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VICE PRESIDENT  
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June 11, 1991

U. S. Nuclear Regulatory Commission  
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant  
Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318  
Proposed Change to Quality Assurance Program

Gentlemen:

In accordance with 10 CFR 50.54(a)(3), Baltimore Gas and Electric (BG&E) Company hereby requests approval of a proposed change to the Quality Assurance (QA) Program for Calvert Cliffs Units 1 & 2. The proposed change introduces Nuclear Program Directives (Directives) to replace the existing Quality Assurance Procedures (QAPs). As part of the change, a sponsoring Manager will approve each Directive whereas the Vice President-Nuclear Energy Division (NED) approves all QAPs. The changes result from program improvements developed through the Procedures Upgrade Project.

We propose to change the program as shown on the attached markup. Nuclear Regulatory Commission approval is requested prior to implementation of this change since part of the change could be deemed to constitute a reduction in commitments in the quality assurance program description previously accepted. The quality assurance program is also described in Section 1.B of the Calvert Cliffs Updated Final Safety Analysis Report (UFSAR). The UFSAR is updated annually in accordance with 10 CFR 50.71.

Presently, the QA Program is documented and implemented in the QAPs. Each QAP and revision is prepared by Department responsible for conducting the activity, and reviewed by NED Managers and other affected Managers. The Manager-Nuclear Quality Assurance Department (NQAD) ensures an independent quality assurance compliance review is completed, coordinates comment resolution, and recommends approval. The Vice President-NED approves all QAPs and revisions.

Under the proposed change, Directives will replace QAPs in a systematic transition. Each Directive and revision is prepared under the direction of the sponsoring Manager assigned by the Vice President-NED. Each is reviewed by affected Managers. The sponsoring Manager resolves comments and the Manager-NQAD ensures an independent quality assurance compliance review is completed. The sponsoring Manager approves the Directive and revisions.

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Presently and under the proposed change, the Vice President-NED resolves issues that cannot be settled at the Manager level and is ultimately responsible for the QA Program.

The primary objective of this change is to increase accountability for QA Program activities. Under the proposed change, ownership and responsibility for activities are emphasized by assigning approval authority to the sponsoring Manager and reducing the administrative role of NQAD. Minimizing Vice President-NED and Manager-NQAD involvement eliminates any appearance of shared responsibility. Consequently, the sponsoring Manager clearly owns each activity and is accountable for the results.

Although not a reduction in commitment, Directive processing in the proposed change relieves the Manager-NQAD of some responsibilities held under the QAP review and approval process. Distancing NQAD from the process promotes the organization's independence and focuses resources on independent verification of the QA Program.

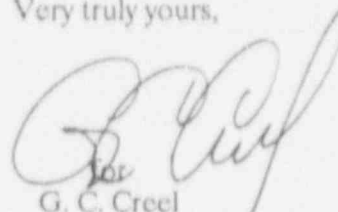
The introduction of Directives owned by sponsoring Managers is part of a larger effort involving the Procedures Upgrade Project to improve QA Program accountability, communications, and interface controls through the creation of a Nuclear Procedures Hierarchy. The hierarchy offers numerous advantages that, in effect, raise the commitment to implement a well defined QA Program that protects public health and safety.

Plant operation in accordance with the proposed change would continue to satisfy the requirements of 10 CFR Part 50, Appendix B. Criterion 6, "Document Control," states in part, "...that documents, including changes, are reviewed for adequacy and approved for release by authorized personnel..." Managers have the requisite authority and organizational freedom to approve Directives and effectively implement the QA Program at the direction of the Vice President-NED. Furthermore, plant operations benefit because of the increased accountability of sponsoring Managers and the increased ability of NQAD to focus resources on independent verification of the QA Program.

Considering the above information, we conclude that the proposed change will maintain the effectiveness of management control of our QA Program.

We respectfully request your approval within 45 days in order to support Procedures Upgrade Project objectives. Should you have any questions regarding this matter, we will be pleased to discuss them with you.

Very truly yours,



G. C. Creel  
Vice President - Nuclear Energy

GCC/JJS/jjs/dlm

Attachment: Markup of QA Policy, Revision 26

Document Control Desk

June 11, 1991

Page 3

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Without Attachment

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## 18.1 ORGANIZATION AND RESPONSIBILITIES

### General Responsibilities

All levels of organization have definite and unique responsibilities in assuring safe, economical, and reliable operation of Calvert Cliffs Nuclear Power Plant (CCNPP). Top level management is responsible for ensuring that policies are established, resources are authorized, management philosophy and commitments are communicated to lower levels of the organization, independent verification of management controls are performed, results are reviewed, and appropriate actions taken when necessary.

