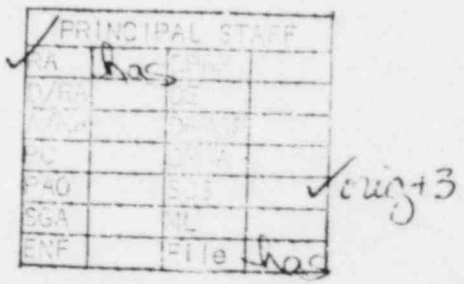
DMB

Consumers Power Company

Dean L Quamme
Site Manager
Midland Project

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

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

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.

CCP0384-0001A-CN02

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IE01

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

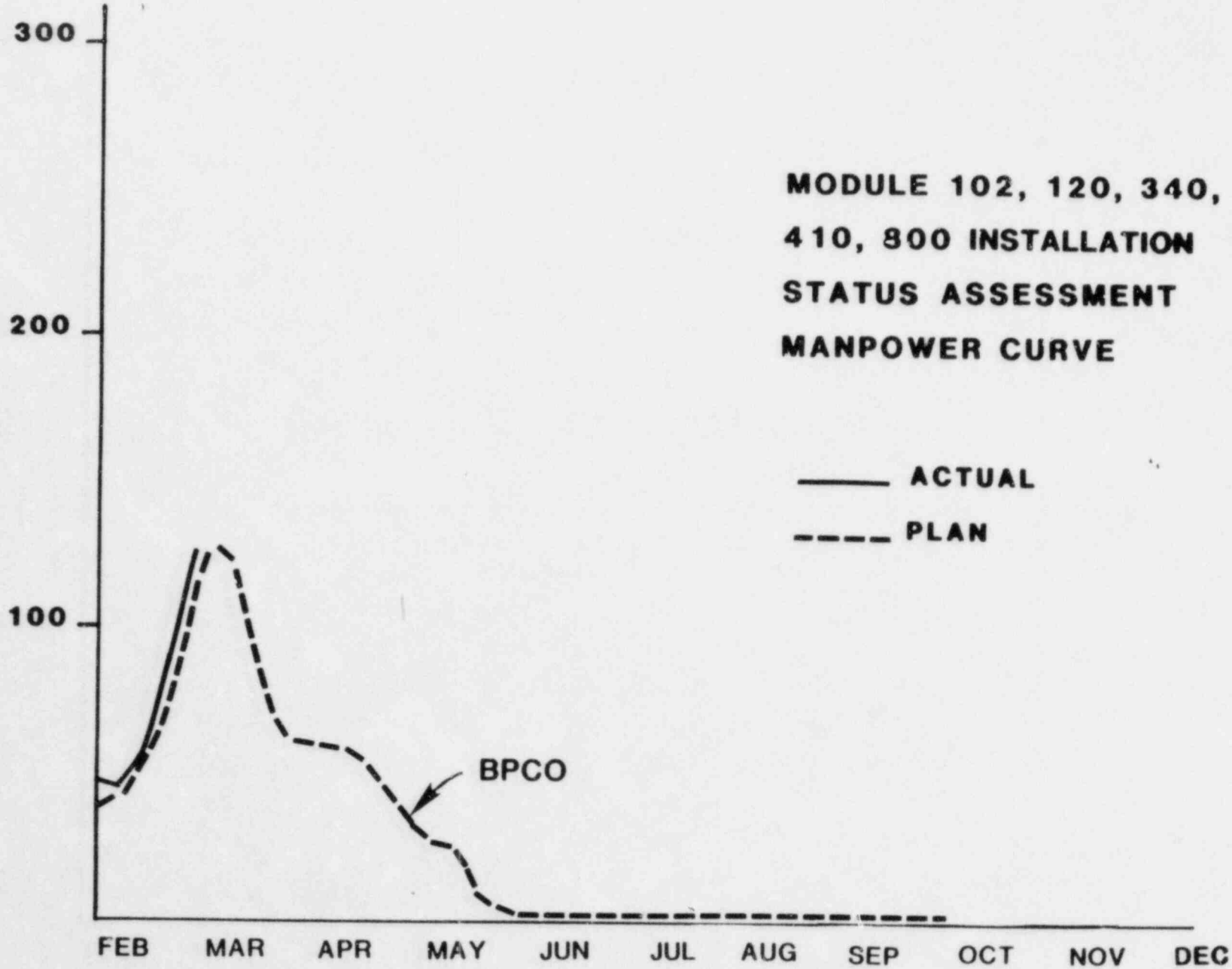
SECTION II

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 3/9					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

