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 VAN BRUNT, E.E. Arizona Public Service Co.
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 DENTON, H.R. Office of Nuclear Reactor Regulation, Director

SUBJECT: Forwards program plan for independent QA evaluation of facilities for review prior to 820629 meeting.

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PUBLIC SERVICE COMPANY

P. O. BOX 21666 PHOENIX, ARIZONA 85036

ANPP-21182-EEVBJr

June 15, 1982

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Mr. Harold R. Denton, Director
Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Denton:

Enclosed per our previous discussion are five copies of the Torrey Pines work plan for your review prior to our meetings on June 29th.

Also for your information, Combustion Engineering, Inc., and Bechtel Power Corporation have identified contact people for this project. For Combustion Engineering the contact person will be J. M. Westhoven, with E. H. Kennedy as an alternate. Bechtel has selected W. G. Bingham as an interim contact and will notify us of a permanent selection as soon as one is identified.

If there is other preparatory information which you would like us to provide, please let me know.

Very truly yours,

E.E. Van Brunt *agr*

E. E. Van Brunt, Jr.
APS Vice President,
Nuclear Projects
ANPP Project Director

1b:

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PROGRAM PLAN

INDEPENDENT QUALITY ASSURANCE EVALUATION OF PALO VERDE NUCLEAR GENERATING STATION UNITS 1, 2, AND 3

PREPARED FOR

ARIZONA



PUBLIC SERVICE COMPANY

JUNE 1982

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I. SUMMARY

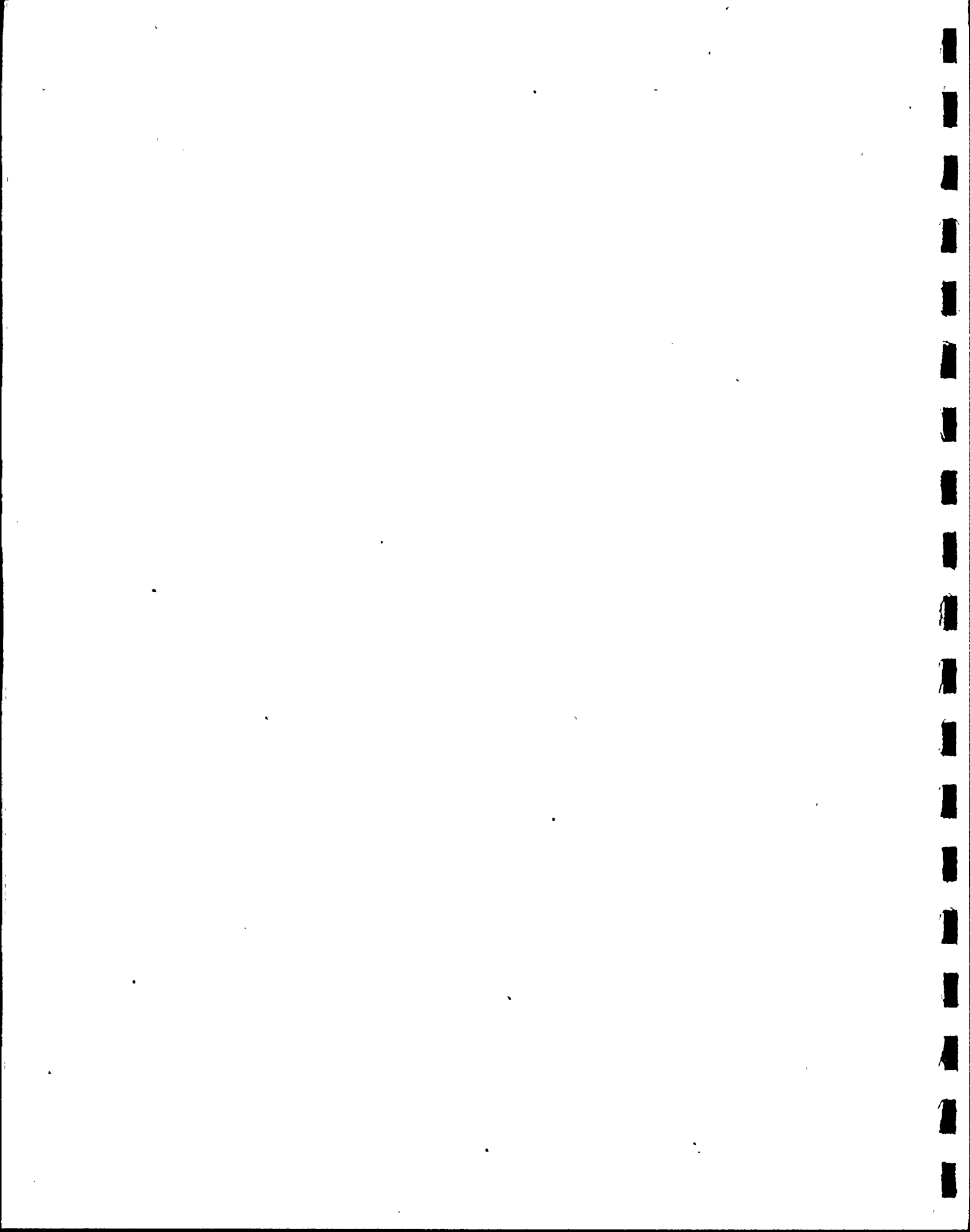
This program plan has been developed for an independent quality assurance evaluation of the Palo Verde Nuclear Generating Station (PVNGS) Units 1, 2 and 3 in the areas of organization, management, quality verification, design and construction activities. This program will be performed by Torrey Pines Technology, a division of the General Atomic Company, for Arizona Public Service Company. The program is divided into seven tasks as follows:

- Task A Evaluation of Project Management Organization
- Task B Evaluation of Management's Policies Toward Quality Assurance
- Task C Evaluation of Quality Assurance Activities
- Task D Design Verification Review
- Task E Construction Verification Review
- Task F Processing of Findings
- Task G Reports

General Atomic Company, through its Torrey Pines Technology Division, is eminently qualified to perform this evaluation for Arizona Public Service Company. We operate under the first NRC-approved quality assurance program. We have available the significant expertise in both quality assurance and design required to review in detail the PVNGS quality assurance program starting with the project management organizational structure, through implementation of the quality assurance program, to verification that the system has been successfully applied to design and construction.

We, as a company, have not had significant involvement with Arizona Public Service Company in the immediate past. The individuals assigned to this program will be free from conflict of interest.

This independent review is scheduled to be completed October, 15, 1982. The overall schedule is shown in Figure 1.



II. TASK DESCRIPTION

The purpose of this program is to conduct an independent review of the quality assurance program for the Palo Verde Nuclear Generating Station Units 1, 2 and 3, from the project management organization to implementation at the constructor or fabricator.

The program is structured to evaluate if the Arizona Public Service Company (APS) nuclear project management organization, policies and quality assurance program have been adequately and appropriately structured, organized and implemented to assure that the high standards expected of nuclear power plant design and construction have been met. The program will be limited to a review of the activities of APS, Bechtel Power Corporation (BPC) and Combustion Engineering Corporation (CE) - Windsor.

The program is structured to concentrate on Unit 1. Since no design difference is known to exist between Units 1, 2, and 3, the design review implicitly includes Units 2 and 3. Some of the same items walked down on Unit 1 during the Construction Verification will also be walked down on Units 2 and 3.

Detailed descriptions of the tasks included in this program are in the following subsections. Potential Findings, as identified in Tasks A through E will be processed in Task F and included in the Final Report of Task G.



TASK A - EVALUATION OF PROJECT MANAGEMENT ORGANIZATION

Objective

To evaluate the APS Nuclear Projects Management Organization in order to determine if it is adequately and appropriately structured and organized, adequately interfaces with contractors, and operates to help assure that the high standards expected of nuclear power plant designs, procurement and construction have been met.

Subtasks

- A1. Prepare a procedure and checklists as appropriate, to accomplish the evaluation described below.
- A2. Interview APS personnel to discuss this task and obtain information, manuals, procedures, and supporting documents as necessary.
- A3. Evaluate the APS organization structure to determine if it provides for implementation of QA and project objectives in an effective manner, and is consistent with good project management practice for a major design and construction project. Evaluation will include top management visibility and communication and clear assignment of responsibility and authority. Objective evidence will be examined to determine that the policies and procedures have been implemented in practice.
- A4. Evaluate APS project policies for proper consideration of quality in the project effort, and for clear and complete definition of policies covering all project activities. Objective evidence will be examined to determine that the policies and procedures have been implemented in practice.
- A5. Evaluate APS project procedures to determine if procedures are available which clearly define how responsibilities are implemented.

Particular attention will be paid to controls required by 10CFR50 Appendix B. Objective evidence will be examined to determine that the policies and procedures have been implemented in practice.

A6. Evaluate APS project procedures to determine if procedures are available which adequately identify means of controlling interfaces between APS departments, between APS and vendors, contractors and consultants. Objective evidence will be examined to determine that the policies and procedures have been implemented in practice.

A7. Prepare a summary report on the work in Task A.