Middle level management is responsible for translating management policies, philosophy, commitments, and goals; applicable federal, state, and local rules and regulations; Operating Licenses, Technical Specifications (TS), and the Final Safety Analysis Report (FSAR) into control programs for activities such as design, procurement, construction, testing, operation, refueling, maintenance, repair, modification, training, plant security, fire protection, records, independent verification, and corrective action. Middle level management is also responsible for defining, measuring, and modifying the overall effectiveness of control programs; taking appropriate action on the results; and keeping top management informed of the status, adequacy, and effectiveness of control programs, and matters which could have an impact on nuclear safety.

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First line craft and non-craft supervisors are individually responsible for ensuring that appropriate procedures are understood and used to implement each activity described in the control programs; identifying problems, seeking solutions, verifying implementation of solutions; investigating root causes of problems and taking preventive actions; ensuring that conditions adverse to plant and personnel safety are promptly identified, reported, and corrected; detecting trends which may not be apparent to a day-to-day observer, recommending generic solutions for adverse trends to management, and taking appropriate actions, to achieve desired results; ensuring that employees assigned to do a job are properly qualified through appropriate training and experience; have properly qualified procedures, tools, equipment, and parts to do the job, and, ensuring that independent inspections of work are conducted in accordance with preestablished requirements. First line non-craft supervisors are responsible to ensure that procedures are written, reviewed, and approved; first line craft supervisors may not have this responsibility. Non-supervisory personnel acting as job directors are responsible for ensuring that properly qualified procedures are understood and used; and ensuring that tools, equipment, and parts are on hand to do the job.

Adherence to procedures is vital to the safe and reliable operation of the Calvert Cliffs Nuclear Power Plant. Personnel are responsible for adhering to established procedures, interpreting them conservatively in case of doubt, and recommending changes when necessary. Procedures with the potential to affect nuclear or personnel safety shall be strictly adhered to. When an activity controlled by such procedures cannot be accomplished as described or accomplishment of such activity would result in an undesirable situation, the work shall be stopped and the plant placed in a safe condition. Work shall not resume until the procedure is changed to reflect correct work practices. (1)

These control programs are designated as Quality Assurance Procedures (QAPs) as contained in the Quality Assurance Manual, or as Nuclear Program Directives (NPDs) to be contained in the Nuclear Program Directives Manual. NPDs will replace QAPs during implementation of the new procedures hierarchy. The transition of QAPs into NPDs will be systematically controlled.

Quality assurance matters that cannot be resolved by the Managers or Vice Presidents are brought to the attention of the Vice Chairman or the Chairman of the Board for resolution.

#### Vice President-Nuclear Energy Division

The Vice President-Nuclear Energy Division, is responsible for ensuring that the QA Program is developed and administered. The authority to develop and administer the QA Program is assigned to the Manager-NQAD. The Vice President-Nuclear Energy Division, is also responsible for ensuring that the requirements of the QA Program that relate to the design, operation, and maintenance of the plant are implemented. This responsibility is carried out through the Plant General Manager-CCNPPD; the Manager-NED; the Manager-NQAD; the Manager-NSPD; the Manager-NSSD; and the Manager-NOPMD.

#### Manager-Nuclear Quality Assurance Department

The Manager-NQAD, is responsible for the ~~detailed development~~, direction, and overall coordination of the QA Program for CCNPP. He is also responsible for auditing, quality verification, and the vendor evaluation functions for CCNPP. These responsibilities include:

1. Developing, <sup>and</sup> revising the QA Manual for Nuclear Power Plants.
2. Reviewing <sup>Control Programs</sup> ~~and approving Quality Assurance Procedures (QAP)~~ and their revisions before they are issued for use.
3. Taking necessary corrective action, which can include the stoppage of work when manufacturing, maintenance, or modification activities fail to comply with approved specifications, plans, or procedures. Such corrective action is arranged through appropriate channels and is delegated when necessary. When a unit is operating, the Manager-NQAD, may recommend to the Plant General Manager that the plant be shut down. The Plant General Manager has the final responsibility for the overall evaluation of all aspects and implications of shutting down an operating unit.