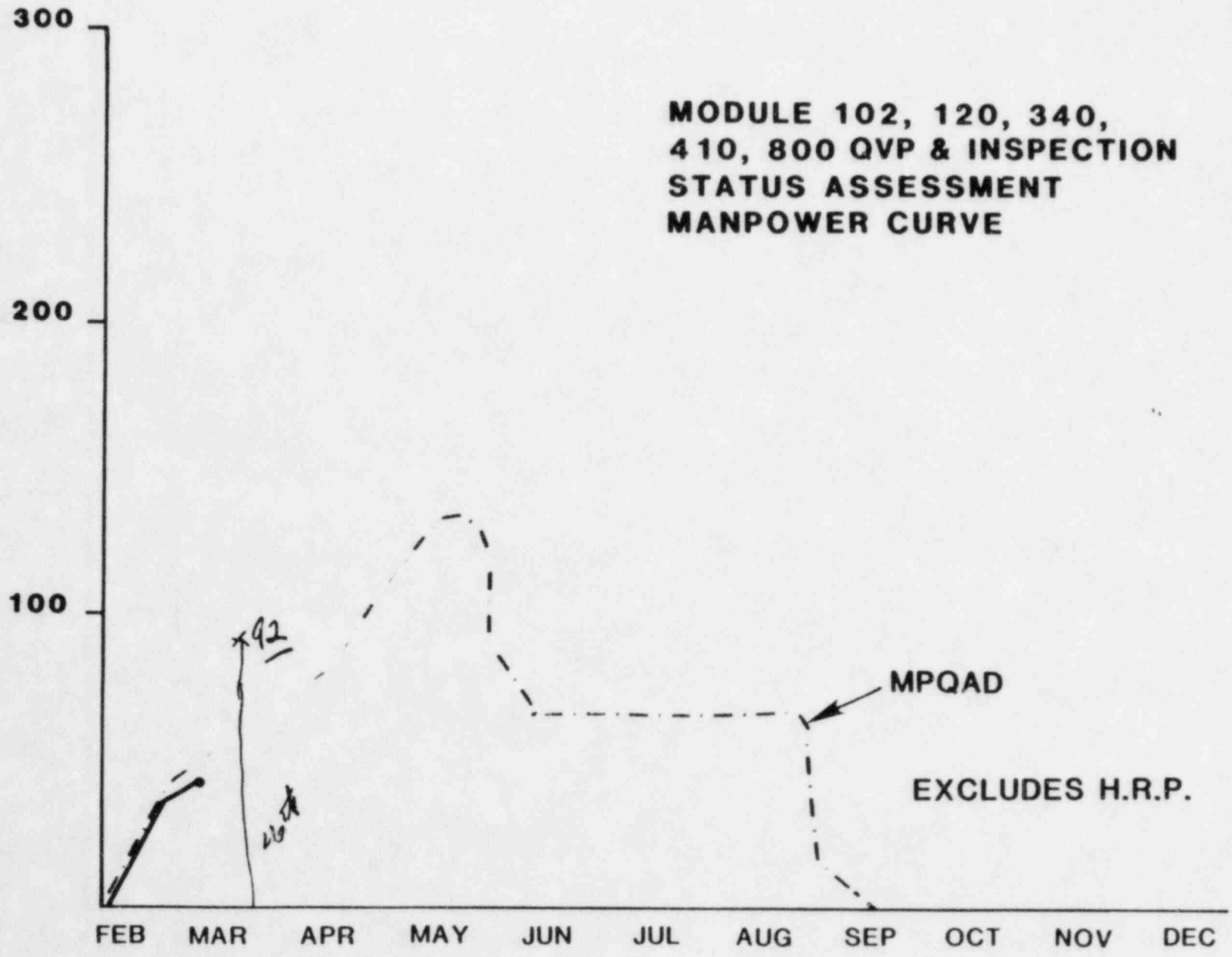
STATUS ASSESSMENT (S/A) PROCEDURES

- 48 PROCEDURES REQUIRED FOR S/A
- ALL REQUIRED PROCEDURES ISSUED

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
300	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
92
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 4/Dept.