Milestones

A1	Procedure and Checklists	6/11
A2	Interviews, document collection	7/9
A3	Evaluate organization structure	7/23
A4	Evaluate project policies for quality consideration	7/23
A5	Evaluate project procedures for responsibility definitions	7/30
A6	Evaluate project procedures for interface control	7/30
A7	Internal summary report	8/7



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PROJECT REPORT

TASK A - EVAL. OF PROJ. MGT. ORGANIZATION

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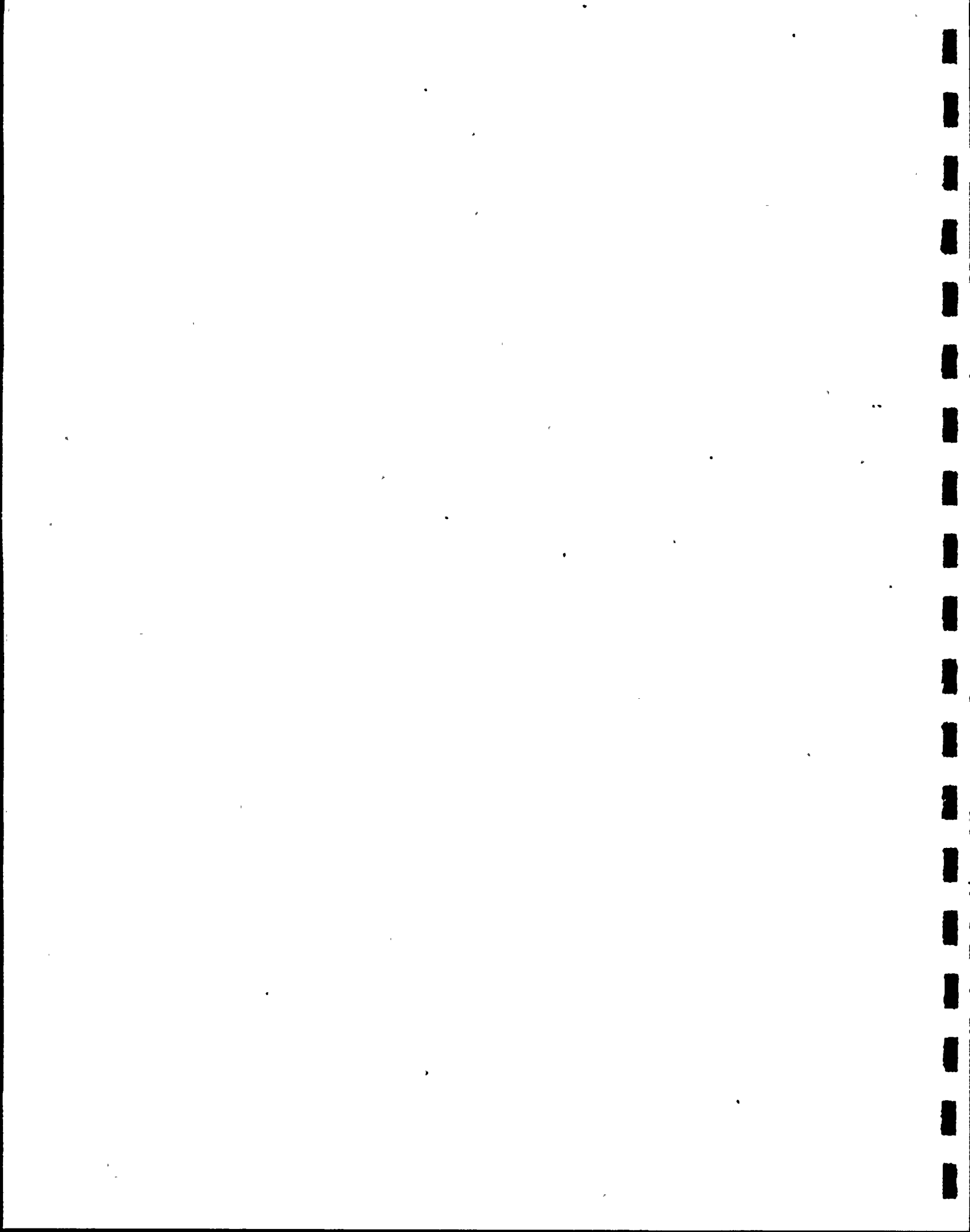
REVISION LTR A

DATE 06/08/82

PROJECT TITLE Independent QA Evaluation of PVNGS 1, 2, and 3

PROJECT MANAGER W. A. Simon

WORK ITEM/ACTIVITY	MAY		JUNE		JULY		AUG		SEPT		OCT		COMMENTS
A1 - Procedure & Checklist			▽										
A2 - Interviews, Document Collection					▽								
A3 - Evaluate Org. Structure						▽							
A4 - Evaluate Project Policies for Quality Consideration						▽							
A5 - Evaluate Project Procedures for Responsibility Definitions							▽						
A6 - Evaluate Project Procedures for Interface Control							▽						
A7 - Internal Summary Report								▽					



TASK B = MANAGEMENT POLICIES TOWARD QUALITY ASSURANCE

Objective

To review APS management policies which affect QA, and to assess the degree to which those policies help to assure an effective QA program.

Subtasks

- B1. Prepare a procedure, and checklists as appropriate, to accomplish the evaluation described below. Checklists will include requirements to determine that relevant QA program policies have been put in practice.
- B2. Meet with APS personnel to discuss this task, identify and interview appropriate personnel and obtain relevant manuals, procedures and supporting documents.
- B3. Evaluate the organization level and status of the Corporate QA Department to determine if the level and status are consistent with that required for an effective QA program.
- B4. Evaluate Corporate QA Department's access to upper management to determine if QA program status and problems can be, and have been, brought to the attention of upper management and acted upon, as appropriate, in a timely manner.
- B5. Evaluate the Corporate QA Department's involvement in project activities to determine if the QA Department was sufficiently involved to help assure adequate QA control and cognizance over the project.
- B6. Evaluate management's involvement in QA activities to determine if management was sufficiently involved to provide an appropriate level of

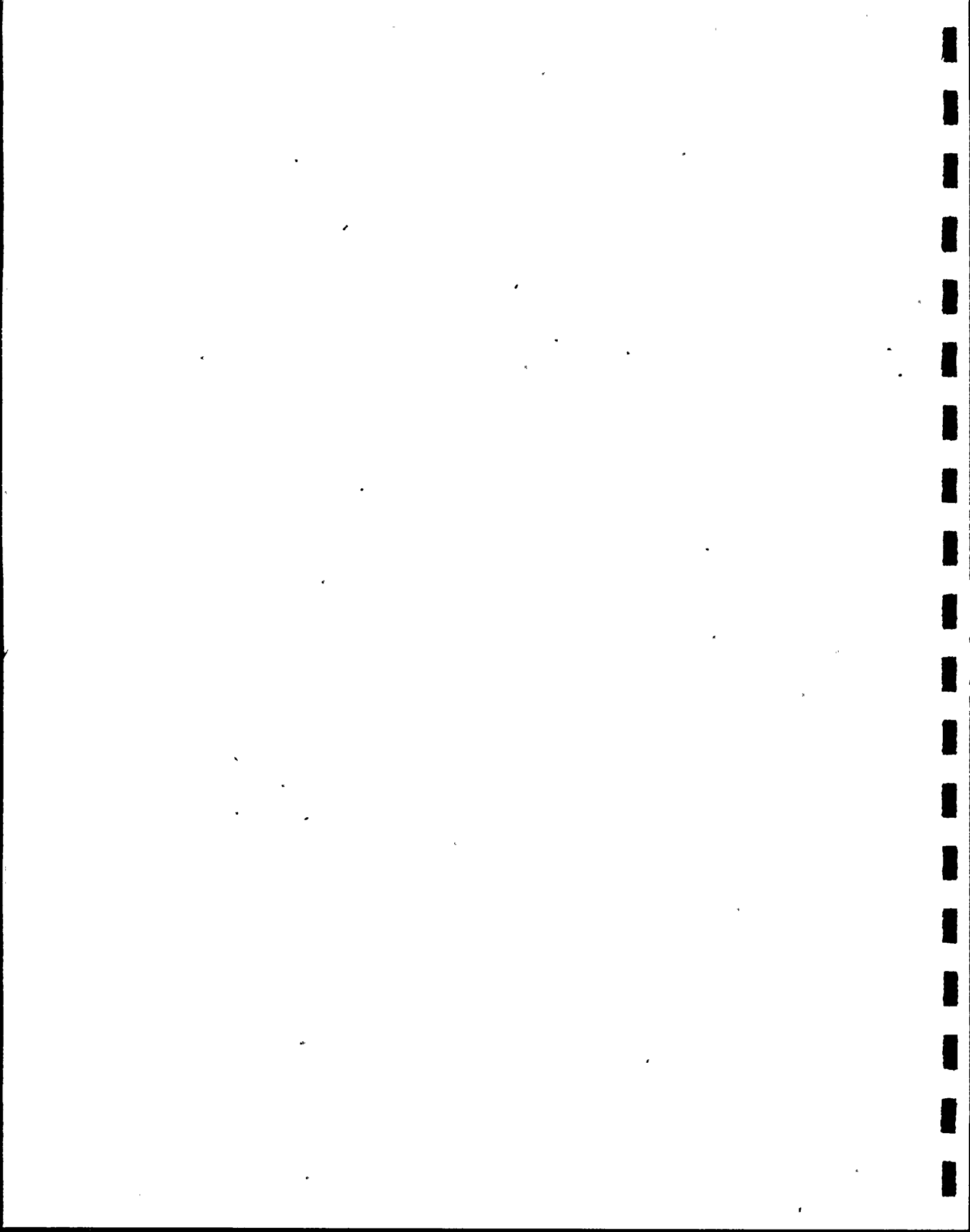


support and status to the QA program. Evaluation will include organizational level of QA with relation to line and site managers responsible for activities affecting quality, communication channels between QA and other senior management positions, distribution of QA reports to management, QA and project meeting attendance and APS policy statements regarding QA.

- B7. Evaluate management's involvement in licensing activities to determine if licensing activities had the support of management, and if management was appropriately informed of licensing matters.
- B8. Evaluate the APS management involvement, cooperation, dedication and commitment to performance of this independent quality assurance evaluation. This will also include an evaluation of the cooperation of APS' primary contractors with regard to the thoroughness and independence of this program.
- B9. Prepare a summary report on the work in Task B.