NQAD personnel who report to the Manager-NQAD, are independent of departments, sections, and employees responsible for performing specific activities, and have sufficient authority and organizational freedom to identify quality problems; to initiate, recommend, or provide solutions through designated channels; and to verify implementation of solutions.

EG&E has established that the Manager-NQAD, should have at least six years of responsible experience in engineering, design, manufacturing, construction, quality assurance, or power plant operation, as well as a knowledge of regulations and standards related to nuclear power plants.

The organization of NQAD is shown in Chapter 12 of the FSAR. The Manager-NQAD, delegates the following responsibilities for accomplishing required quality assurance activities:

Planning and scheduling evaluations of vendor quality assurance programs.

Performing receipt inspection functions including special receipt inspections and coordinating testing performed to accept commercial grade items, designated NSR items or upgrade NSR items for use in SR applications. (5)

Reviewing proposed changes to QA Program documents for compliance with regulations and licensing documents.

Planning, scheduling, and performing internal audits and evaluations of on-site and off-site functions performed under the nuclear QA Program.

Supporting maintenance and operations activities by performing inspections and surveillances.

#### Plant General Manager-Calvert Cliffs Nuclear Power Plant Department

*Control Programs* The Plant General Manager is responsible for operations, chemistry, radiation safety, maintenance, and systems and performance engineering activities at CCNPP. He must ensure that these activities are conducted in accordance with the plant operating license and TSs, the FSAR, and the ~~Quality Assurance Manual for Nuclear Power Plants~~ <sup>their</sup> implementing procedures. The Plant General Manager fulfills the position and requirements of the Plant Manager, as defined in ANSI N18.1 (1971).

The organization of CCNPPD is shown in Chapter 12 of the FSAR. The Plant General Manager, delegates responsibilities for accomplishing required activities as follows:

1. The Superintendent-Nuclear Operations (S-NO) is responsible to the Plant General Manager, for the operation of the plant, including the general supervision of all shift operating personnel and prioritization of maintenance activities to support operations. This responsibility covers the safety of plant personnel and equipment, all fuel-handling and refueling activities, and adherence to applicable license and regulatory requirements. The S-NO fulfills the position and requirements of the Operations Manager as defined in ANSI N18.1 (1971) with the exception taken in Table 1B.1.

The S-NO delegates primary management responsibility to the Shift Supervisor (SS) on duty to ensure the safe operation of the plant under all conditions. The SS maintains the broadest possible perspective on operational conditions that affect the safety of the plant. As the senior member of plant management on each shift, he exercises the command authority of his position to take whatever steps he deems necessary during emergency situations to place and maintain in a safe configuration any unit that may be affected.

### Manager-Information Systems Department

The Manager-ISD, is responsible for directing the efforts of ISD personnel involved in acquiring and supporting computer software and hardware.

### Vice President-Management Services Division

The Vice President-MSD, is responsible for ensuring that the activities of MSD personnel involved with medical examinations for CCNPP operators, Nuclear Security Officers, and respirator users, meet the requirements of the regulations. The responsibility is carried out through the Manager-SMSD.

### Manager-Safety and Medical Services Department

The Manager-SMSD, is responsible for directing the efforts of SMSD personnel involved with medical examinations for CCNPP operators (10CFR55), Nuclear Security Officers (10CFR73), respirator users (10CFR20), and with the Fitness for Duty rule (10CFR26).

## 1B.2 QUALITY ASSURANCE PROGRAM

### General Controls

BG&E's QA Program for CCNPP is applied to structures, systems, components, and activities that have been designated SR because they prevent accidents or mitigate the consequences of postulated accidents that could cause undue risk to the health or safety of the public. The QA Program is also applicable to designated NSR structures, systems, components, and activities as committed to in regulations. Designated NSR program requirements are based on a graded approach to Quality Assurance required to meet applicable regulatory requirements or guidance. The level of QA Program controls placed on NSR items are defined in QA's Control Programs.

This <sup>QA</sup> Program is governed by, <sup>Control Programs</sup> ~~the Quality Assurance Manual for Nuclear Power Plants~~, which specifies assignment of responsibilities for implementation of the Program and establishes responsibilities for controlling and ensuring the quality of the Program's activities.

Controls have been established for specifying on a Quality List (Q-List) all SR structures, systems, components, and activities that are subject to the requirements of the QA Program.

