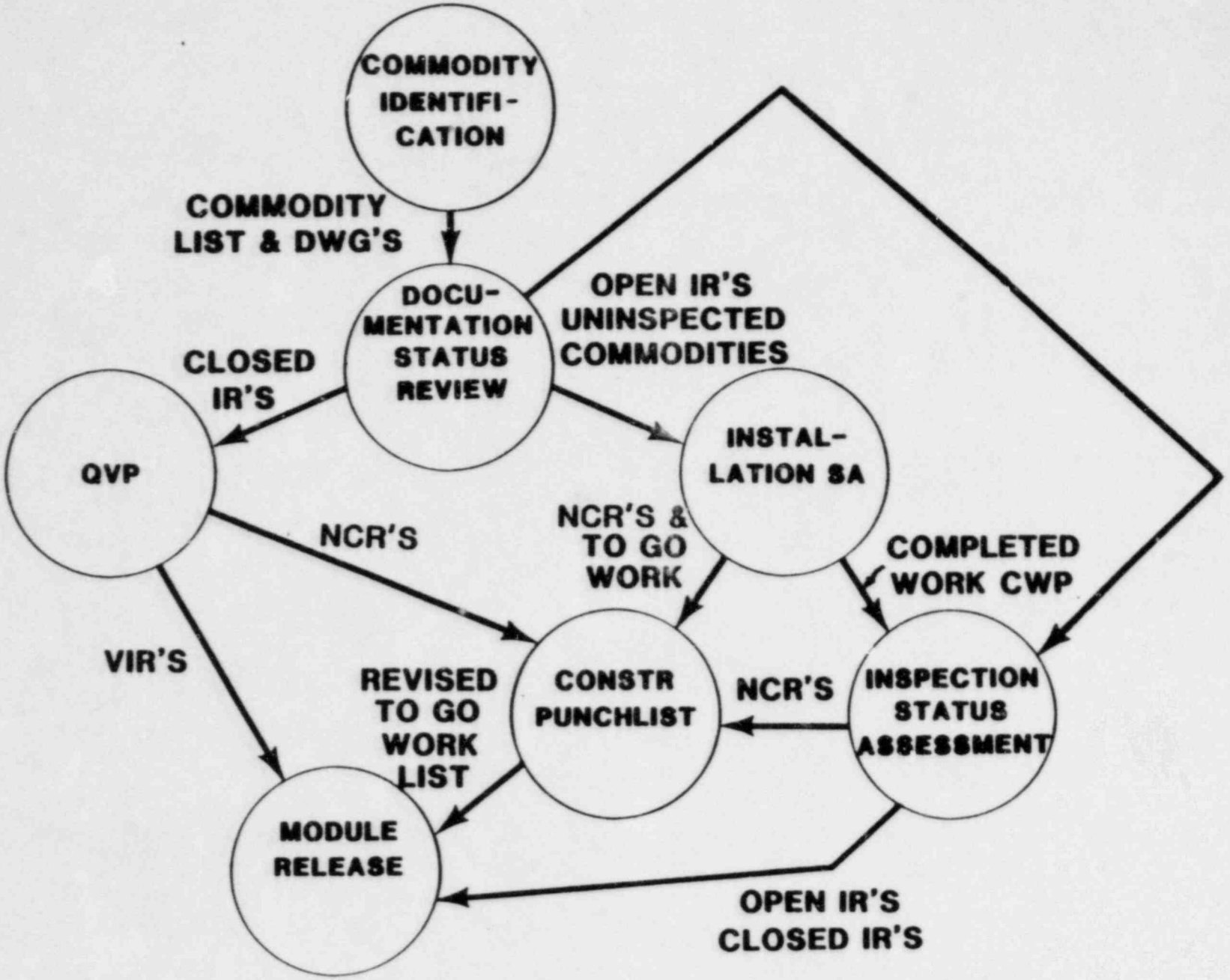
INSPECTION STATUS ASSESSMENT PROCEDURES

- FOUR PROCEDURES REQUIRED (T-SERIES)
- ALL REQUIRED PROCEDURES ISSUED.

SECTION III

RESULTS ACHIEVED TO DATE

CCP PHASE I PROCESS



INSPECTIONS INITIATED

(BY COMMODITY)

COMMODITY	FE STATUS ASSESSMENT
Mechanical Instrumentation	X
Electrical Instrumentation	X
Mechanical Equipment (M-485)	X
Electrical Equipment (E-62)	X
Pipe Supports	X
Valves (Welded)	X
Valves (Mechanical)	-
Flued Heads	-
Pipe Welds	X
Pipe	X
Concrete Pipe	-
Cable Terminations	X
Electrical Containment Penetration Assemblies	X
Feed-Thru Adapter Modules	-
Batteries/Racks	-
Structural Steel & Framing	X
Platform	X
Equipment Supports	X
Shield Plates	X
Whip Restraints	X
Jet Impingement Barriers	X
Fuel Racks	-
Liner Plate	X
Liner Plate Attachments	X
Special Doors	X
Block Walls	X
Air Locks	-
Concrete	X

INSPECTIONS INITIATED (CONT.)

(BY COMMODITY)

COMMODITY	FE STATUS ASSESSMENT
Concrete & Masonry Openings	X
Decontaminable Coatings on Concrete	X
Miscellaneous Q Coatings	X
Cable Tray	X
Conduit	X
Conduit Supports	X
Wireways & Supports	-
Trenches for Cable	-
Boxes & Supports	X
Cable Tray Supports	X
Slots	-

NCR'S IDENTIFIED 184

DOCUMENTATION ELEMENTS OF S/A

- BASE DOCUMENTS
  - DRAWINGS
  - SPECIFICATIONS
  - FIELD PROCEDURES AND INSTRUCTIONS
- COMMODITY LISTS WITH QC MARKUP
- NCR'S
- FIELD CHANGE NOTICES AND REQUESTS
- CONSTRUCTION PUNCHLISTS
- UPDATE OF DATA BASE
  - FOR INSTALLATION INSPECTION CREDIT AND IDENTIFICATION OF "TO GO WORK"
- CWP'S

INSPECTIONS INITIATED

(BY COMMODITY)

COMMODITY	QVP
Mechanical Instrumentation	-
Electrical Instrumentation	X
Mechanical Equipment (M-485)	-
Electrical Equipment (E-62)	X
Pipe Supports	-
Valves (Welded)	X
Valves (Mechanical)	X
Flued Heads	X
Pipe Welds	X
Pipe	X
Concrete Pipe	-
Cable Terminations	X
Electrical Containment Penetration Assemblies	-
Feed-Thru Adapter Modules	-
Batteries/Racks	-
Structural Steel & Framing	X
Platform	X
Equipment Supports	X
Shield Plates	-
Whip Restraints	X
Jet Impingement Barriers	X
Fuel Racks	-
Liner Plate	-
Liner Plate Attachments	-
Special Doors	X
Block Walls	X
Air Locks	-
Concrete	X

COMMODITY	QVP
Concrete & Masonry Openings	X
Decontaminable Coatings on Concrete	X
Miscellaneous Q Coatings	X
Cable Tray	X
Conduit	X
Conduit Supports	X
Wireways & Supports	X
Trenches for Cable	-
Boxes & Supports	X
Cable Tray Supports	-
Slots	-

NCR'S IDENTIFIED 133

NCR'S RECV'D BY CONSTR. 86

QVP

A "PRODUCT" OF THE QVP PROCESS WILL INCLUDE:

- COMMODITY LIST, SHOWING OPEN /CLOSED INSPECTION RECORDS
- REQUEST FOR VERIFICATION
- VERIFICATION INSPECTION RECORD (VIR)
- DISPOSITION OF INACCESSIBLE ITEMS/ATTRIBUTES (DIIA)
- NONCONFORMANCE REPORT (NCR)

NCR'S REC'D BY CONSTRUCTION THRU 3/9/84

	S/A	QVP
DAMAGE	10	31
DIMENSIONS	90	17
MATERIAL		
WELDING	25	
OTHER	59	38
	184	86 *

*EXCLUDES: HANGER VERIFICATION AND CABLE VERIFICATION

QVP NCR'S

TOTAL ISSUED AS OF 3/2/84 = 133

BREAKDOWN BY PQCI AND MODULE

PQCI NO.	TITLE	NCR'S ISSUED
MODULE 340:		
C-1.10	GROUTING + DRY PACKING	2
C-8.50	STEEL COATINGS	18
C-8.51	CONCRETE COATINGS	8
E-5.0	CABLE TERMINATIONS	31
P-1.90	PIPING	0
		59
MODULE 800:		
C-1.10	GROUTING + DRY PACKING	4
C-1.40	CONCRETE POST-PLACEMENT	0
E-1.2	CONDUIT/BOX SUPPORTS	1
E-5.0	CABLE TERMINATIONS	37
E-6.0	ELECTRICAL EQUIPMENT	0
E-6.1	MODS TO ELEC. EQUIP.	0
E-6.3	ELECTRICAL INSTRUMENTS	8
CW-1.00	WELDING + NDE - Q - NON - ASME	6
P-1.90	PIPING	18
PI-1.90	Q PIPING - RELATED INSTRUMENTS	0
		74

MANAGEMENT EVALUATIONS

MANAGEMENT IS OVERVIEWING THE CCP THROUGH THE FOLLOWING PROCESSES:

A. PERIODIC WRITTEN REPORTS

- WEEKLY STATUS ASSESSMENT REPORT TO SITE MANAGER
- WEEKLY QVP REPORT TO EXECUTIVE MANAGER - MPQAD
- BI-WEEKLY QVP REPORT TO VP - P,E & C
- MONTHLY REPOLT

B. REGULAR MEETINGS

- WEEKLY STATUS ASSESSMENT/QVP PROGRESS MEETING
- BI-WEEKLY QUALITY MEETING

C. MANAGEMENT MEETINGS

- BI-WEEKLY REVIEWS WITH CPCO PRESIDENT/CHAIRMAN OF THE BOARD
- MANAGEMENT STATUS MEETING - FEBRUARY 28, 1984
- EXECUTIVE REVIEW MEETING - MARCH 2, 1984

MANAGEMENT EVALUATIONS (CONT'D)

MANAGEMENT EVALUATIONS HAVE RESULTED IN THE FOLLOWING ACTIONS:

- READINESS STATEMENT FOR TURBINE ROLL MILESTONE
- REVIEW OF PLANS TO PROCEED FROM PHASE I TO PHASE II
- DEVELOPMENT OF A PLAN FOR ADDITIONAL MODULE RELEASES FOR PHASE I
- SELECTION OF MODULE 120D AS THE FIRST MODULE (OTHER THAN TURBINE ROLL MODULES) TO-GO TO PHASE II

SECTION IV

LESSONS LEARNED

BECHTEL SELF-APPRAISAL TEAM (SAT)

- CONCEPT INITIATED OCTOBER 1983
- PURPOSE:

  TO PROVIDE ADDITIONAL ASSURANCE TO BECHTEL MANAGEMENT THAT BECHTEL RESPONSIBILITIES ARE BEING PROPERLY CARRIED OUT

- SAT OPERATIONS:
  - PROJECT FIELD ENGINEER (PFE) SELECTS/DIRECTS SAT
  - MONITOR STATUS ASSESSMENT TEAMS PROGRESS
  - PRIMARILY MODULE 340
  - ADDITIONAL AREAS AS DETERMINED BY PFE OR HIGHER AUTHORITY

SAT AREAS REVIEWED

(AS OF 3/5/84)

1. CIVIL/ARCHITECTURAL (COATINGS)
2. CIVIL (PIPE WHIP RESTRAINTS)
3. ELECTRICAL (TERMINATIONS)
4. ELECTRICAL (RACEWAY)
5. INSTRUMENTATION
6. MECHANICAL (HANGERS)
7. MECHANICAL (PIPING)
8. WELDING (PIPING AND HANGERS)

SAT OBSERVATIONS

FIELD ENGINEERING/MPQAD INTERFACE

4

FORM COMPLETION

2

PROCEDURAL RE-EMPHASIS /CLARIFICATIONS

15

PROCESS EFFICIENCY/RECORD RETENTION

3

LESSONS LEARNED -STATUS ASSESSMENT

(AS OF 3/5/84)

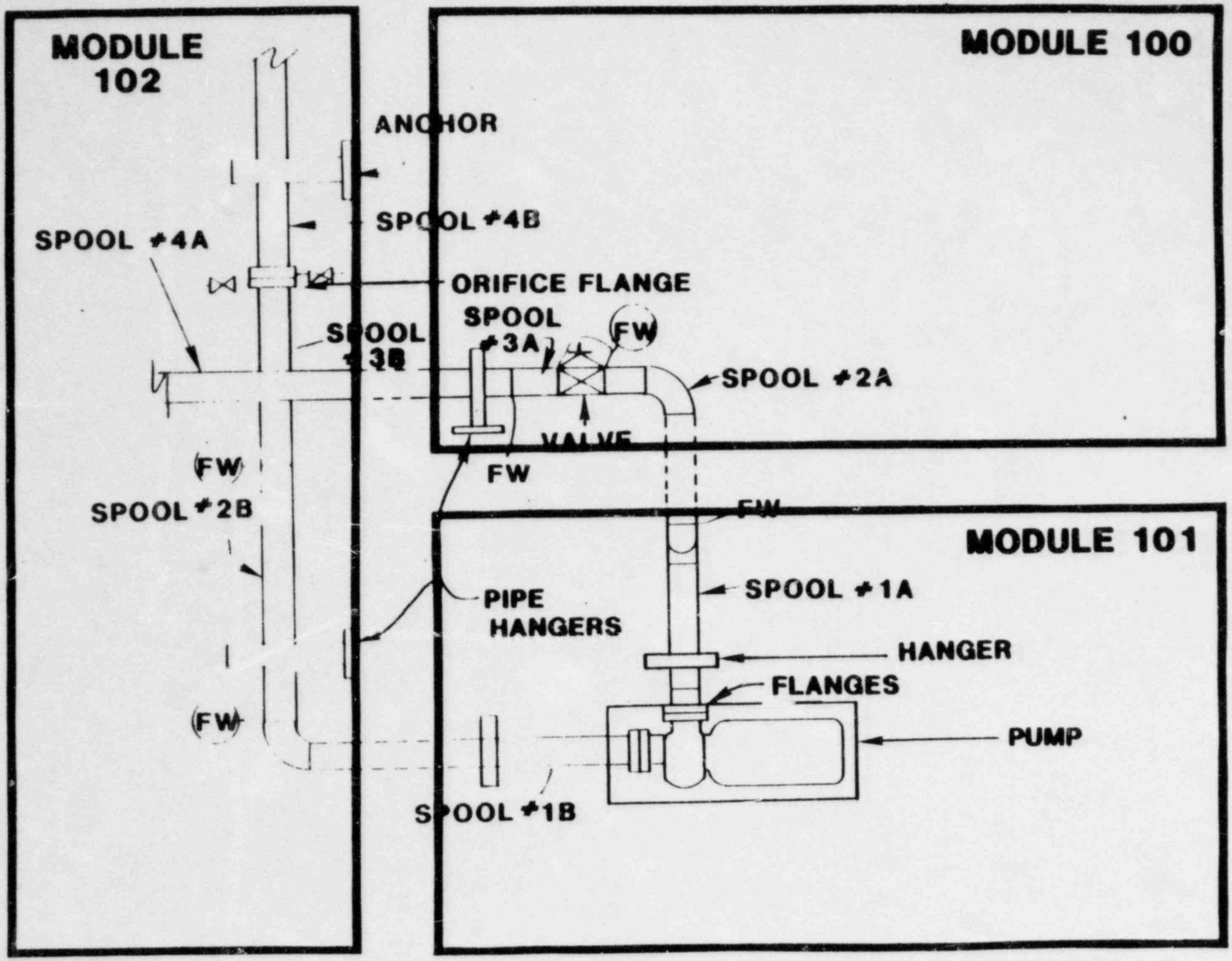
5 PROCEDURE CHANGES

11 WRITTEN REMINDERS/CLARIFICATIONS

SAT CONCLUSIONS

1. STATUS ASSESSMENT PROCEEDING SATISFACTORILY

2. SITE MANAGEMENT WILL CONTINUE SAT MONITORING OF STATUS ASSESSMENT TEAM ACTIVITIES


MODULE 102
MODULE 100
MODULE 101
ANCHOR
SPOOL #4B
SPOOL #4A
ORIFICE FLANGE
SPOOL #3A
FW
SPOOL #2A
VALVE
FW
FW
SPOOL #2B
FW
PIPE HANGERS
SPOOL #1A
HANGER
FLANGES
PUMP
FW
SPOOL #1B

RECOMMENDED RESOLUTION

INCLUDE WITH FUTURE PHASE I MODULE RELEASES, AN EXTENSION OF CROSSOVER COMMODITIES INTO OTHER MODULES TO ALLOW COMPLETION OF PHASE I TO LOGICAL LIMITS.

QVP ASSESSMENT TEAM

- INITIATED DECEMBER 1983
- ESTABLISHED TO ASSESS ADEQUACY OF QVP CONTROLS
- TEAM COMPOSITION
  - QUALITY CONTROL
  - VERIFICATION PROGRAM MGMT GROUP
  - INSPECTION EVALUATION
  - QUALITY ADVISORS STAFF
  - PROJECT ASSURANCE ENGINEERING

AREAS REVIEWED

- INSPECTION METHODS AND PROCEDURES
- USE AND CONTROL OF FORMS
- PROGRAM PROCEDURES
- COMPLIANCE WITH QVP DOCUMENT.
- REPORTS
- COMMUNICATION AND INTERFACES
- CONTROL OF ACTION ITEMS

QVP ASSESSMENT TEAM RESULTS

IN GENERAL ITEMS WERE MINOR AND REQUIRED MINOR PQCI AND PROCEDURAL REVISIONS.

THE FOLLOWING PROGRAM AREAS WERE ADDRESSED:

- CRAFT SUPPORT - SCAFFOLDING, CLEANING, LIGHTING, ACCESS
- DRAWING DOCUMENT CONTROL - ISSUANCE OF WORK PRINTS TIMELINESS OF OBTAINING DOCUMENTS, FCR INCORPORATION
- MINOR PQCI REVISIONS TO CORRECT INCONSISTANCIES
- MINOR PROCEDURE REVISIONS TO CLARIFY DATA PROCESSING AND VIR LOGGING, NUMBERING AND PROCESSING
- INSPECTION EVALUATION PROCEDURES (N-19/M-15) EFFECTIVITY DATE

LESSONS LEARNED QVP/SA

AS OF 3/9/84

N-SERIES (QVP)

15 REVISIONS:

- DELETE SAMPLING APPROACH
- UPDATE ORGANIZATIONAL TITLES
- CLARIFICATION OF REQUIREMENTS

T-SERIES (STATUS ASSESSMENT)