Milestones

B1	Procedure and checklists	6/11
B2	Interviews, document collection	7/9
B3	Level and status of QA Dept.	7/23
B4	QA Dept. access to management	7/23
B5	QA Dept. involvement in project activities	7/30
B6	Management involvement in QA activities	7/30
B7	Management involvement in Licensing activities	7/30
B8	Management involvement in verification effort	10/15
B9	Internal summary report	.8/7





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TASK B - EVAL. OF MGT. POLICIES TOWARD QA

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REVISION LTR A

DATE 06/08/82

PROJECT TITLE Independent QA Evaluation of PVNGS 1, 2, and 3 PROJECT MANAGER W. A. Simon

WORK ITEM/ACTIVITY	MAY		JUNE		JULY		AUG		SEPT		OCT		COMMENTS
B1 - Procedure & Checklist			▽										
B2 - Interviews, Document Collection					▽								
B3 - Level & Status of QA Dept.						▽							
B4 - QA Dept. Access to Mgt.						▽							
B5 - QA Dept. Involvement in Project Activities							▽						
B6 - Management Involvement in QA Activities								▽					
B7 - Management Involvement in Licensing Activities									▽				
B8 - Management Involvement in Verification Effort											▽		
B9 - Internal Summary Report								▽					



TASK C - QUALITY ASSURANCE ACTIVITIES

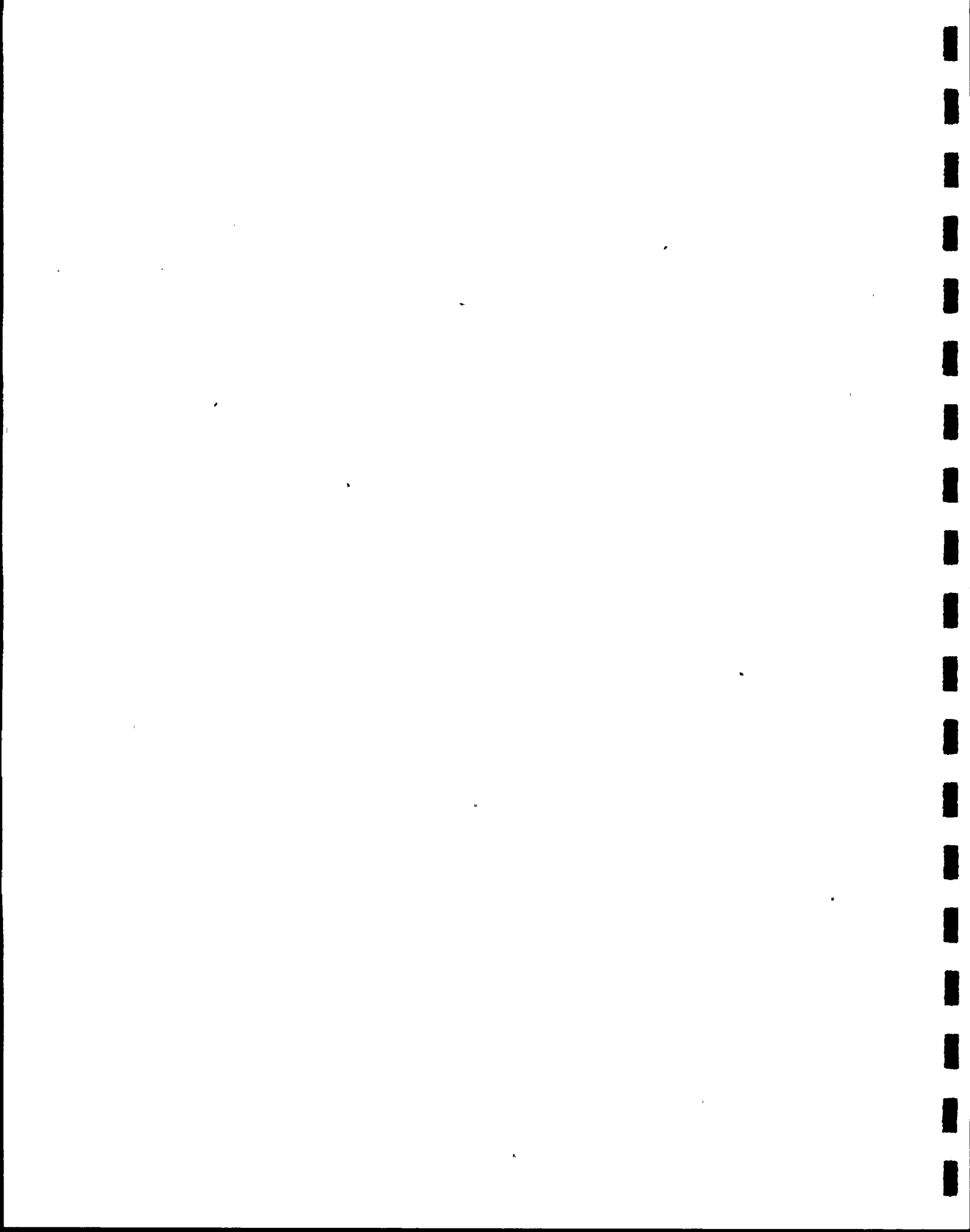
Objective

To evaluate the specified elements of the APS QA program in order to determine if those elements were defined and implemented in a manner to help assure that the high standards expected of nuclear power plant construction have been met in the PVNGS.

Subtasks

- C1. Prepare procedures and checklists, as appropriate to accomplish the evaluation described below.
- C2. Evaluate APS PVNGS project organization to assess its effectiveness in implementing the QA program. The evaluation will examine interfaces between QA and the project design and construction organizations, to assure that the structure and supporting procedures necessary for effective implementation were in place. The information obtained in Tasks A and B will be used in this evaluation.
- C3. Evaluate the APS audit program (and supporting procedures) for compliance with section 17.1A.18 of the PSAR, and with NRC requirements in 10CFR50 Appendix B, Section XVIII. This evaluation will be limited to the audits performed by APS.

Review APS audit reports, schedules and supporting records to verify that the audit program was implemented as required by the procedures identified above. Select audit reports to include design-related and fabrication/construction-related audits over the entire history of the project.



Review documents which report summary results of the audit program to management, to help assess the effectiveness of the audit program in assessing compliance and in obtaining effective corrective action where needed.

- C4. Review the APS program and procedures for pre- and post-award vendor evaluation, for compliance with Sections 17.1A.4 and 17.1A.7 of the PSAR, and with NRC requirements in 10CFR50, Appendix B Sections IV and VII. Since Bechtel has a major role in implementing the vendor program, the procedures of Bechtel will be evaluated in this area.

Review a sampling of pre-award vendor evaluation reports and supporting documents to verify that appropriate requirements (identified above) have been satisfied and the results justify including the vendor(s) on the approved suppliers list.

Review documents supporting vendor post-award activity (e.g., witness, hold-points, inspections, audits) to verify that procedural requirements identified above have been implemented, that the reports justify vendor retention on the approved supplier list, and that corrective actions are specified when needed.

- C5. Review the APS program and procedures for construction inspection, for compliance with Section 17.1A.10 of the PSAR, and with NRC requirements in Section X of 10CFR50 Appendix B. Since Bechtel is responsible for establishing and implementing the inspection program, the procedures of Bechtel will be evaluated in this area.

Review records of the inspection program to verify that the procedural requirements identified above have been met. Records to be examined will include inspection reports, nonconformance reports and personnel training and qualification records. The review will include an assessment of:

- (a) adequacy of construction inspection staff level,
- (b) independence of construction inspection personnel,
- (c) adequacy of inspection procedures,
- (d) inspection personnel knowledge of and familiarity with procedures, and
- (e) qualification and training of inspectors.

C6. Review the APS policies and procedures for evaluating and reporting construction deficiencies per requirements of 10CFR21 and 10CFR50.55(e) for compliance with intent of these regulations.

Deficiencies, which because of their safety significance, resulted in reports to the NRC, and those which, because of their nonsafety significance, did not result in reports to the NRC, will be evaluated for compliance with the APS requirements and the regulations. Evaluation will include an assessment of corrective action.

C7. Prepare a summary report on the work in Task C.

Milestones

C1	Procedures and checklists	6/18
C2	Project Organization evaluation	8/7
C3	Audit program evaluation	9/3
C4	Vendor evaluation program	9/3
C5	Inspection Program	9/3
C6	Nonconformance system	8/6
C7	Internal summary report	9/10



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TASK C - EVAL. OF QA ACTIVITIES