The Statement of Authority, <sup>Y</sup> ~~in the Quality Assurance Manual for Nuclear Power Plants~~, signed by the Chairman of the Board, establishes the overall QA Policy of BG&E. This Statement sets the goal of safe and reliable operation of CCNPP; commits the Company to a QA Program designed to ensure the plant's compliance with regulatory requirements, BG&E commitments, and established practices for reliable plant operation; and requires every person involved in QA Program activities to comply with the provisions of the Program.

The Policy is approved by the Vice President-NED and implemented by the Managers of NQAD, NED, NOPMD, NSPD, NSSD, CCNPPD, ETD, FESD, GMD, PHMD, ISD, and SMSD.

(1)

The QA Program has established controls for BG&E and its contractors as required to ensure that the criteria of 10 CFR 50, Appendix B, will be met throughout the operations phase of the plant; i.e., during activities of testing, operation, maintenance, repair, modification, and refueling.

The QA Program has also established controls to ensure that the construction and operation of designated NSR structures, systems, components and activities for the Independent Spent Fuel Storage Installation (ISFSI) are conducted in compliance with 10 CFR 72.

The Manager-NQAD, coordinates the development of the QA Program and the Manager-NSSD controls the issue and revision of the Quality Assurance Manual for Nuclear Power Plants. Each change to the Manual is issued with a transmittal notice, which is completed by the recipient and returned to NSSD to indicate that the documents listed on the transmittal have been received and incorporated into the recipient's Manual. The Manager-NQAD, ensures that the Program is revised as regulations, standards, results, or experience dictate. (1) The Manager also determines and evaluates the degree of compliance of QA Program activities with the requirements of ~~the Quality Assurance Manual for Nuclear Power Plants and its implementing Procedures~~. Audits are conducted regularly to ensure compliance with established requirements, and the results of these audits are reported to responsible management personnel.

The Vice President-NED, ensures that activities of the NQAD are audited regularly by personnel independent of the Department. These auditors assess the effectiveness of the Section's implementation of appropriate portions of BG&E's QA Program.

The Vice President-Nuclear Energy Division, evaluates the report of the independent audit to determine if changes are required to the QA Program. He is responsible for negotiating such changes with the appropriate level of management and for sending to the Chairman of the Board a copy of the audit report and an account of the corrective action taken.

If a difference of opinion arises between NQAD personnel and those of other Sections or Departments, the dispute is resolved as follows: The Supervisor/General Supervisor of the QA Unit/Section involved first tries to resolve the matter with the organization responsible for conducting the activity. If a resolution cannot be obtained, the matter is referred up through the following management personnel until it is resolved: (3)

1. The Manager-NQAD, and the Manager responsible for performing the activity.

NOTE:

If the dispute is with another Unit/Section in NQAD, the issue will be settled by the Vice President-Nuclear Energy Division. (3)

2. The Vice President-Nuclear Energy Division. (1)
3. The Vice Chairman or the Chairman of the Board.

To ensure that important activities are performed correctly, BG&E conducts formal training programs for Company personnel with significant responsibilities. These programs include both initial and continuing training

In addition, the Quality Assurance Manual for Nuclear Power Plants  
Procedural Controls by Control Programs and their implementing procedures.

The QA Program is documented in the Quality Assurance Manual for Nuclear Power Plants. This Manual contains a QA Policy that identifies the NRC regulatory requirements, industry standards, and specific codes applicable to the eighteen criteria contained in 10 CFR 50, Appendix B. The QA Policy also indicates action that will be taken by BG&E in response to these documents and to commitments made in the FSAR and TSS for CCNPP. The Policy is approved by the Vice President-Nuclear Energy Division. (1) QA

The Manual also contains a series of individual QAPs that implement actions identified in the QA Policy. QAPs cover the major activities related to operating a nuclear power plant, such as plant operation, plant maintenance, purchasing, purchase of items and services, calibrations, etc. Each QAP is developed by one or more of the departments responsible for conducting the activity. The QAP and revisions thereto are reviewed by the manager(s) of the responsible departments (those departments responsible for the QAP activity, and the Managers of Nuclear Energy Division). (1) The Vice President-Nuclear Energy Division approves all QAPs and revisions thereto. The Manager-NQAD reviews changes to QAPs and recommends approval to the Vice President-NED, and the Manager-NSE issues all QAPs and revisions thereto. (1)

INSERT B

and Nuclear Program Directives. QAPs also show interdepartmental relationships and departmental responsibilities as they relate to particular activities, regulatory requirements, and BG&E commitments. One QAP controls the distribution and revision of the Manual. QA

QAPs and Nuclear Program Directives

Others ensure that:

1. The need for special controls, processes, test equipment, tools, and skills is specified when necessary to ensure that required quality is attained in performance of the activity.
2. Quality is verified by inspections and tests.
3. Personnel who perform activities affecting quality achieve and maintain suitable proficiency through appropriate training and experience.