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

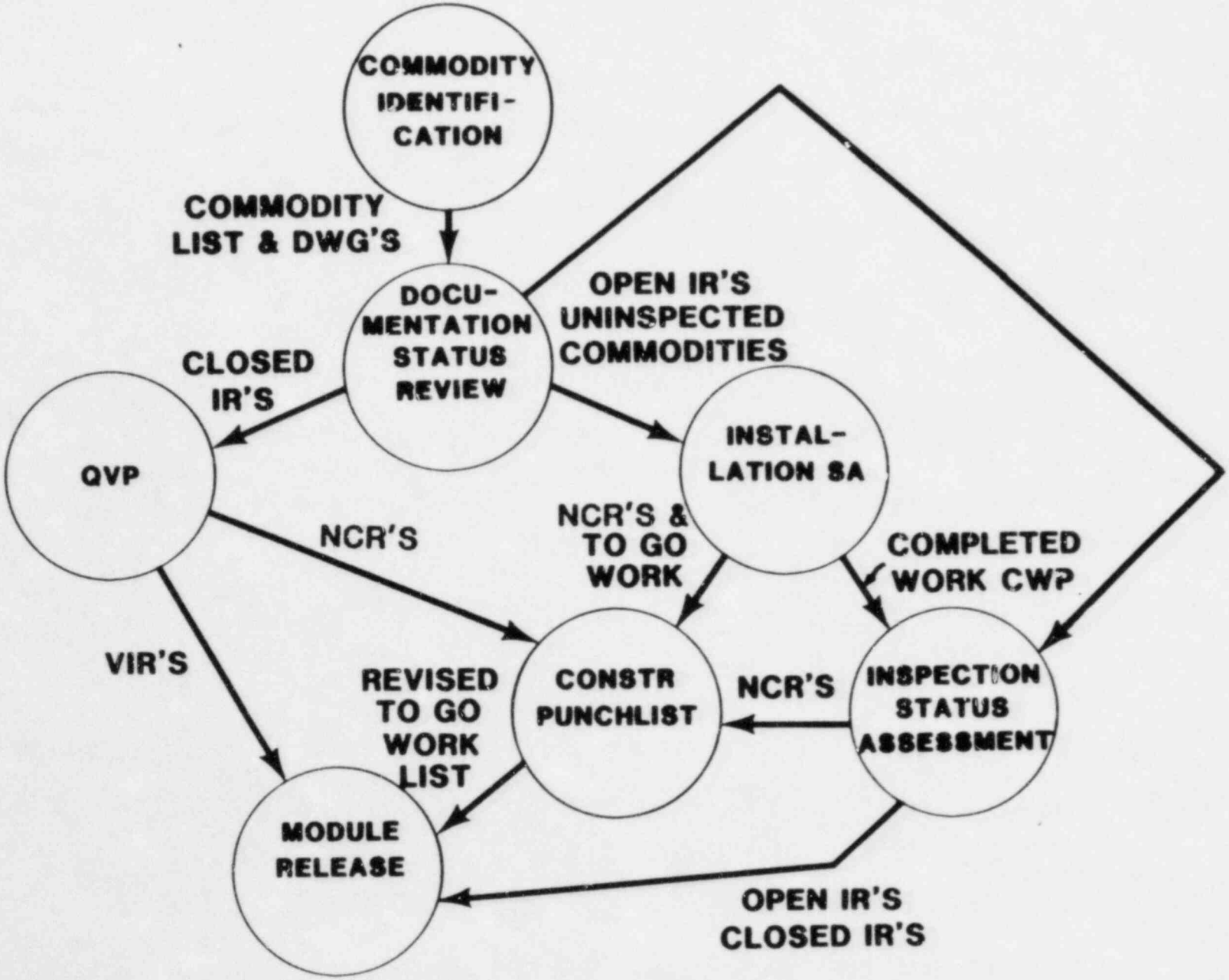
INSPECTION STATUS ASSESSMENT PROCEDURES

- 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	-
Patteries/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 3/2/34 = 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 REPORT