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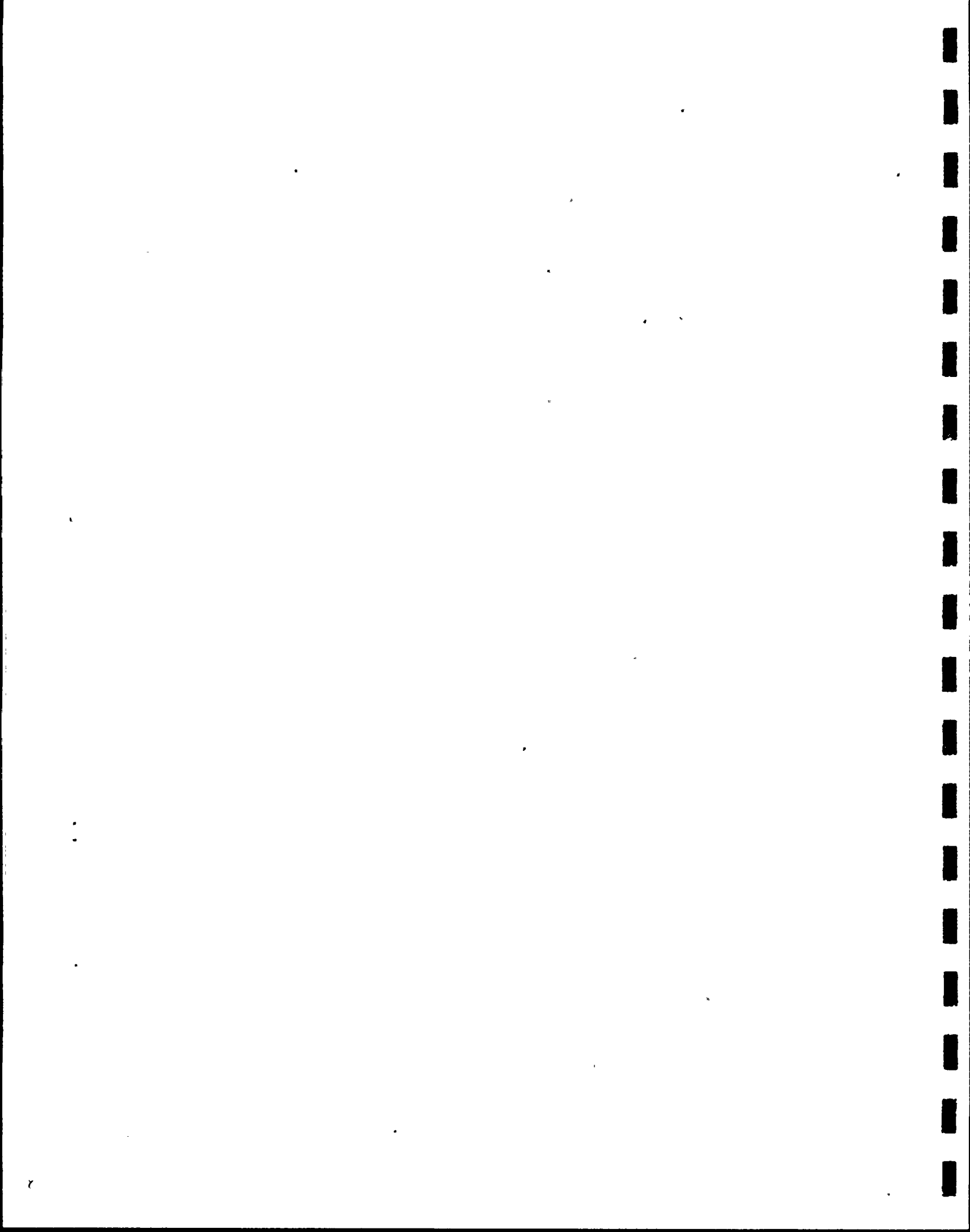
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DATE 5/14/82

PROJECT TITLE Independent QA Evaluation of PVNGS 1, 2, and 3

PROJECT MANAGER W. A. Simon

WORK ITEM/ACTIVITY	MAY		JUNE		JULY		AUG		SEPT		OCT		COMMENTS
C1 - Procedures & Checklist				▽									
C2 - Project Organization Evaluation							▽						
C3 - Audit Program Evaluation									▽				
C4 - Vendor Evaluation Program									▽				
C5 - Inspection Program									▽				
C6 - Nonconformance System							▽						
C7 - Internal Summary Report									▽				



TASK D = DESIGN VERIFICATION REVIEW

Objective

To review compliance of design related QA procedures and controls at APS, BPC and CE-Windsor, to the NRC QA requirements to review the implementation of these procedures and controls. To review the design of selected safety related structures, systems, and components, utilizing these procedures and controls, for compliance with NRC approved design bases and methodologies given in FSAR.

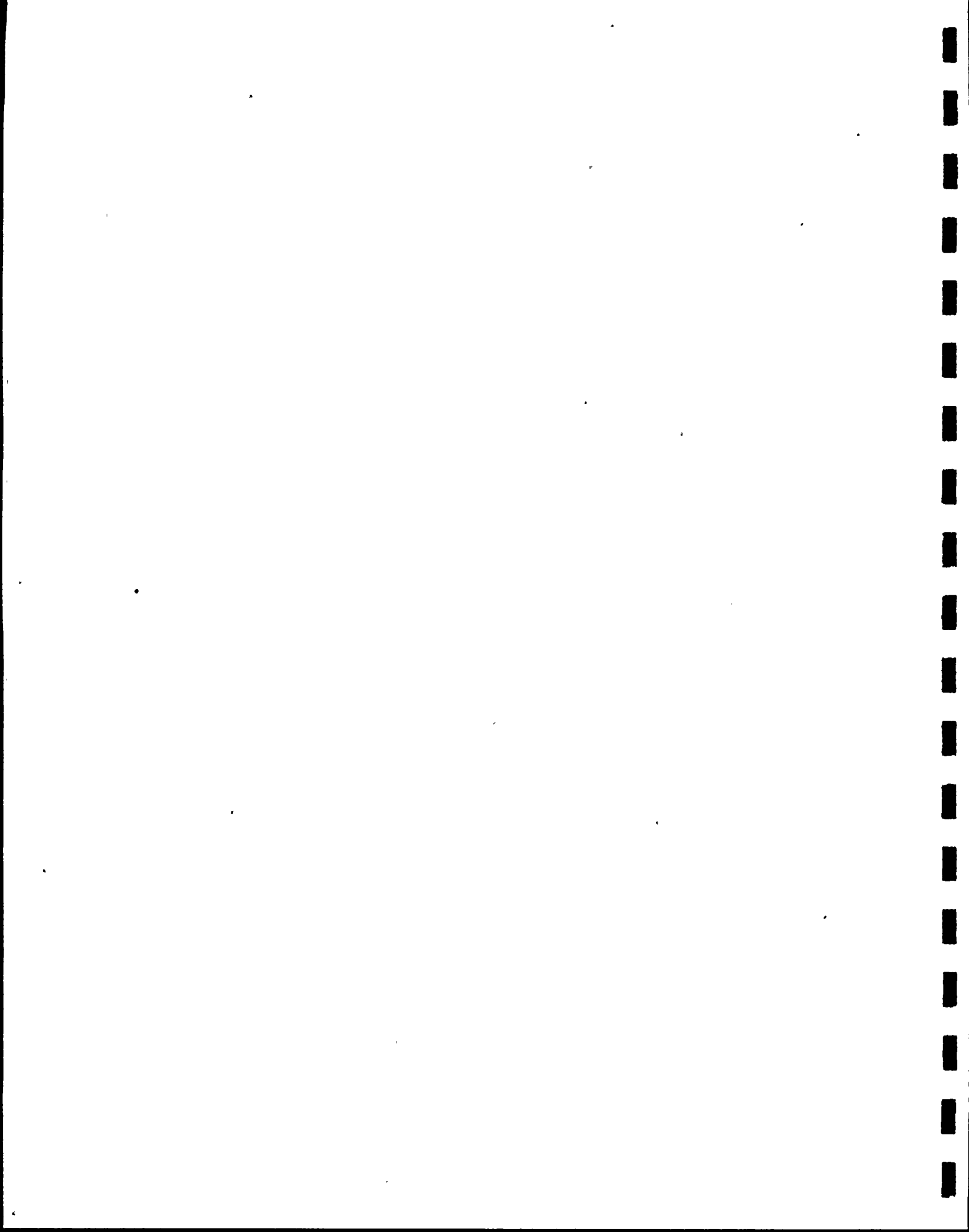
Subtask D1 Procedure Review

The scope of this subtask is to review APS design control procedures for compliance with NRC requirements, and to confirm that BPC and CE design control procedures are essentially the same as those used for the San Onofre Units 2 and 3.

D1a. Prepare a procedure and checklist to accomplish the evaluation described herein.

D1b. Review the APS, BPC and CE design control system and procedures to assess compliance with commitments in the PSAR and with NRC requirements. In carrying out this item, the BPC and CE procedures will be checked first to confirm they are essentially the same as the procedures used for the San Onofre plant.

1. If it is determined that the same procedures were used, then no further review will be performed except for the relevant APS procedures. The results for the TPT San Onofre Units 2 and 3 seismic review will be used as the basis for this review.



2. If the titles and revisions of any of the BPC and CE procedures are different from those used on San onofre, then the principal aspects, in terms of the "who", "what", "when", and "how" and the controls described in each will be compared to identify differences, if any, in the approaches taken on the Palo Verde project versus the San Onofre project.

a) If the principal aspects of the controls are basically the same, then no further review will be performed; except for relevant APS procedures, and the results of the TPT San Onofre Units 2 and 3 seismic review will be used as the basis for this review.

b) If the principal aspects of the controls described in the BPC or CE procedures for Palo Verde appear to contain basic differences from that described in the comparable San Onofre procedures, then they will be reviewed in detail for compliance with PSAR commitments and NRC requirements.

Dlc. Prepare a summary report on the results of Subtask Dl.

Milestones

Dla. Procedure and checklist	6/11
Dlb. Design procedures review (assume CE and BPC systems same as used on San Onofre)	7/23
Dlc. Internal summary report	7/30

Subtask D2 Design Procedure Implementation Review

The scope of this subtask is to evaluate a sample of the design documents for compliance with the applicable design QA procedures.

D2a. Prepare procedure and checklist to accomplish the evaluation described herein.

D2b. Evaluate implementation of design procedures identified in D1 by reviewing APS, BPC and CE design documents for compliance with those procedures.

The selection of documents for review will be based on the following criteria:

- 1 All documents reviewed in subtask D3 will be included.
- 2 Additional design documents shall be selected for at least 30 other Quality Class I or II items from the Equipment Classification List in the FSAR.
- 3 The selection shall include work by APS, (if any), BPC and CE.
- 4 The selection shall include design documents such as calculations, drawings, specifications, memos, change notices, computer code verification reports.
- 5 The selection shall include work which spans the calendar period of the design effort, and which covers all phases of the design process.

D2c. Prepare a summary report on the work in Subtask D2.

Milestones

D2a	Procedure and checklist	6/25
D2b	Implementation Review	8/27
D2c	Internal summary report	9/04

Subtask D3 Technical Review

The scope of this subtask is to review the structural, mechanical and seismic design of a selected portion of a safety system and selected portions of a structure of the Palo Verde Nuclear Generating Station for compliance with NRC approved design bases and methodologies as given in the FSAR.