Department or lower-level implementing Procedures are prepared either by Departments such as ETD and PMND or by groups within Departments. The controls for review and issue of implementing procedures are discussed in Sections 1B.5 and 1B.6.

Review of Operations

Procedures require that CCNPP shall be operated and maintained in accordance with the plant TSS and operating license. The following organizations review plant operations to ensure that these procedures are followed:

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These QAPs (Control Programs) will be systematically replaced by Nuclear Program Directives (also Control Programs) which accomplish the same objective as QAPs but have a different level of approval. The Procedures Directive defines the review and approval requirements for NPDs.

1. The Manager-NQAD provides independent verification that the requirements contained in the Plant's operating license, FSAR, TSS, and plant procedures are met. This is accomplished through quality assurance audits.
2. The OSSRC provides independent verification by review that CCNPP is operated in accordance with established requirements. The OSSRC, which functions under a written Charter approved by the Vice President-Nuclear Energy Division, is composed of on-site and off-site personnel knowledgeable of in-plant operations, nuclear engineering, chemistry and radiochemistry, metallurgy, radiological safety, instrumentation and control systems, mechanical and electrical systems, quality assurance, and environmental factors. The proceedings of all meetings are documented and sent to the Vice President-Nuclear Energy Division, Committee members, and others designated by the Committee Chairman.
3. The on-site POSRC reviews matters pertaining to nuclear plant safety. This Committee screens subjects of potential concern to the OSSRC and performs preliminary investigations under the direction of the Plant General Manager. The POSRC, which is chaired by the Plant General Manager, functions under a written Procedure which is approved by the Plant General Manager. The results of all meetings are documented and sent to the members of the OSSRC, and others designated by the Committee Chairman.

The maintenance and repair of systems, structures, and components subject to the QA Program are performed by personnel under the direction of the General Supervisors of Electrical and Controls, Radiation Safety, and Mechanical Maintenance, according to written procedures and instructions as prepared by the maintenance force and approved as stated in ~~the Quality Assurance Manual for Nuclear Power Plants~~. These Procedures: *Control Programs*

1. Ensure that quality-related activities, such as inspections and tests, are performed with appropriate equipment and under suitable environmental conditions.
2. Indicate inspections and checks that must be made and records and data that must be kept.
3. Show where independent verifications of inspections or checks should be performed by specified personnel other than those performing the work.

When necessary, non-plant Company personnel or outside contractors are brought in to supplement the plant work force. In such instances, the approval of work procedures and the tagging of equipment are coordinated by a member of the RG&E organization responsible for the performance of the work.

Controls are established *by Control Programs* ~~in the Quality Assurance Manual for Nuclear Power Plants~~ to ensure that materials and parts used in the repair, maintenance, and modification of SR and designated NSR portions of the plant are appropriate for the service intended. Written procedures are prepared for the storage and identification of materials and parts to ensure that they do not deteriorate in storage and can be correctly identified before installation or use.

Equipment manufacturers and contractors used for the repair, maintenance, and modification of SR and designated NSR structures, systems, and components are required to have quality assurance programs consistent with the importance of the end-product to safety.

### 1B.3 DESIGN CONTROL

#### Control

Plant modifications described in the FSAR and considered significant for nuclear safety are controlled by <sup>a Control Program</sup> ~~the Quality Assurance Manual for Nuclear Power Plants~~, which is written to ensure compliance with Regulatory Guide 1.64 and 10 CFR 50.59.

Alterations to the Operating License, including TSs, the FSAR and the Emergency Response Plan (ERP) are subject to the same controls as are alterations to changes, tests, and experiments defined in 10 CFR 50.59.

Controls for changes, tests, and experiments conducted at GCNPP vary according to the following:

1. As the item or activity affected is or is not described in the FSAR.
2. As the item or activity affected has been classified SR or NSR.
3. As a safety analysis is or is not required.
4. As the proposed change, test, or experiment does or does not constitute an Unreviewed Safety Question or require a change to the TSs.