5 REVISIONS:

UPDATE ORGANIZATIONAL TITLES

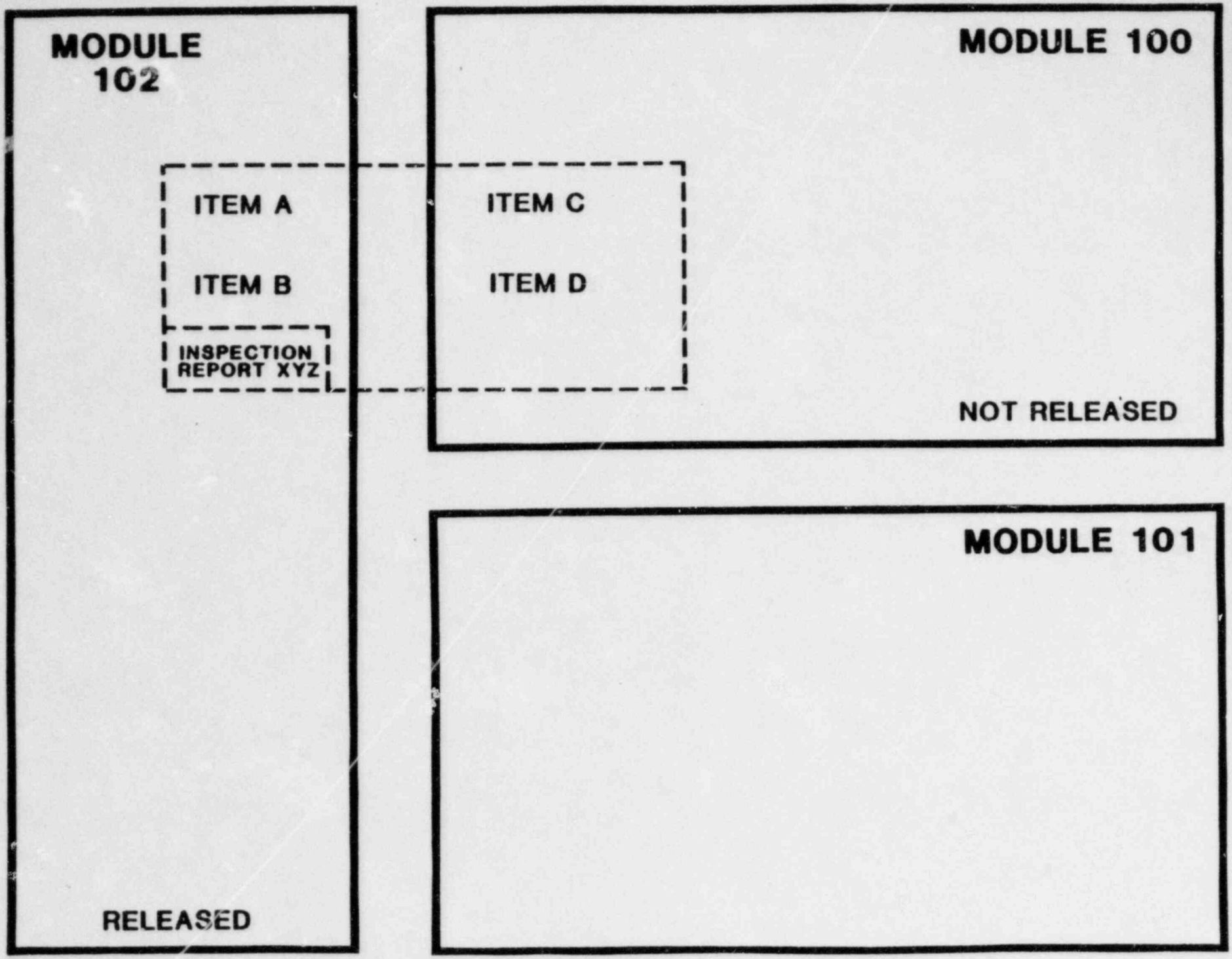
REFLECT CHANGES IN SYSTEM

CLARIFY REQUIREMENTS

QVP ASSESSMENT TEAM CONCLUSIONS

1. QVP PROCESS IS PROCEEDING IN A SATISFACTORY MANNER

2. QVP ASSESSMENT TEAM REVIEWS WILL CONTINUE


MODULE
102
ITEM A
ITEM B
INSPECTION
REPORT XYZ
RELEASED
MODULE 100
ITEM C
ITEM D
NOT RELEASED
MODULE 101

RECOMMENDED RESOLUTIONS

- ALLOW REINSPECTION TO FOLLOW SCOPE OF PQCIs

- ALLOW REINSPECTION OF MULTIPLE ITEMS WHICH ARE COVERED BY ONE "OLD" IR

SECTION V

THIRD PARTY OBSERVATIONS

THIRD PARTY OBSERVATIONS

- STATUS ASSESSMENT ACTIVITIES, IN THE PLANT, ARE BEING PERFORMED IN A SATISFACTORY MANNER.
- QVP ACTIVITIES ARE ALSO BEING PERFORMED IN A SATISFACTORY MANNER. SOME MINOR DEFICIENCIES HAVE BEEN NOTED, BUT THESE ARE NOT CONSIDERED SERIOUS.
- CIO HAS SOME CONCERNS REGARDING THE INTEGRATION OF STATUS ASSESSMENT AND QVP ACTIVITIES. CPCO IS WORKING WITH CIO TO RESOLVE THESE CONCERNS.
- CIO HAS A CONCERN REGARDING THE METHODS TO BE USED TO TIE ALL PHASE I ACTIVITIES TOGETHER PRIOR TO PROCEEDING TO PHASE II. CPCO IS WORKING WITH CIO TO RESOLVE THIS CONCERN.

SECTION VI

ADDITIONAL MODULE RELEASES

MODULE RELEASE SEQUENCE

1. 340 RB II Outside D-Ring*
2. 800 Service Water Structure
3. 102 East Wing Wall Aux* +5K SA
4. 120 584' Aux*
5. 410 614' Unit II Turbine*

RELEASED

6. 150 634' Aux*
(151 incl)
7. 160 646' & 652' Aux*
(161 & 162 incl)
8. 320 RB II N. D-Ring*
9. 240 659'Control Tower*
10. 280 659' Unit II Elect Penetration
11. 330 RB II S. D-Ring*
12. 210 614' Control Tower*
13. 820 Diesel Generator Bldg
14. 250 674'-6" Control Tower*
15. 170 659' & 674'-6 Aux*
(175 incl)
16. 140 614' Aux* 100 K. SA.
17. 230 646' Control Tower*
18. 130 599' Aux*
19. 101 Aux Bldg Pipeway & Valve Gallery*
20. 180 Aux Building Roof *
21. 110 568' Aux*

2B MILESTONE

22. 260 685' Control Tower & Roof

23. 310 RB II Fuel Pool
24. 103 West Wing Wall
25. 290 Unit I 685' W. Penetration
26. 220 634' Labs Control Tower
27. 860 Tank Farm
28. 420 634' Turbine II
29. 430 659' Turbine II
30. 440 695' & 715 Turbine II
31. 190 Radwaste Building
32. 900 Misc Structures
33. 850 Health Physics Cal Facility
34. 880 River Intake Structure
35 810 Circ Water Building
36. 890 Pond Blowdown Structure
37. 830 Guard House
38 870 Oily Waste Building
39 610 614' Turbine I
40 620 634' Turbine I
41. 630 659' Turbine I
42. 640 695' Turbine I
43. 540 RB I Outside D-Ring
44. 530 RB I S. D-Ring
45. 520 RB I N. D-Ring
46. 510 RB I Fuel Pool
47. 700 Evaporator Building
48. 710 Steam Tunnel
49. 720 Con. Return Pumphouse

* = Require for Aux Flush - 2B Milestone

PRELIMINARY

SECTION VII

SUMMARY

SUMMARY

1. THE INITIAL IMPLEMENTATION OF THE CCP PHASE I HAS PROCEEDED IN A DELIBERATE AND CAUTIOUS MANNER USING SELF-APPRAISAL PROCESSES TO DEVELOP FEEDBACK FROM LESSONS LEARNED.
2. TO-DATE PHASE I RESULTS FROM BOTH STATUS ASSESSMENT AND QVP HAVE BEEN SATISFACTORY.
3. REGULAR MANAGEMENT EVALUATIONS OF PHASE I ACTIVITIES HAVE BEEN HELD TO ASSURE THAT PROCESS CONTROLS ARE IN PLACE.
4. ADDITIONAL MODULE RELEASES ARE NECESSARY TO:
   - FACILITATE A CONTINUATION OF THE LOGICAL STATUS ASSESSMENT AND QVP PROCESS TO SUPPORT EVENTUAL PHASE II RELEASES FOR MILESTONE 2B (AUX FLUSH).
   - MAINTAIN THE PLANNED MANPOWER BUILDUP FOR STATUS ASSESSMENT AND QVP.
5. RECOMMENDED RESOLUTIONS ON COMMODITIES SPANNING SEVERAL MODULES ARE NEEDED TO FACILITATE EFFICIENT COMPLETION OF STATUS ASSESSMENT AND QVP ACTIVITIES.

MODULE RELEASE SEQUENCE

PRIORITY NUMBER	SCHEDULE NUMBER	DESCRIPTION
1	340	RB II Outside D-Ring*
2	800	Service Water Pump Structure
3	102	East Wing Wall Auxiliary Building*
4	120	El. 584' Auxiliary Building
5	410	El. 614' Unit II Turbine*
	RELEASED	
6	150 (151 included)	El. 634' Auxiliary Building*
7	160 (161 & 162 included)	El. 646' & 652' Auxiliary Building*
8	320	RB II N. D-Ring*
9	240	El 659' Control Tower*
10	330	RB II S. D-Ring*
11	820	Diesel Generator Building
12	280	El. 659' Unit II Electrical Penetration
13	210	El. 614' Control Tower*
14	250	El. 674'-6" Control Tower*
15	170 (175 included)	El. 659' & 674'-6 Auxiliary Building*
16	140	El. 614' Auxiliary Building*
17	230	El. 646' Control Tower*
18	130	599' Auxiliary Building*
19	101	Auxiliary Building Pipeway and Valve Gallery*
20	180	Auxiliary Building Roof*
21	110	El. 568' Auxiliary Building*
	2B MILESTONE	
22	260	El. 685' Control Tower and Roof
23	310	RB II Fuel Pool
24	103	West Wing Wall
25	290	Unit I El. 685' W. Penetration
26	220	El. 634' Labs Control Tower
27	860	Tank Farm
28	420	El. 634' Turbine II
29	430	El. 659' Turbine II
30	440	El. 695' and 715 Turbine II
31	190	Radwaste Building
32	900	Miscellaneous Structures
33	850	Health Physics Cal. Facility
34	880	River Intake Structure
35	810	Circulating Water Building
36	890	pond Blowdown Structure
37	830	Guard House
38	870	City Waste Building
39	610	El. 614' Turbine I
40	620	El. 634' Turbine I
41	630	El. 659' Turbine I
42	640	El. 695' Turbine I
43	540	RB I Outside D-Ring
44	530	RB I S. D-Ring
45	520	RB I N. D-Ring
46	510	RB I Fuel Pool
47	700	Evaporator Building
48	710	Steam Tunnel
49	720	Cou. Return Pumphouse

* = Require for Aux. Flush - 2B Milestone

Revision 1
3/27/81
BHPeck

Uniquely identified and tracked crossover commodities that may be status assessed or quality verified as a unit.

COMMODITY	EXTENSION LIMIT
Electrical Slots (floor penetration)	Complete uniquely identified unit
Cable Tray	Complete uniquely identified unit
Exposed Conduit	Complete uniquely identified unit
Wireway	Complete uniquely identified unit
Embed Conduit/Ductbanks	Each end
Trenches	Complete uniquely identified unit
Instrumentation Tubing	Complete isometric drawing. (To be included with module containing instrument)
Mechanical Equipment	The entire piece of equipment as supplied by the equipment vendor will be assessed on both rotating and nonrotating equipment, even if field work or assembly was performed within the component or skid.
Equipment Supports	Both integral and non-intregral equipment supports will be assessed in their entirety, not including the permanent building frame or structure.
Special Doors & Airlocks	Complete door with hardware and frame

Uniquely identified commodities that form a single identifiable unit and may be status assessed or quality verified as a unit.