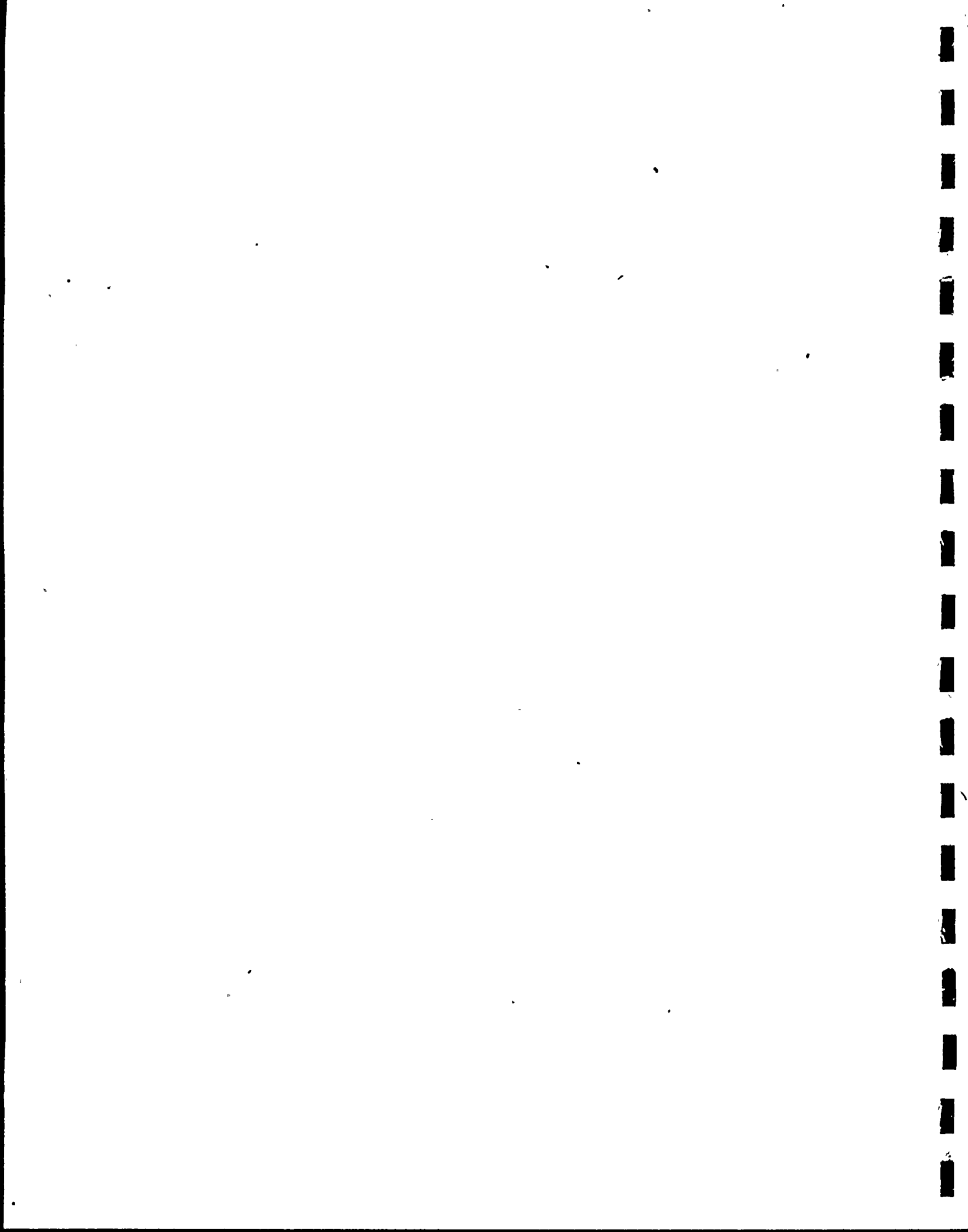
D3a. Develop specific procedures and evaluation criteria for the design review using ANSI N.45.2.11, Section 6.3.1 criteria for guidance.

The procedures will selectively address the following as they apply to each feature:

- o Adequacy of design specification.
- o Applied loads.
- o Mathematical model used for analysis.
- o Input to analysis.
- o Validation of computer code used.
- o Output of analysis.
- o Calculations showing compliance with approved standards.

D3b. Prepare a design chain for major structures and components to identify major design organizations and interfaces.

D3c. Select review features based on the following criteria:



- o The portion of the system shall include safety related mechanical components, controls, electrical, and piping.
- o Features which have design interfaces between APS, BPC, and CE shall be included. Other design organizations will be included if significant.
- o Features selected shall be representative of safety related portions of the plant.
- o Features which are encompassed within one or more identified concerns of NRC or ACRS in their review of the PVNGS design shall be included:
- o At least one major NSSS component shall be included.
- o A range of design methods shall be covered.

At least ten features will be selected for review. These will include piping, pipe supports, valves, instrumentation, power panels, control panels, and structural elements. The portions of systems selected shall include major components such as tanks, pumps, heat exchangers, and pressure vessels. Representative candidates for review are shown in Table D-1.

- D3d. Obtain current design documentation from APS, if any, BPC and CE and perform review.
- D3e. Identify need for independent analysis with different analytical models and computer codes than those used by APS, if any, BPC, or CE. Independent analysis shall be performed only on the selected review features and only if one of the following situations arises:

- o The analytical output cannot be adequately judged based on ANSI N.45.2.11, Section 6.3.1.
- o The method of analysis does not appear reasonable.
- o The impact of potential finding cannot be ascertained.

D3f. Prepare a summary report on the results of Subtask D3.

Milestones

D3a	Develop Review Procedures and Criteria	6/18
D3b	Prepare Design Chain	6/25
D3c	Select Features for Review	7/2
D3d	Complete Design Review	9/3
D3e	Identify Need for Independent Analysis	8/20
D3f	Internal Summary Report	10/1

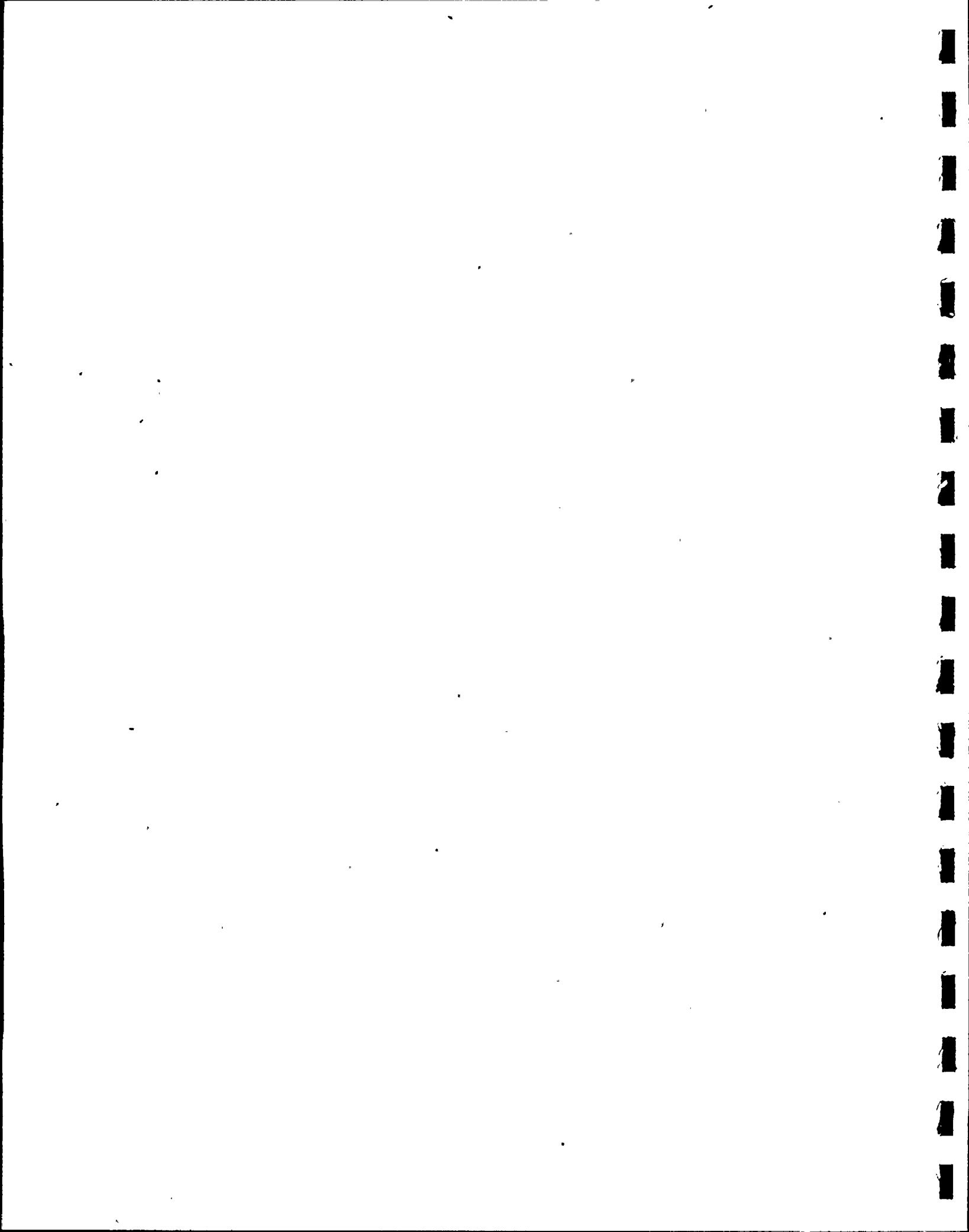


TABLE D-1

Representative Candidates for Detailed Review

Structures

Reactor Containment Building

Auxiliary Building

Reactor Coolant System

Reactor Vessel, Steam Generators, Pressurizers, Reactor Coolant
Pumps, and Connecting Piping