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)

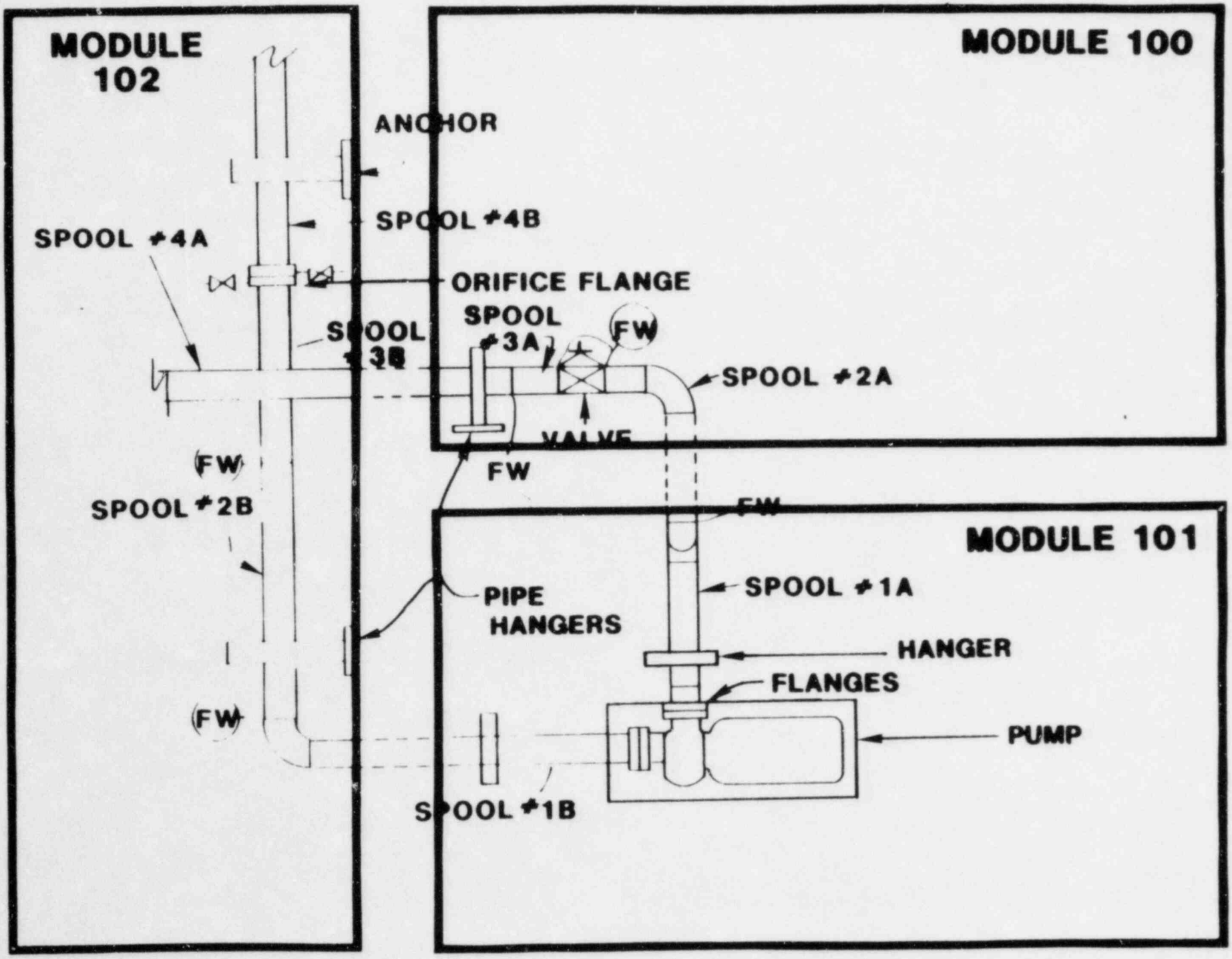
5 PROCEDURE CHANGES

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

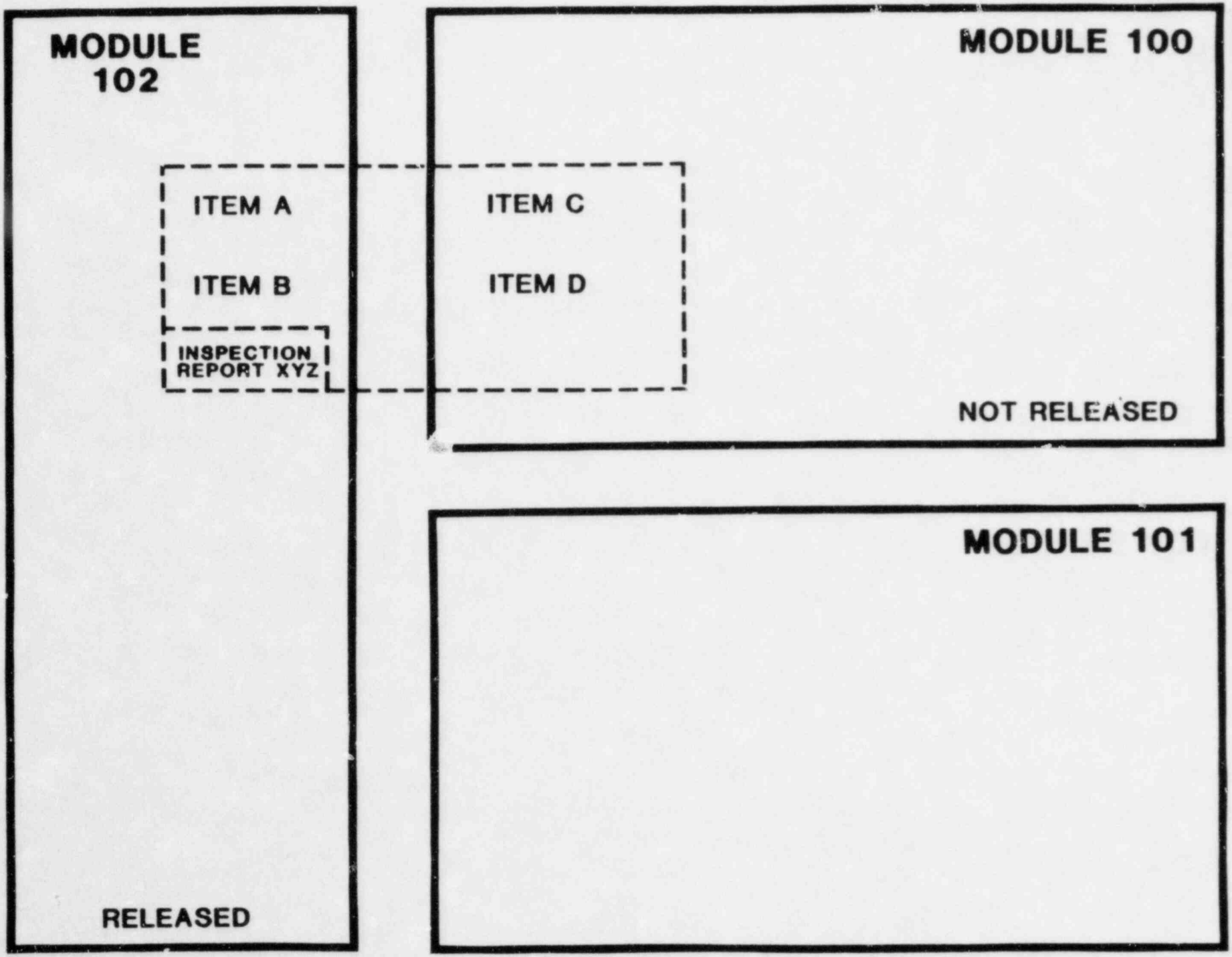
REFLECT CHANGES IN SYSTEM

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*
4.	120	5[illegible]4' 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*
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	Oily 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	Con. 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)