COMMODITY	EXTENSION LIMIT
Structural Framing	to and including the next connection or support point
Blockwalls	Both sides of wall, including attachments and penetrations to end of the span (tie-in to the next structural support point)
Structural Concrete Walls	both sides of the wall, including penetrations, up to the module boundary
Decontaminable Coatings	any coatings on the commodities shown on this extension list
Miscellaneous Q Coatings	Any coatings on the commodities shown on this extension list

Functionally interrelated crossover commodities that may be status assessed or quality verified as a whole item.

COMMODITY	EXTENSION LIMIT
Large Pipe	Assess to the point outside the module which represents the boundary of the stress analysis. This will not exceed the first anchor point, ie: anchor, pump, tank nozzle, etc.
Small Pipe	Assess to the limits of the piping as shown on the isometric. Note: QVP on piping which was accepted on PW-1.00 and PF-1.10 PQCI's must extend to the next "field break," ie: field weld or flange joint, beyond these limits.
In-Line Commodities: Flued Heads Flange Joints Weld Joints Valves (Mechanical and Welded) Orifice Plates	Assess all of these commodities which are installed within the boundaries of the piping being assessed (as described above).
Electrical Penetration Assembly	Manufactured electrical pressure boundary assembly as a complete unit

BCC JWCook, P-26-336B
SHHowell, M-1180B
TABuczwinski, Midland-207
LGraber, LIS
JNLeech, P-24-506
DFLewis, Bechtel
FJLevandoski, B&W
GALow, P-12-237A
DASommers, P-14-106
PPSteptoe, IL&B, Chicago
DJVandeWalle, P-24-614B
BJWalraven, P-24-517
RAWells, Midland
FCWilliams, IL&B, Washington, DC
DTPerry, Midland
NRC Correspondence File, P-24-517
UFI, P-24-511
CMS-Midland
JEKarr, Stone & Webster

RC DMBudzik, P-24-517A
RJErhardt, P-14-113A
LSGibson, P-24-618A
P-24-505 (Last)

Consumers Power Company

James W Cook
Vice President - Projects, Engineering and Construction

General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0453

November 10, 1983

PRINCIPAL STAFF			
RA		DPP	
D/RA		DE	
A/RA		DRMSP	
RC		DRMA	
PAO		SCS	Orig + 3
EGA		AL	
ELF		File	

Harold R Denton, Director
Office of Nuclear Reactor Regulation
Division of Licensing
US Nuclear Regulatory Commission
Washington, DC 20555

MIDLAND ENERGY CENTER
MIDLAND DOCKET NOS 50-329, 50-330
SUPPLEMENTAL RESPONSE TO GENERIC LETTER 82-33
FILE: B13.3 SERIAL: 26468

REFERENCE: (1) CPCO LETTER, SERIAL 21649, DATED APRIL 13, 1983, RESPONSE TO GENERIC LETTER 82-33
(2) CPCO LETTER, SERIAL 26237, DATED OCTOBER 28, 1983, CONSTRUCTION COMPLETION SCHEDULE

This letter provides Revision 1 to the Midland Emergency Response Capabilities (ERC) Schedule (see attached). In accordance with our previous commitment, provisions for this schedule revision were documented per Reference 1.

As you may be aware, the impact of the Dow termination and the delays in the approval of the CCP has changed many of the major schedule assumptions in the Midland Plant Schedule. As a result, we are presently re-evaluating that schedule for the completion of Unit 2. Where possible, we have given dates in the ERC Schedule for information submittal, completion of construction, implementations of procedures and personnel training. As the schedule for plant completion is established, it may become necessary to adjust these dates. Wherever completion dates are not given, "prior to fuel load" has been provided. Within six months following our new schedule announcement, we will submit a subsequent revision to this table modifying any dates as necessary.

James W. Cook

JWC/CLH/mdb

CC RJCook, Midland Resident Inspector
JGKeppler, Administrator, NRC Region III

8311180124

NOV 17 1983

oc1183-0658a100

CONSUMERS POWER COMPANY
Midland Units 1 and 2
Docket No 50-329, 50-330

Letter Serial 26468 Dated November 10, 1983

At the request of the Commission and pursuant to the Atomic Energy Act of 1954, and the Energy Reorganization Act of 1974, as amended and the Commission's Rules and Regulations thereunder, Consumers Power Company submits Revision 1 to the Midland Emergency Response Capabilities (ERC) Schedule.

CONSUMERS POWER COMPANY

By /s/ J W Cook
J W Cook, Vice President
Projects, Engineering and Construction

Sworn and subscribed before me this 14 day of November, 1983

/s/ Barbara P Townsend
Notary Public
Jackson County, Michigan

My Commission Expires September 8, 1984

oc1183-0658a100

TABLE 1: REVISION 1

MIDLAND ERC SCHEDULE

	FORECAST DATE
SPDS	
A. Safety Analysis Submittal	March 1984
B. System Operational	March 1984
C. Operators Trained	Prior to fuel load
DCRDR	
A. Submittal of Program Plan	Completed January 15, 1983
B. Final Report Describing Control Room Improvements	Completed March 31, 1983
C. Implementation of Recommendations	Prior to fuel load
R.G. 1.97	
A. Implementation Report	February 1984
B. Implementation of Recommendations	Prior to fuel load
EOPs	
A. Submittal of Technical Guidelines	June 1984
B. Submittal of Procedures Generation Package	June 1984
C. EOP Implementation	Prior to fuel load
Integrated Training Plan	
A. Training Completion	Prior to fuel load*
ERFs	
A. Submittal of Plan	
1. NUREG - 0814 Response	Completed Feb 19, 1982
2. Staffing Information & GOCC Description	Completed Feb 15, 1983
B. Completion date for fully functional	
1. TSC	Prior to NRC Emergency Planning Appraisal
2. OSC	Prior to NRC Emergency Planning Appraisal
3. EOF	Prior to NRC Emergency Planning Appraisal
4. GOCC	Prior to NRC Emergency Planning Appraisal

*Training completion dependent upon final resolution of the SPDS/DCRDR/ EOF's/Accident Monitoring Instrumentation/ERF submittals

mi1183-0658b100

INTEROFFICE MEMORANDUM
▲ 040.26

SUBJECT CPCo TRAINING

J.O. OR W.O. NO. 14509

DATE October 21, 1983

FROM S. W. Baranow

TO MR. D. QUAMME

PRINCIPAL STAFF			
A		DPRP	
D/RA		DE	
A/RA		DRMSP	
C		DRMA	
AO		SCS	
SGA		ML	
ENF		File	

Orig+3

CC: JCKeppler, Administrator
Region III
JJHarrison, US NRC
RCook, US NRC
RBKelly, S&W
APAmoruso, S&W
CORichardson, S&W

Subsection 4.2.3 of the Construction Completion Program (CCP) forwarded by the letter of August 26, 1983 to Mr. J. G. Keppler from Mr. J. W. Cook discusses training for each organization, management, and staff level. The CIO understands that a separate training program exists for CPCo staff members. An assessment of that program by the CIO has been planned. Preliminary contact with your staff, however, indicates that this training program may not be structured as an auditable activity but setup as more of an informal informational program.

Your comments on this matter would be appreciated.

S. W. Baranow

OCT 26 1983

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

RPW

OCT 2 1 1983

Docket No. 50-329
Docket No. 50-330

Consumers Power Company
ATTN: Mr. D. L. Quamme
Site Manager
P. O. Box 1963
Midland, MI 48640

Dear Mr. Quamme:

SUBJECT: CONSTRUCTION COMPLETION PROGRAM (CCP), NRC HOLD POINT RELEASE

The staff has reviewed your letter dated October 20, 1983, requesting the NRC to release designated areas of the plant to allow Consumers Power Company (CPCo) to initiate Phase 1 of the CCP (status assessment and verification of completed work) for those areas.

As a basis for granting authorization, the staff, as part of its inspection effort, has reviewed/observed the following documents/activities: (1) the CCP program, (2) CPCo and Bechtel procedures related to the CCP, (3) the retraining and recertification of QC Inspectors, (4) the training of CCP teams, (5) revised Project Quality Control Instructions (PQCI's), (6) Third Party Program, Stone and Webster Construction Implementation Overview (CIO), (7) CIO implementation, (8) CIO Hold Point usage, (9) CCP Management Reviews, and (10) problem identification and corrective action.

The results of these NRC inspections are documented in the NRC Midland Monthly Inspection Reports.

The staff, based on these reviews, has concluded that CPCo has completed the requirements to enter Phase 1 for the requested areas. This letter, therefore, authorizes CPCo to proceed with Phase 1 activities for the CCP for the following plant modules:

340 - Balance of Unit 2 Containment
102 - Unit 2 Pipeway and Valve Galleries
120 - Elevation 584 Auxiliary Building
410 - Elevation 614 Unit 2 Turbine Building
800 - Service Water Building

8310270165

OCT 2 1 1983

Should you have any questions regarding this matter, please call me at (312) 790-5635.

Sincerely,

Original signed by
J. J. Harrison

J. J. Harrison, Chief
Section 2, Midland

Enclosure: Ltr dtd 10/20/83

cc w/encl:
DMB/Document Control Desk (RIDS)
Resident Inspector, RIII
The Honorable Charles Bechhoefer, ASLB
The Honorable Jerry Harbour, ASLB
The Honorable Frederick P. Cowan, ASLB
The Honorable Ralph S. Decker, ASLB
William Paton, ELD
Michael Miller
Ronald Callen, Michigan
Public Service Commission
Myron M. Cherry
Barbara Stamiris
Mary Sinclair
Wendell Marshall
Colonel Steve J. Gadler (P.E.)
Howard Levin (TERA)
Billie P. Garde, Government
Accountability Project
Lynne Bernabei, Government
Accountability Project
Stone and Webster Michigan, Inc.
James W. Cook, CPCo

RIII						
Gardner/ls	Harrison	Warnick	Lewis	Davis	Keppler	
10/21/83	10/21/83	10/21	10/21	10/21	10/21/83	

Consumers Power Company

Midland Project: PO Box 1983, Midland, MI 48640 • (517) 631-8650

PRINCIPAL STAFF			
RA		DRP	
D/RA		DE	
A/RA		DRMSP	
PC		DRMA	
PAO		SCS	
SGA		ML	
ENF		File	

orig +3

October 20, 1983

Mr John J Harrison
Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

MIDLAND ENERGY CENTER
MIDLAND DOCKET NOS 50-329 and 50-330
CONSTRUCTION COMPLETION PROGRAM
RELEASE OF PHASE 1 ACTIVITIES
File: 0655 UFI: 99*08 Serial: CSM-0694

References: 1) Letter to Mr J G Keppler dated August 26, 1983 from Mr J W Cook regarding Construction Completion Program

2) Letter to Mr J W Cook dated October 6, 1983 from Mr Richard C DeYoung regarding Confirmatory Order for Modification of Construction Permits for the Midland Plant

The initiation of status assessment and verification of completed work (Phase 1 of the Construction Completion Program) requires a release from NRC as defined in References 1 and 2. This is to inform you that Consumers Power Company has completed its preparation and required Management Reviews for Phase 1 and is requesting NRC release to initiate Phase 1 in a portion of the plant defined herein. The Construction Implementation Overview (CIO) has released their hold points on Phase 1 activities. (See Attachments)

We have planned an initial implementation of Phase 1 that is restricted to specific areas of the plant as defined in Attachment 2. The initial activities will be restricted to five modules which represent approximately 10 percent of the total number of modules covered by the CCP. During the initial effort, all team activities and elements of the Quality Verification Program (QVP) will be exercised in a slow, controlled manner. Frequent internal review and assessment will be carried out to ensure all objectives and commitments of the CCP are being met during this initial effort. Full NRC release for Phase 1 will be requested after this initial effort has demonstrated effective implementation of the CCP. We are prepared to support any additional reviews above those already conducted on our procedures and training that the NRC may require.