Feedwater and Steam Piping

Pressurizer Pressure Indicator

Safety Valve

Safety Injection Systems

Safety Injection Tanks

HPSI or LPSI Injection Pump

LPSI Pump Section Check Valve

Chemical and Volume Control System

Regenerative Heat Exchanger

Purification Ion Exchange

Charging Pump

Purification Filters

TABLE D-1 (continued)

Component Cooling Water System

- Component System Pump
- Component System Piping
- Component Signal Conditioner
- Essential Services and Water Chillers

Shutdown Cooling System

- Shutdown Cooling Heat Exchangers
- Shutdown Cooling System Motor Operated Isolation Valve
- Heat Exchanger Inlet and Outlet Temperature Monitors

Auxiliary Feedwater System

- Feedwater pumps
- Motor and Turbine Drive
- Valves (AC & DC Operated)

Containment Spray System

- Shutdown Cooling Heat Exchangers
- Containment Spray Pumps
- Spray Chemical Storage Tank
- Spray Chemical Addition Pumps



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SUBTASK D - DESIGN VERIFICATION REVIEW

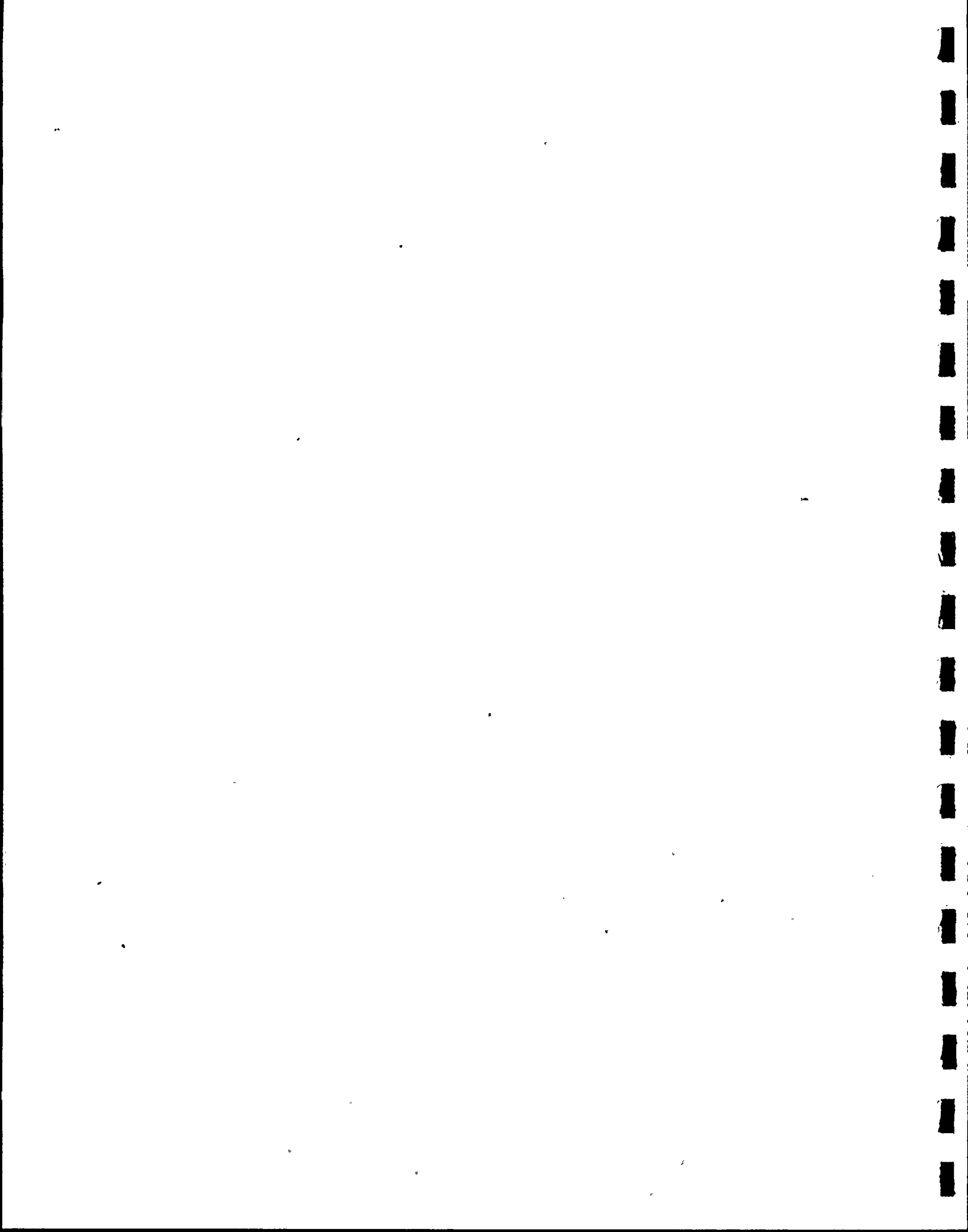
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DATE 5/14/82

PROJECT TITLE Independent QA Evaluation of PVNGS 1, 2, and 3 PROJECT MANAGER W. A. Simon

WORK ITEM/ACTIVITY	MAY		JUNE		JULY		AUG		SEPT		OCT		COMMENTS
D1a - Procedure & Checklist			▽										
D1b - Design Procedures Review					▽								
D1c - Internal Summary Report					▽								
D2a - Procedure and Check-list			▽										
D2b - Implementation Review							▽						
D2c - Internal Summary Report								▽					
D3a - Develop Review Procedures and Criteria			▽										
D3b - Prepare Design Chain				▽									
D3c - Select Features for Review				▽									
D3d - Complete Design Review								▽					
D3e - Identify Need for Independent Analysis							▽						
D3f - Summarize Results									▽				



TASK E - CONSTRUCTION VERIFICATION REVIEW

Objective

To review the compliance of construction related QA procedures and controls at APC, BPC and CE to the NRC approved QA requirements; to evaluate the implementation of these procedures and controls; and to determine that construction of selected safety related systems and components, utilizing these procedures and controls, was in accordance with design documentation.

Subtask E1 Field Design Change Control

This subtask is to evaluate the APS and BPC field design change control system and its implementation.

E1a. Prepare a procedure and checklist to accomplish the evaluation described herein.

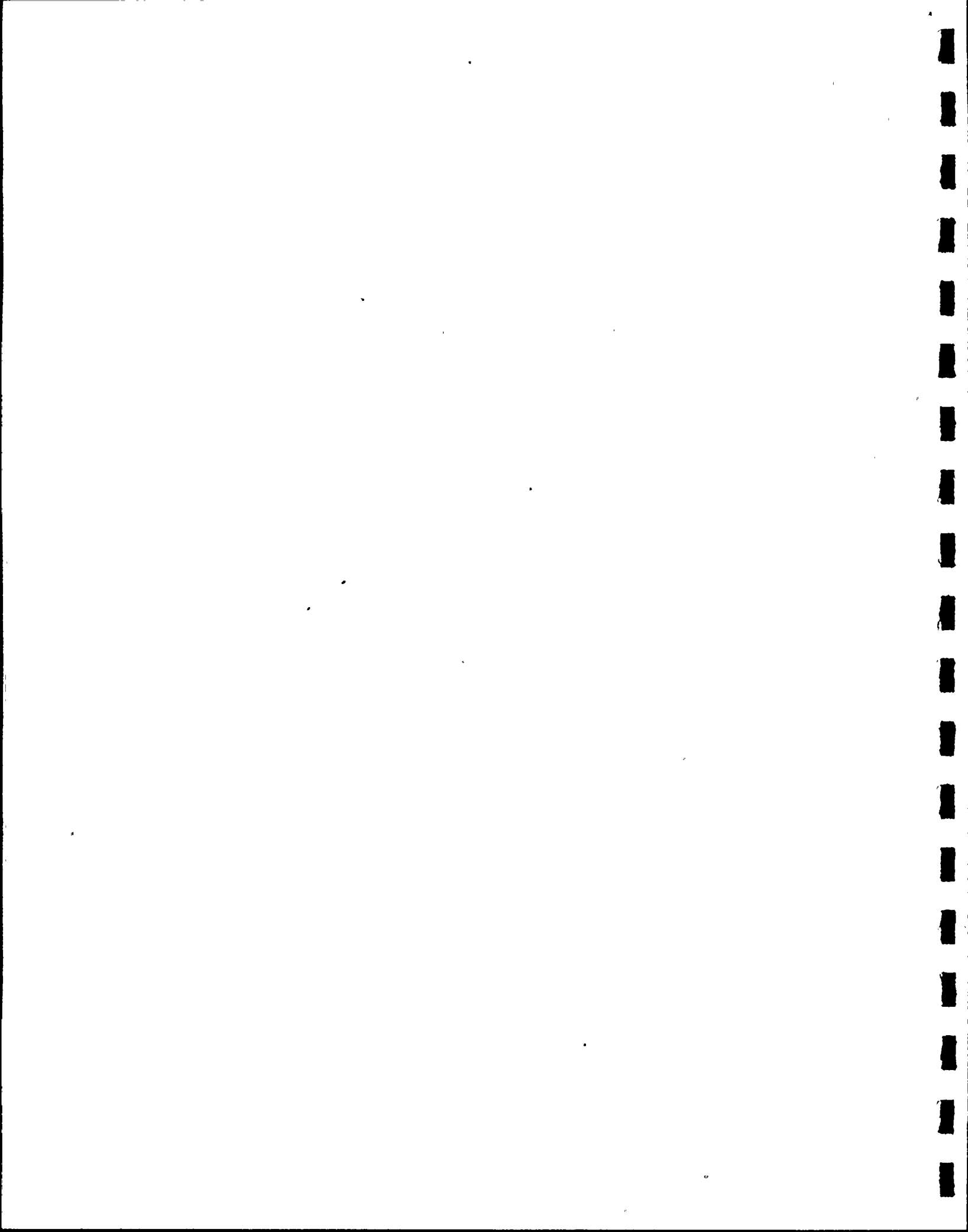
E1b. Evaluate APS and BPC procedures for control of field design changes to assess compliance with PSAR commitments and NRC requirements.

E1c. Evaluate implementation of those procedures by examining field change documents for compliance with applicable procedures. The field change documents for evaluation will be selected from components and systems evaluated in subtasks D3 and E3, and will represent a cross-section of activities and time periods.

E1d. Prepare summary report on the work in Subtask E1.

Milestones

E1a Procedure and checklist	6/25
E1b Evaluate procedures	7/31



Elc Evaluate implementation	8/16
Eld Internal summary report	8/23

Subtask E2 As-Built Drawing Control

This subtask is to evaluate the APS and BPC as-built control system and its implementation.

E2a. Prepare a procedure and checklists to accomplish the evaluation described herein.

E2b. Evaluate the APS and BPC procedures for generation and control of as-built drawings.

E2c. Evaluate implementation of those procedures by reviewing as-built drawings to determine degree of compliance with procedures and timeliness and accuracy of as-built drawing preparation, approval and release. The drawings for review will include those used in subtask E3, and a selection from the drawings for components and systems identified in subtask D3 and E3.

E2d. Prepare a summary report on the work done in Subtask E2.

Milestones

E2a Procedure and checklists	6/25
E2b Evaluate procedures	8/31
E2c Evaluate implementation	9/17
E2d Internal summary report	9/24

Subtask E3 Physical Verification

The scope of this subtask is to determine that the physical installation of selected portions of safety systems and structures conforms to the requirements of design drawings and specifications.

E3a. Develop specific procedures for each unique type of walkdown or inspection. Collectively these procedures will address the following as they apply to each feature:

- o Installation of components in accordance with design documents.
- o Installation of systems in accordance with P&I diagrams.
- o Installation of piping in accordance with drawings and isometrics.
- o Agreement between component functional rating, as given on nameplates, with design requirements, as given in corresponding specification.
- o Inspection of selected features for compliance with design details.
- o Equipment part numbers/tag numbers agree with drawings.

E3b. Choose items for physical verification from those features selected for design review under Subtask D-3. These will include major components, piping, pipe supports, cable trays, panels, and fasteners. Item selection may consider design margin as determined from the design review:



E3c. Perform walkdowns to verify the adequacy of the installation. On Unit 1, 100% of the items selected in Task E3b will be walked down; on Unit 1, at least 25% of the same items will be walked down; and on Unit 3, at least 10% of the same items will be walked down. A system walkdown will visually verify that all components, piping, and instruments on the system components have been installed in proper relative positions. A piping isometric or cable tray walkdown will dimensionally verify routing and support locations as well as general support arrangement. Selected components and supports will also be inspected to dimensionally verify such details as material sizes, welds, fasteners, and attachments to the structure.

E3d. Prepare a summary report on the work in Subtask E3.

Milestones

E3a	Develop walkdown procedures	7/2
E3b	Choose items for physical verification	8/6
E3c	Complete walkdowns	9/17
E3d	Internal summary report	9/24



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PROJECT REPORT

SUBTASK E - CONSTRUCTION VERIFICATION REVIEW

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REVISION LTR _____

DATE 5/14/82

PROJECT TITLE Independent QA Evaluation of PVNGS 1, 2, and 3

PROJECT MANAGER W. A. Simon

WORK ITEM/ACTIVITY	MAY		JUNE		JULY		AUG		SEPT		OCT		COMMENTS
E1a - Procedure & Checklist				▽									
E1b - Evaluate Procedures						▽							
E1c - Evaluate Implementation							▽						
E1d - Internal Summary Report							▽						
E2a - Procedure & Checklist				▽									
E2b - Evaluate Procedures								▽					
E2c - Evaluate Implementation									▽				
E2d - Internal Summary Report										▽			
E3a - Develop Walkdown Procedures				▽									
E3b - Choose Items for Physical Verification							▽						
E3c - Complete Walkdowns									▽				
E3d - Internal Summary Report										▽			



TASK F - PROCESSING OF FINDINGS

Objectives

To review and document all Potential Findings identified during the review; to provide for evaluation and classifying the significance of Potential Findings; and to transmit Findings to APS, BPC and CE.

Subtasks

- F1 Establish a Findings Review committee. This committee shall be composed of senior technical personnel with broad experience in technical management.
- F2 The committee shall define criteria for determining the degree of impact that Potential Findings have on plant adequacy for PVNGS Units 1, 2 and 3.
- F3 The Committee shall establish a procedure to process Potential Findings. This procedure shall include that APS, BPC, or CE has verified the definition and accuracy of Potential Findings. The basic process is shown in Fig. 2.
- F4 The Committee shall review each Potential Finding in Tasks A, B, C, D, and E. All Potential Findings will be reviewed for definition, accuracy, and an assessment of the impact of the Potential Finding on the overall design and construction process for the plant. If the Committee determines the Potential Finding is accurate and has the potential for significant impact on the design adequacy of the Palo Verde Nuclear Generating Station, it shall recommend to the TPT Project Manager that these Potential Findings be identified as Findings. If the committee determines the Potential Finding is accurate, but does not have the potential for significant impact on the design adequacy of

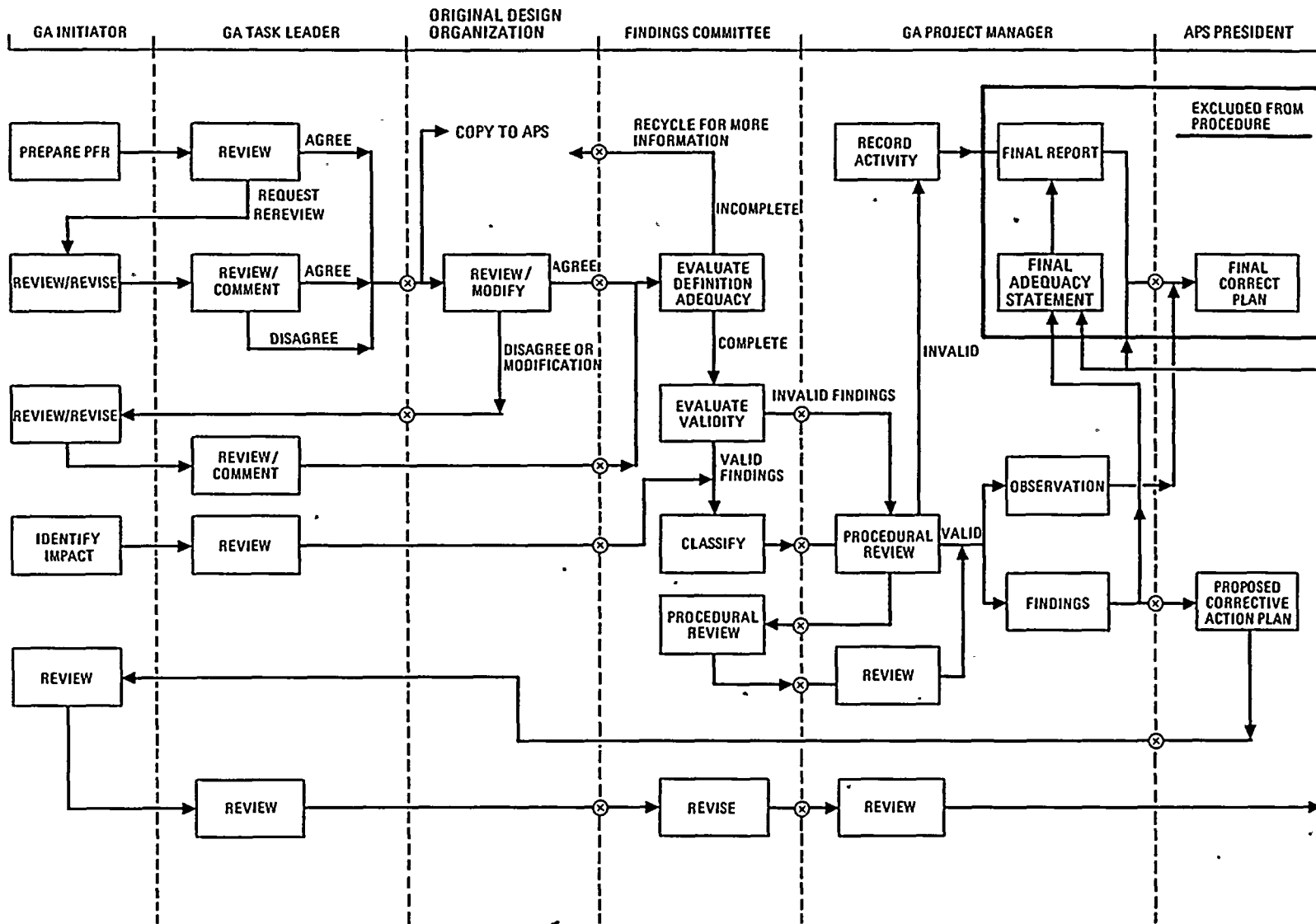
the Palo Verde Nuclear Generating Station, it shall recommend to the TPT Project Manager that these Potential Findings be identified as Observations. If a Potential Finding is not accurate and therefore does not become a Finding or an Observation it shall be classified as invalid, but its record shall be retained and included in the Final Report.

- F5 The TPT Project Manager shall review Potential Finding recommendations of the Findings Review Committee for compliance with established criteria. If criteria have been properly applied and documented he shall declare the Potential Findings as a Finding or an Observation as recommended by the Findings Review Committee and so report it in the final report. If the recommendation is not accepted, the Potential Finding shall be reprocessed by the Findings Review Committee.
- F6 The TPT Project Manager shall transmit both Findings and Observations to APS and BPC or CE as appropriate, as they are documented in a timely manner.
- F7 APS and BPC or CE will be requested to evaluate the Findings in accordance with established APS procedures and propose a corrective action, in a timely manner.
- F8 The individual reviewer and Findings Review Committee shall review the corrective action plans and evaluate their adequacy.