Dean L Quamme
Site Manager

OCT 21 1983

DLQ/pp

8310270174

CC: OL/OM Service List
DSHood, US NRC
RJCook, Midland Resident Inspector

BCC: SHHowell, P26-336B
TABuczwinski, Midland-207
JNLeech, P24-507
DFLewis, Bechtel
DJVandeWalle, P24-614B
GALow, P12-237A
NRC Correspondence File, P24-517
UFI, P24-517
BJWalraven, P24-517
Hearings File, P24-517
RAWells, Midland
RJErhardt, P14-113A
Stan Baranow, S&W (CIO)

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1901 Q Street, NW
Washington, DC 20009

STONE & WEBSTER MICHIGAN, INC.
P.O. Box 2325, Boston, Massachusetts 02107

Site Mgr.

Midland Project

Mr. J. G. Keppler, Administrator, Region III
Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

October 12, 1983
J.O. No. 14509
NRC File #83-10-12

RE: DOCKET NO. 50-329/330
MIDLAND PLANT - UNITS 1 AND 2
OVERVIEW OF THE CONSTRUCTION COMPLETION PROGRAM

The purpose of this letter is to indicate the status of CIO approval of QVP, BHO and Status Assessment.

QVP was conditionally approved by CIO letter, NRC File #83-06-17 dated June 17, 1983. The conditions were satisfied as reported in weekly reports No's 5 and 6. Status Assessment was conditionally approved by CIO letter, NRC File #83-06-30 dated June 30, 1983 and the conditions were satisfied as reported in weekly report No. 12.

BHO and CIO reported 5 observations resulting from the Management Review Committee meeting on May 18, 1983. These observations were satisfactorily responded to in CPCo letter, Serial CSM-0656 dated July 1, 1983. CIO weekly report No. 4 dated July 12, 1983 closes this item.

CIO considers QVP, BHO and Status Assessment ready for implementation.

CIO requires NIRs #002. 003, 004 and 005 to be dispositioned prior to assignment of the referenced 45 MPQAD personnel to QVP. A "Hold Point," has been established against the use of the 45 personnel to perform QVP.

CIO report No. 16 identifies the review of "Vendor Equipment Program" as a Hold Point to Phase II of CCP.

Very truly yours,

S. W. Baranow
Program Manager

SWB/ka

cc: JJHarrison, US NRC, Glen Ellyn, IL
RCook, US NRC Midland (site)
DBMiller Jr., CPCo Midland (site)
RBKelly, S&W
APAmoruso, S&W
CORichardson, S&W

8310270176

ATTACHMENT #2

MODULES REQUESTED FOR RELEASE

340 - Balance of Unit #2 Containment

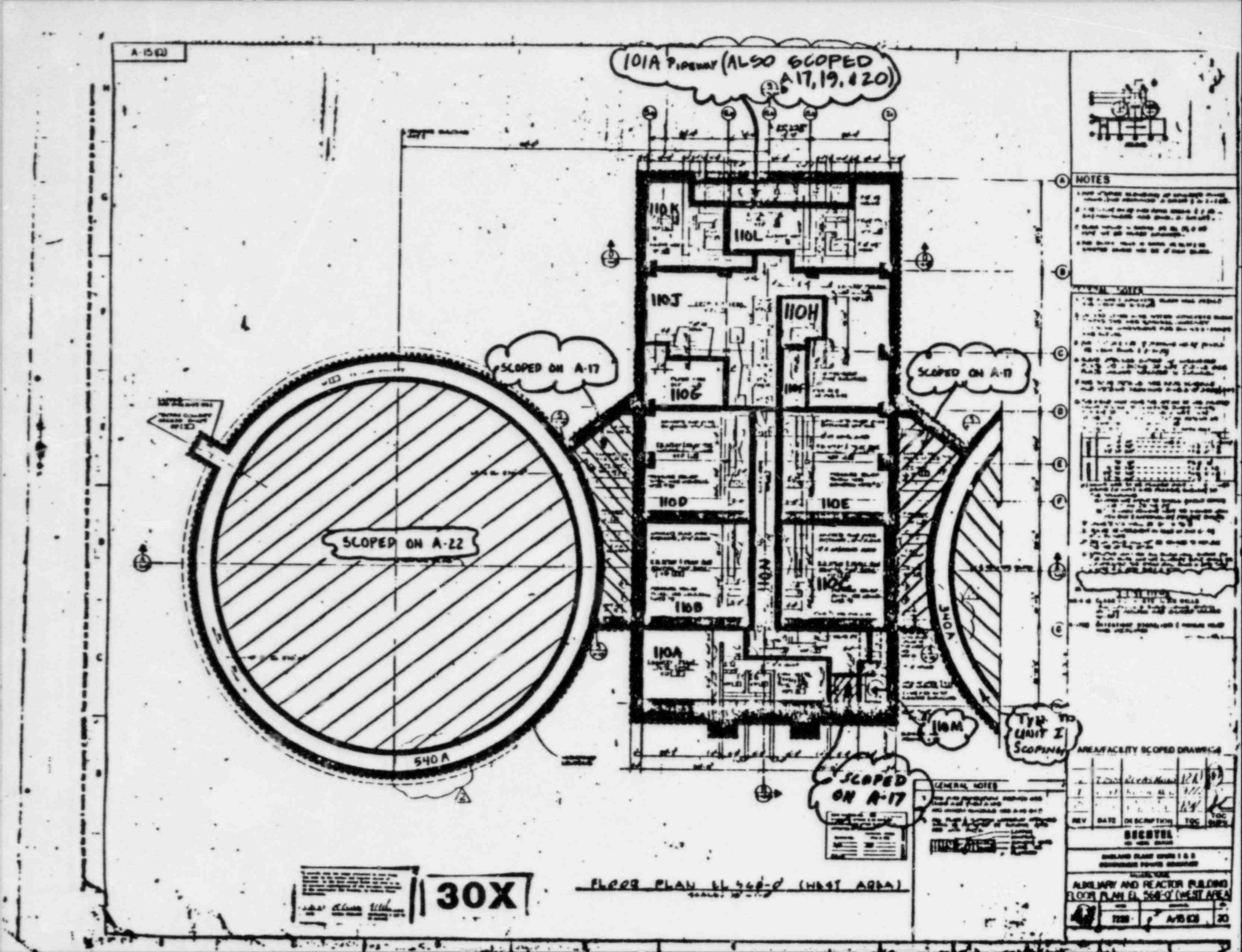
102 - Unit #2 Pipeway & Valve Galleries

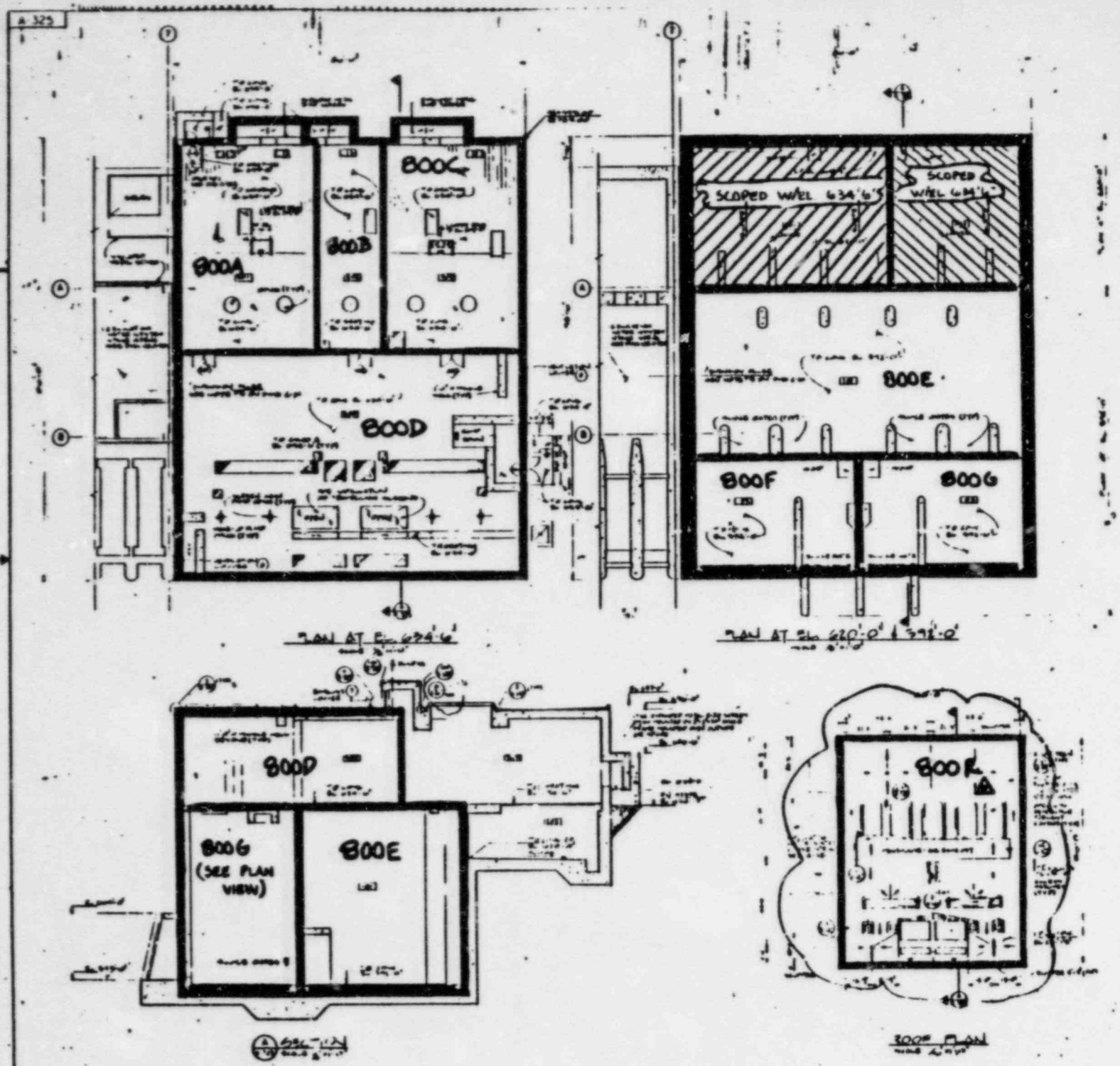
120 - Elevation 584 Auxiliary Building

410 - Elevation 614 Unit #2 Turbine Building

800 - Service Water Building

NOTE: Drawings describing the modules are attached.


101A PIPEWAY (ALSO SCOPED A17, 19, & 20)
110K
110L
110J
110H
110G
110F
110D
110E
110C
110B
110A
110M
SCOPED ON A-17
SCOPED ON A-17
SCOPED ON A-22
540A
SCOPED ON A-17
TYP UNIT 1 SCOPING
NOTES
AREA/FACILITY SCOPED DRAWINGS
GENERAL NOTES
30X
FLOOR PLAN EL 568'-0" (WEST AREA)
AUXILIARY AND REACTOR BUILDING
FLOOR PLAN EL 568'-0" (WEST AREA)



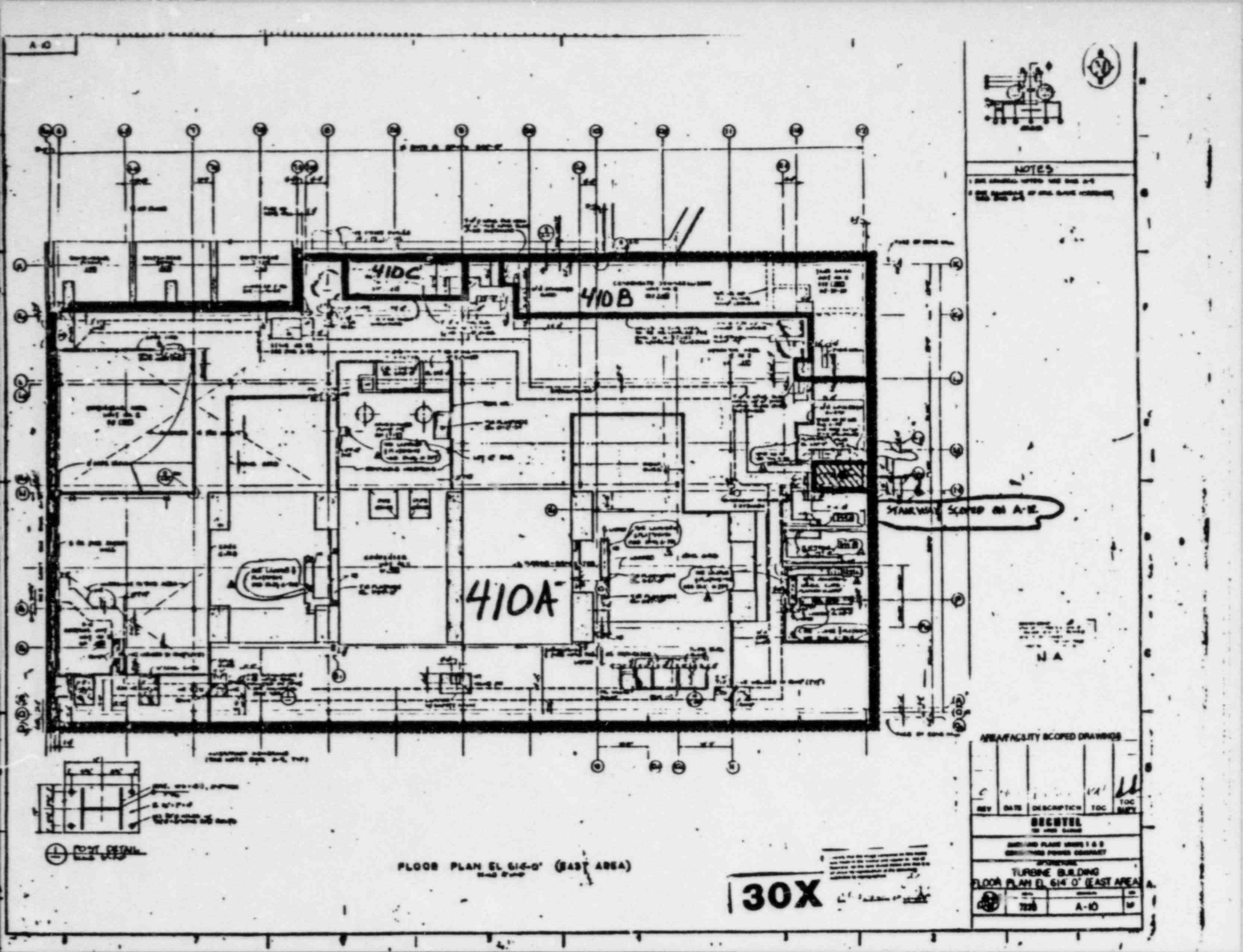
NOTES

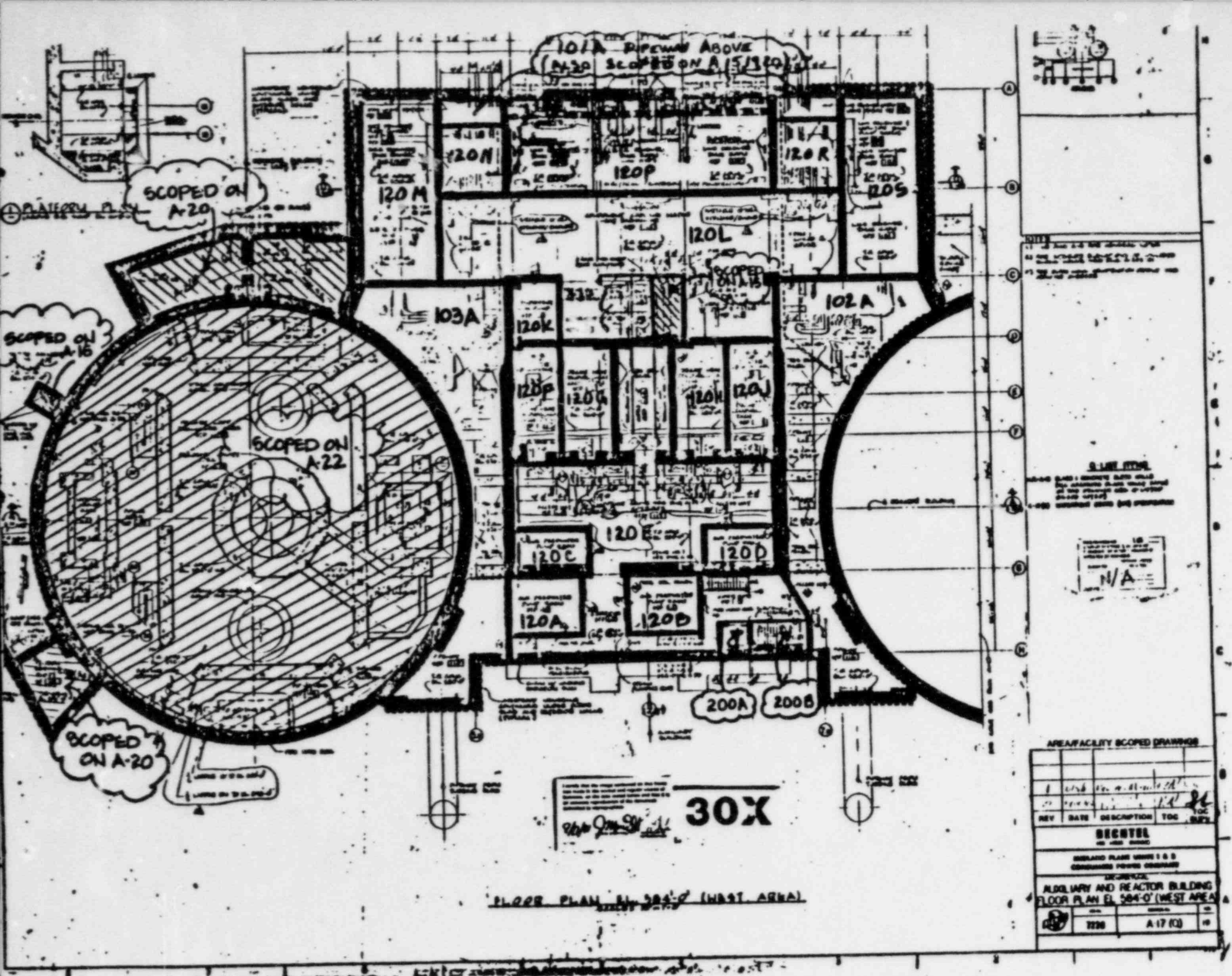
30X

BECHTEL

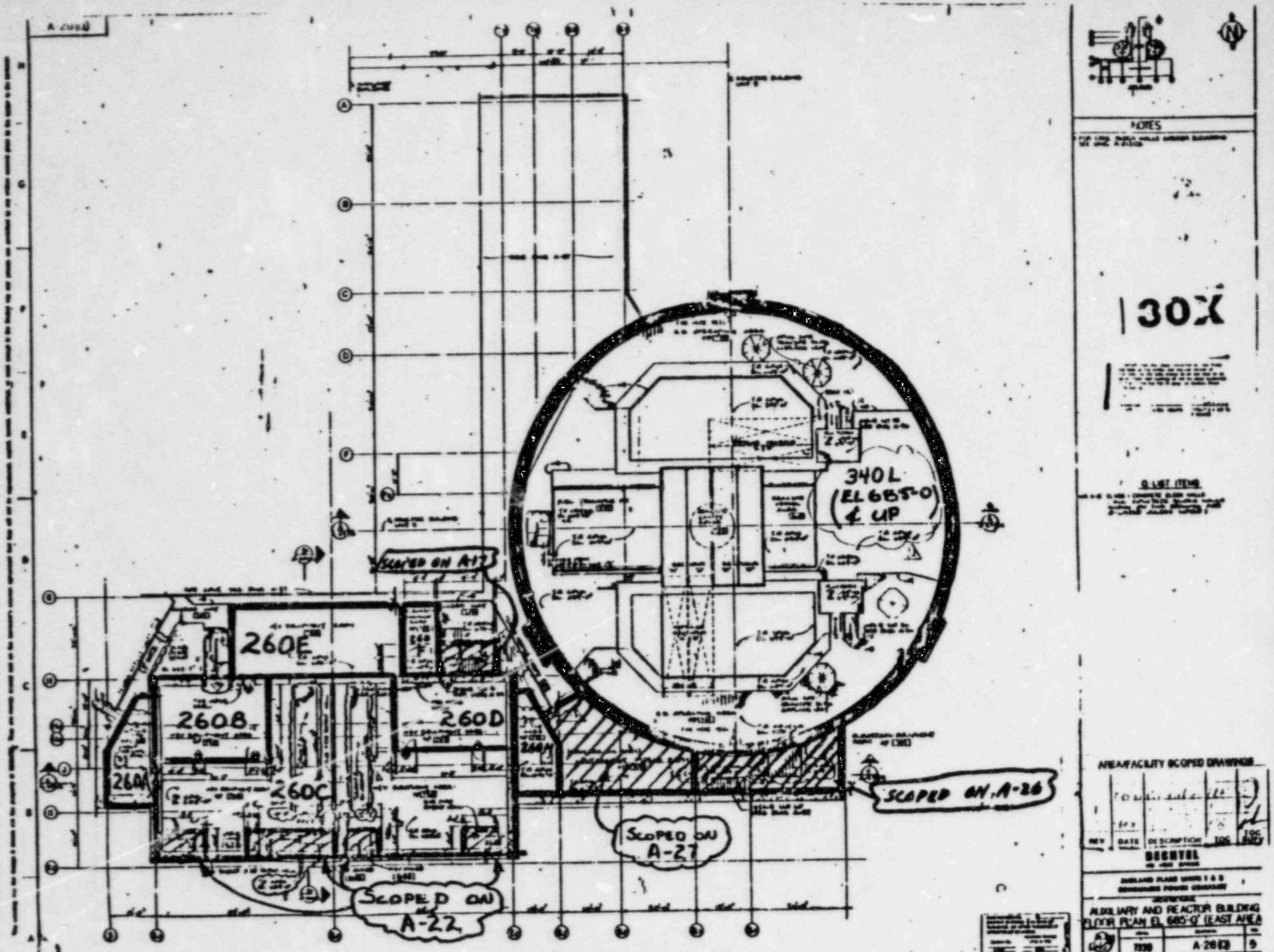
SERVICE WATER PUMP STRUCTURE
FLOOR PLANS & SECTIONS

7330 | A-325 | 3


410C
410B
410A
STAIRWAY SHOWN ON A-12
N A
NOTES
AREA/FACILITY SCOPED DRAWINGS
REV
DATE
DESCRIPTION
TOC
TOC SHEET
BECHTEL
TURBINE BUILDING
FLOOR PLAN EL 614' 0" (EAST AREA)
A-10
FLOOR PLAN EL 614'-0" (EAST AREA)
30X



FLOOR PLAN EL 584'-0" (WEST AREA)



FLOOR PLAN EL 685'-0" (EAST AREA)