Milestones

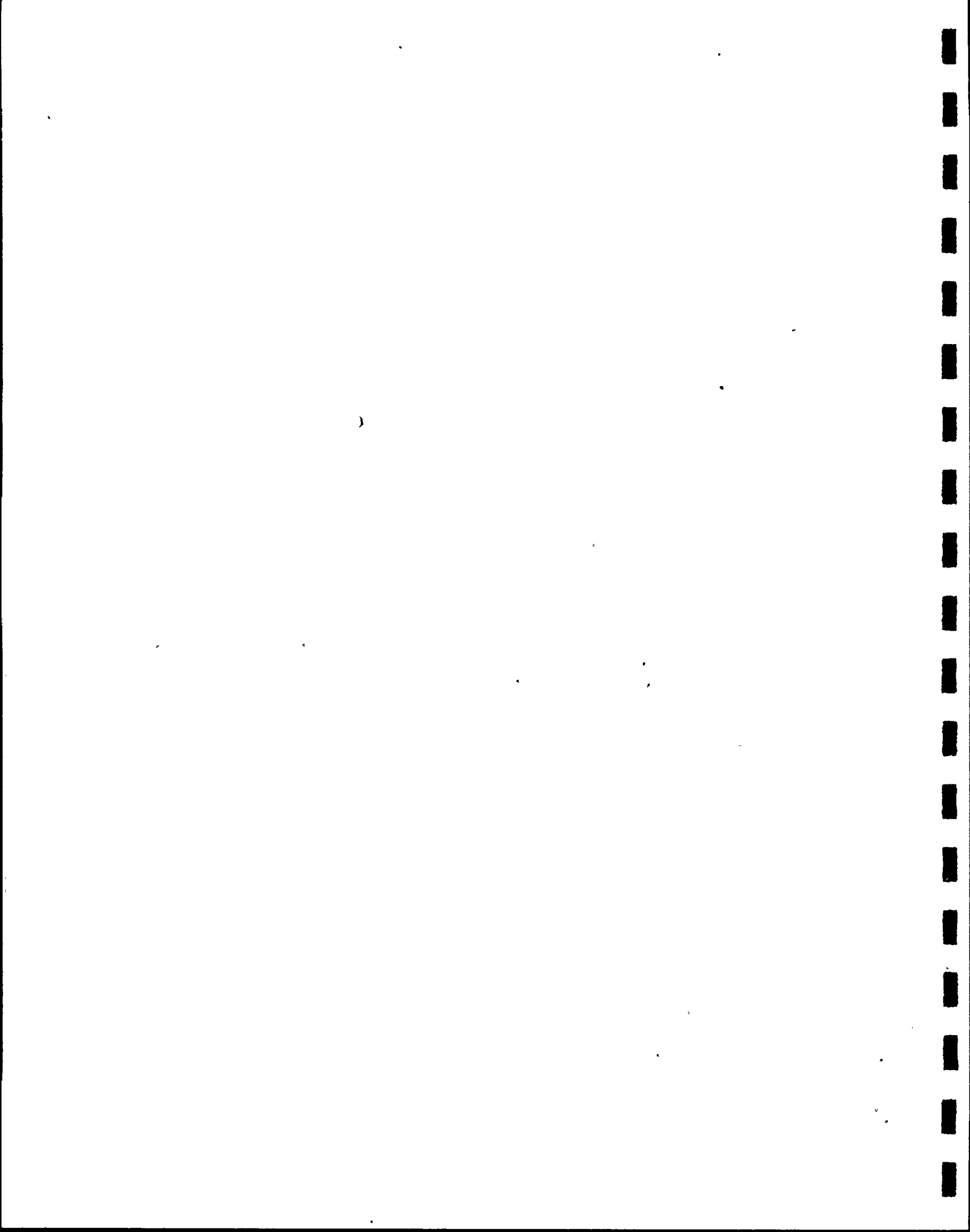
F1	Establish Committee	5/28
F2	Define Criteria	6/18
F3	Establish Procedure	6/18

The remaining subtasks shall be performed as Potential Findings are developed by the individual reviewers.



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Fig. 2 Procedure for Processing Potential Finding Reports





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SUBTASK F - PROCESSING OF FINDINGS

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PROJECT TITLE Independent QA Evaluation of PVNGS 1, 2, and 3

PROJECT MANAGER W. A. Simon

WORK ITEM/ACTIVITY	MAY		JUNE		JULY		AUG		SEPT		OCT			COMMENTS
F1 - Establish Committee			▽											
F2 - Define Criteria				▽										
F3 - Establish Procedure				▽										

TASK G - REPORTS

Objective

Prepare reports on Findings and conclusions with respect to the quality assurance program, organization, procedures and implementation. Prepare, review and issue a final evaluation report.

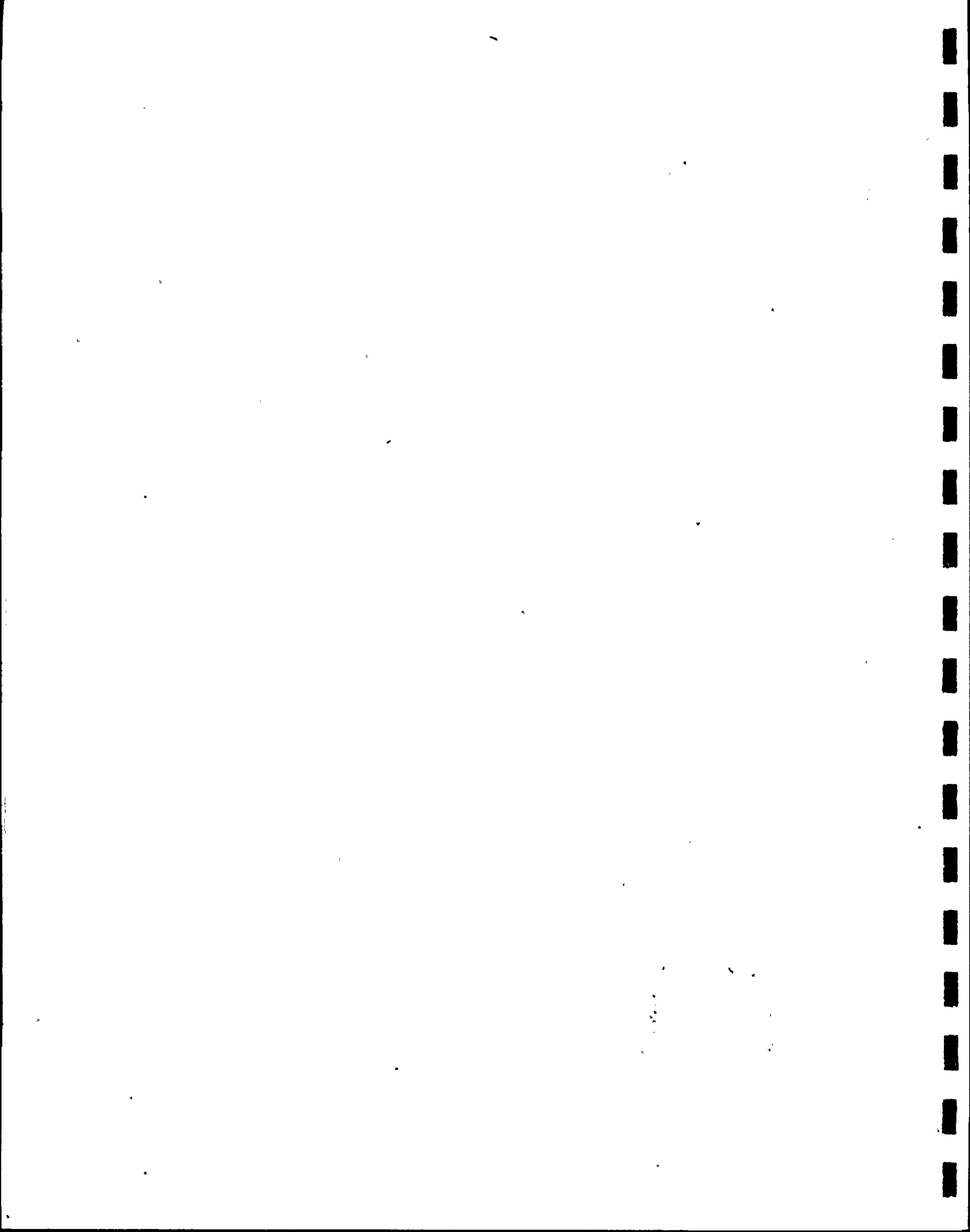
Subtasks

- G1 Prepare and submit biweekly progress reports to APS for its information and transmittal to NRC.
- G2 Compile a record of Potential Findings, and supporting documentation.
- G3 Prepare a final report compiling all Potential Findings, Observations and Findings, including their description, comments, assessment of impact, results of the Findings Review Committee, results of the review of APS corrective action plans, and the final evaluation of the APS QA Program and the design and construction of PVNGS Units 1, 2, and 3. The report will include a description of the work performed under Tasks A through F, an identification of documents used in or generated by this project, the results of the review, and the conclusions drawn from each task.

The final report will be in three volumes: an Executive Summary Volume, A Discussion Volume and a Potential Finding Report Volume.

Milestones

- | | | |
|----|-------------------------------------|-------|
| G1 | Complete Compilation of Information | 10/1 |
| G2 | Publish Final Report | 10/15 |





SUBTASK G - REPORTING

DATE 5/14/82

PROJECT MANAGER W. A. Simon

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PROJECT REPORT

FIGURE 1
PROJECT SCHEDULE

PROJECT TITLE INDEPENDENT QA EVALUATION OF PINES 1, 2, AND 3 PROJECT MANAGER _____