NOTES

130X

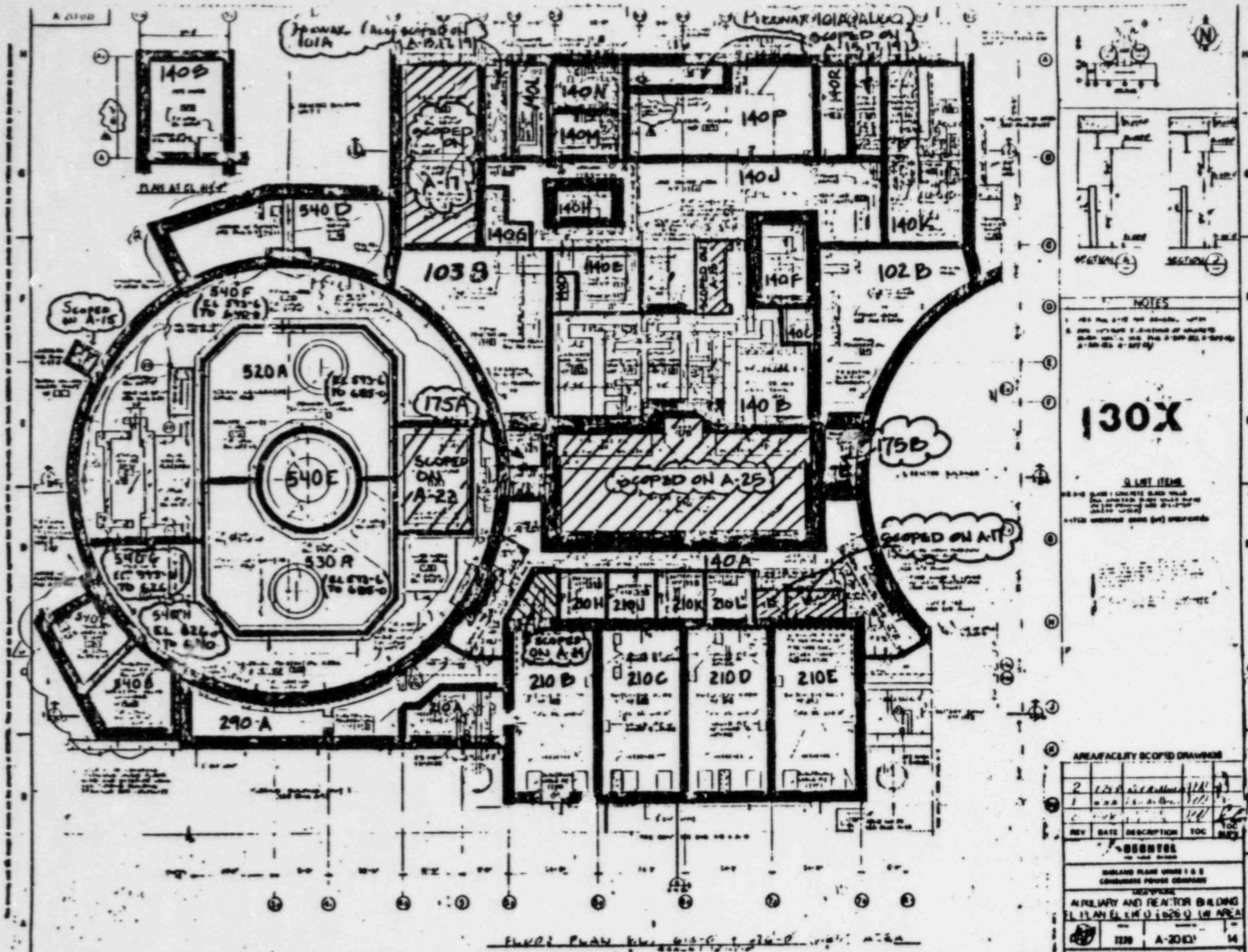
AREA/FACILITY SCOPED DRAWINGS

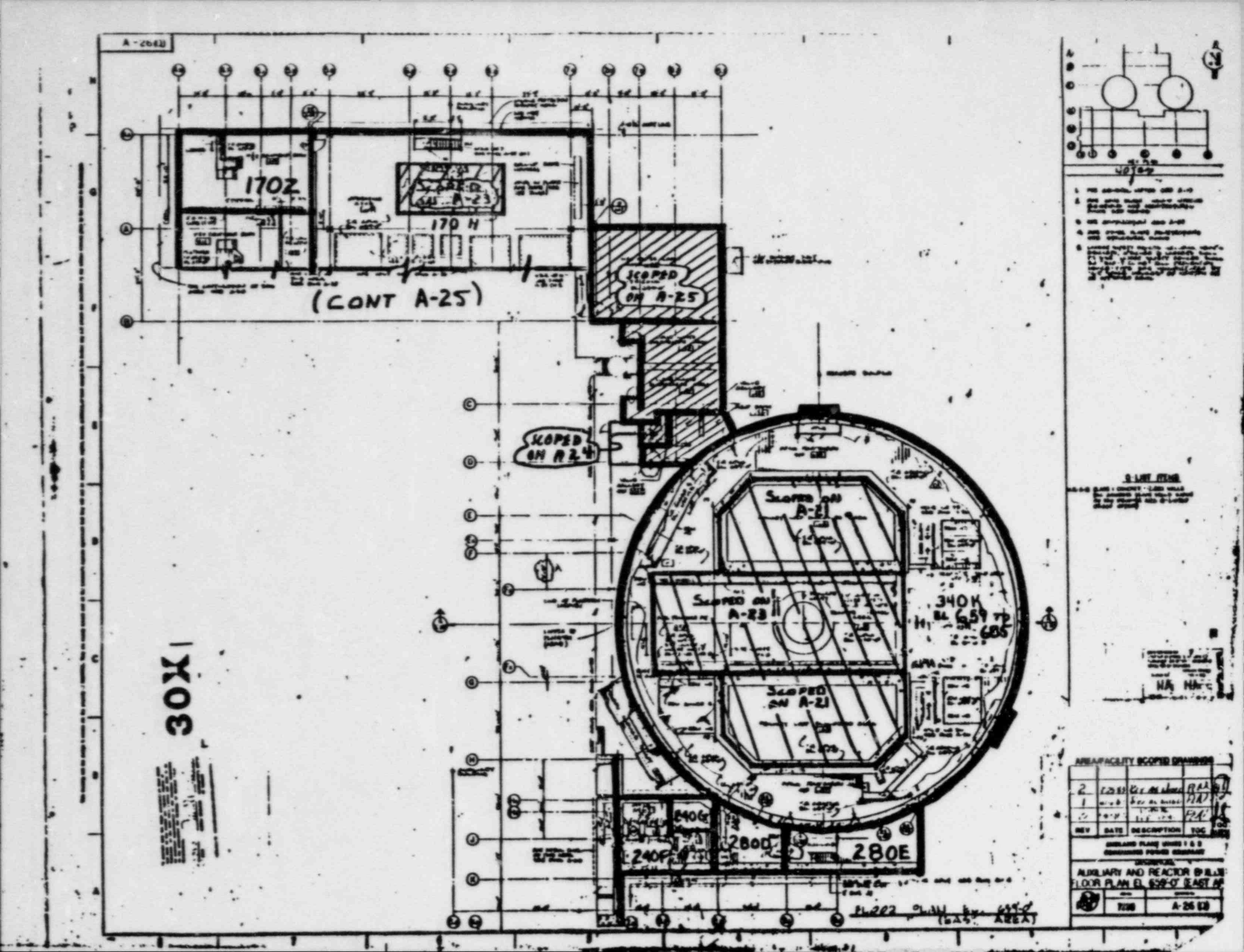
REV	DATE	DESCRIPTION	ORIG	CHK'D

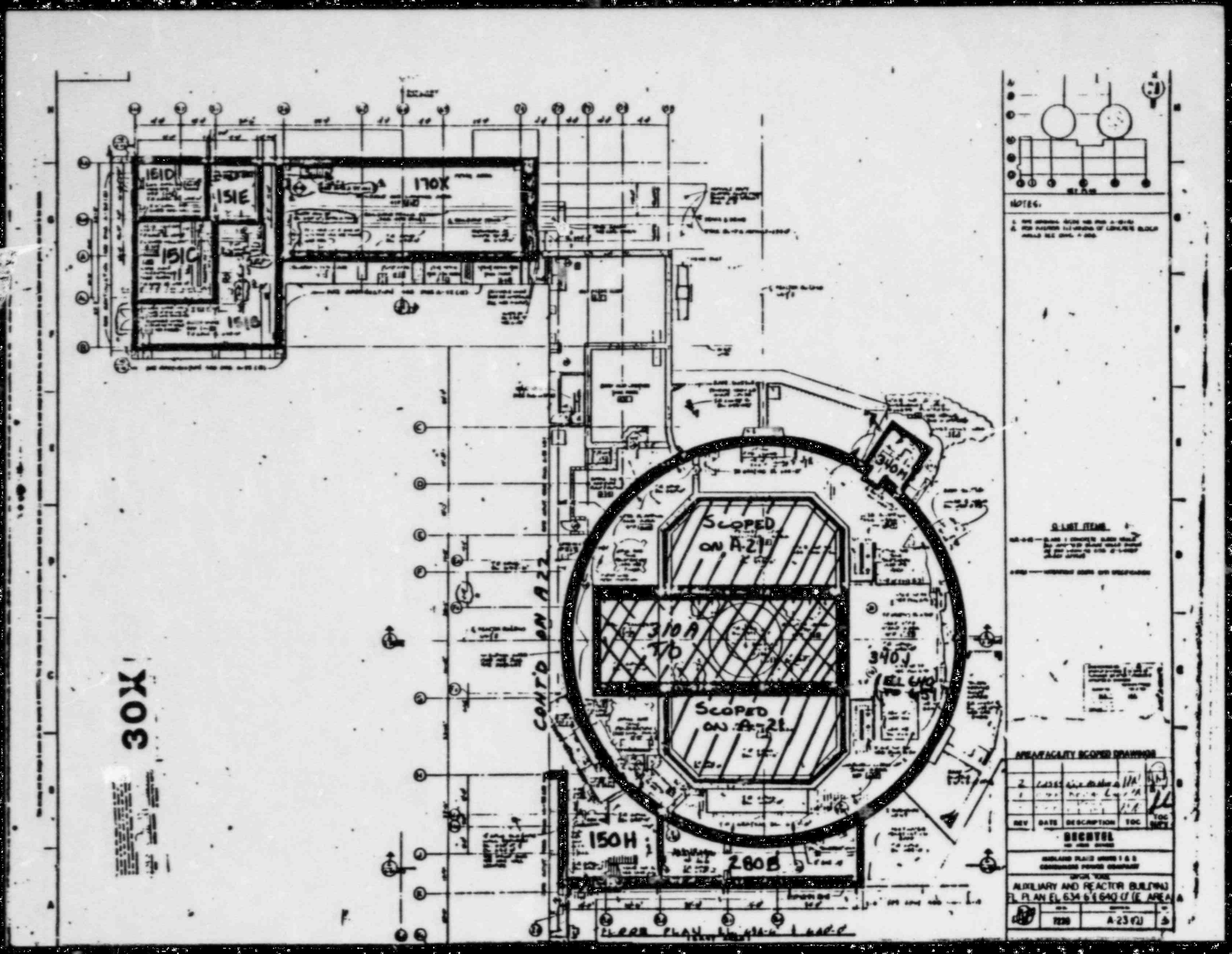
BECHTEL

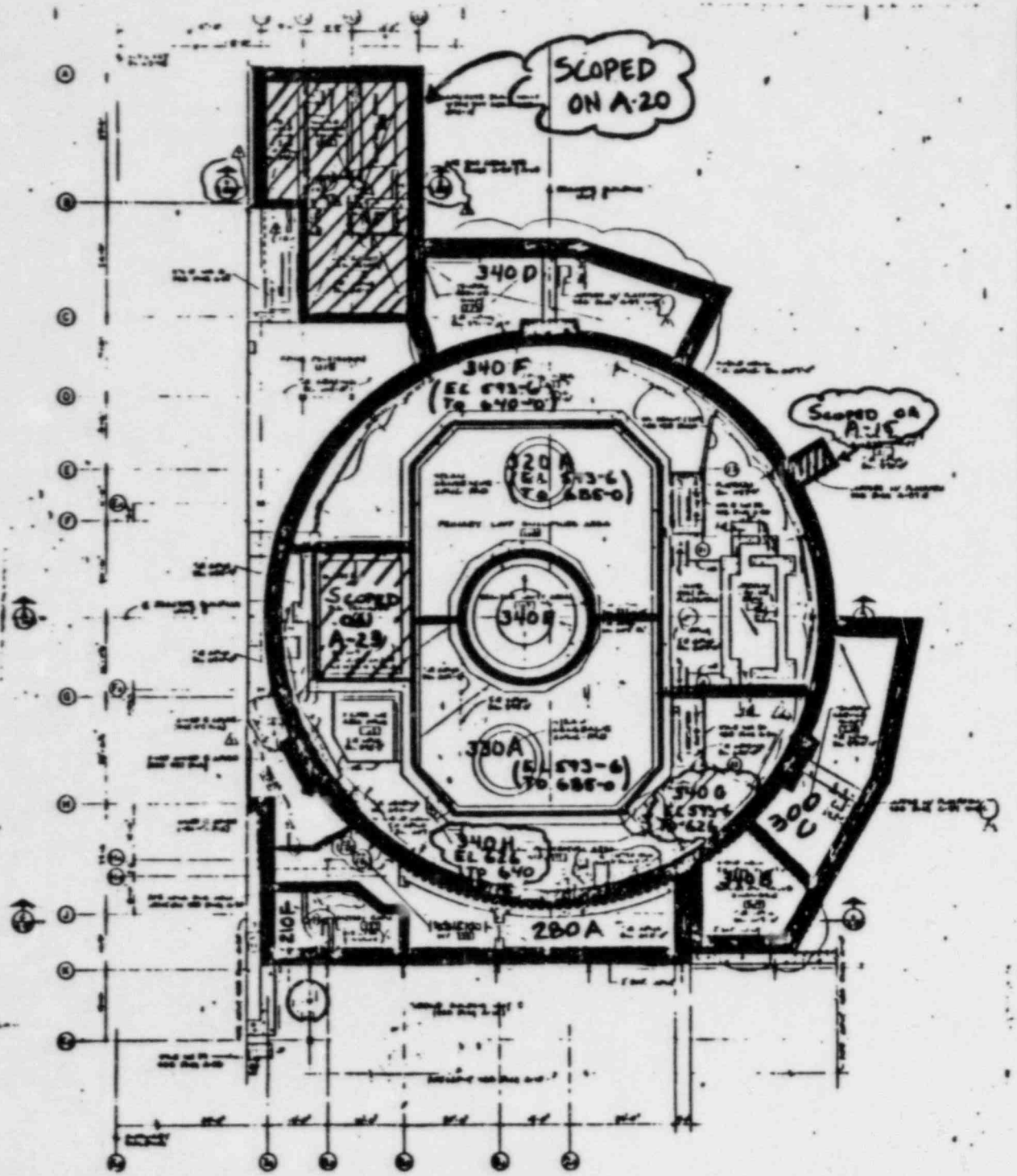
AUXILIARY AND REACTOR BUILDING
FLOOR PLAN EL 685'-0" (EAST AREA)

	1230	A-2823	5


140S
140L
140N
140M
140P
140R
140J
140H
140G
140K
103B
102B
140E
140F
140B
540D
540F
Scoped on A-15
520A
175A
175B
540E
Scoped on A-22
SCOPED ON A-25
SCOPED ON A-17
530R
540G
540H
540B
140A
210H
210J
210K
210L
210B
210C
210D
210E
210A
290-A
NOTES
130X
Q LIST ITEMS
AREA/FACILITY SCOPED DRAWINGS
REV
DATE
DESCRIPTION
TOC
BECHTEL
AUXILIARY AND REACTOR BUILDING
A-2010
14


1702
170 H
(CONT A-25)
SLOPED ON A-25
SLOPED ON A-24
SLOPED ON A-23
SLOPED ON A-21
340K
280D
280E
240F
240G
30X


151D
151E
170X
151C
151B
SCOPED ON A-21
310A TO
340J
SCOPED ON A-21
150H
280B
340M
CONT'D ON A-22
30X
NOTES:
AREA/FACILITY SCOPED DRAWINGS
REV
DATE
DESCRIPTION
BECHTEL
AUXILIARY AND REACTOR BUILDING
A-23



FLOOR PLAN Elev. 614'-0" & 626'-0" (EAST AREA)

N

AS-BUILT ITEMS

30X

AREA/FACILITY SCOPED DRAWINGS

REV	DATE	DESCRIPTION	TOC	TOC BACK

BECHTEL

MIDLAND PLANT UNITS 1 & 2
CONSUMERS POWER COMPANY

AUXILIARY AND REACTOR BUILDING
FL. PLAN El. 614'-0" & 626'-0" (E AREA

	7220	A-21(Q)	5