To ensure compliance with 10 CFR 50.59, changes, tests, or experiments have been divided into categories. Three methods of treatment are allowed:

1. Implementing the change, test, or experiment according to Company practice for operating power plants, or according to Procedures required by ~~the Quality Assurance Manual for Nuclear Power Plants~~. <sup>Control Programs</sup>
2. Implementing the change, test, or experiment according to Company practice for operating power plants by using Procedures required by ~~the Quality Assurance Manual for Nuclear Power Plants~~ but controlling the change, test, or experiment with a Facility Change Request (FCR) so that the preparation and reporting of safety analyses are controlled. <sup>Control Programs</sup>
3. Controlling the change, test, or experiment with a FCR and not allowing the implementing activity to begin until the review requirements of 10 CFR 50.59 and 10 CFR 50, Appendix B, have been met.

Changes, tests, or experiments which require approval by the NRC are approved by the POSRC and by the OSSRC.

<sup>Programs</sup> Controls have been established to ensure that design changes to SR structures, systems, and components are reviewed either by the organization that made the original design or by a Responsible Design Organization (RDO) that meets requirements specified in ANSI N45.2.11, Section 8.0.

10. Incorporate the requirements of 10 CFR 21 for Nuclear Grade procurements.
11. Include requirements for QA program elements to be passed on to sub-vendors.

#### 1B.5 INSTRUCTIONS, PROCEDURES, AND DRAWINGS

Controls delineate the sequence of actions to be performed in the preparation, review, approval, and control of instructions, procedures, and drawings.

Controls require that:

1. Methods for complying with each of the applicable criteria of 10 CFR 50, Appendix B, must be specified in instructions, procedures, and drawings.
2. Instructions, procedures, and drawings must specify appropriate quantitative (such as dimensions, tolerances, and operating limits) and qualitative (such as workmanship samples) acceptance criteria for verifying that important activities have been satisfactorily accomplished.

Controls ensure that:

1. The QA Policy is approved by the Vice President-Nuclear Energy Division. (1)
2. <sup>Control Programs</sup> QAPs are developed by Departments responsible for conducting particular activities, reviewed by the managers of the responsible department(s) for that particular activity, and approved by the Vice President-Nuclear Energy Division. (1) *or by the sponsoring Manager.*
3. Department Procedures are approved and controlled by the responsible Departments and control procedures are reviewed by the Quality Audits Unit (QAU).
4. Plant, section, and unit procedures that control the topics, contents, review, approval, issue, distribution, and revision of plant, section, and unit procedures that specify how activities are to be performed are reviewed by a member of QAU.
5. Other plant, section, or unit procedures that specify how activities are to be performed are controlled by the responsible organization and reviewed and approved within the responsible organization.
6. The basis for changes to all procedures will be recorded. (1)

#### 1B.6 DOCUMENT CONTROL

Requirements have been established to control the documentation of activities controlled by the QA Program. Controlled documents include the FSAR for CCNPP; QAPs in the BG&E Quality Assurance Manual for Nuclear Power Plants; department, section, unit, and plant procedures that implement the QAPs; specifications; and drawings.

*Nuclear Program Directives;  
or Nuclear Program Directives*

*Control Programs*

~~QAPs~~ are required to:

1. Establish controls to ensure that regulatory requirements and BG&E commitments will be implemented.
2. Describe interdepartmental interfaces and establish controls for interdepartmental activities.
3. Specify how important activities, such as plant maintenance or in-service inspection, are to be performed, and give sufficient detail to control the performance of the activity or to ensure that requirements for lower-level procedures are clearly specified.
4. Be prepared and controlled in accordance with ~~one QAP~~ <sup>procedures</sup> that describes the format, sequence of topics, contents, review and approval, issue and distribution, and requirements for revision and record retention.

*Control Program*  
During the review of each ~~QAP~~, compliance with applicable criteria specified in 10 CFR 50, Appendix B, is verified and documented.

The Manager-NSSD, is responsible for issuing, revising, and controlling QAPs.

*Control Programs*

*Control Program*  
QAPs are developed by one of the departments responsible for the subject activities. Each procedure is given a compliance review by a member of the QAU, and technical review by a member of one of the responsible departments. Each ~~QAP~~ is reviewed by department manager(s) who have responsibilities for activities governed by that ~~QAP~~, and the Managers of the Nuclear Energy Division. (1) Each QAP is approved by the Vice President-Nuclear Energy Division and issued by the Manager-NSSD. (1) <sup>Nuclear Program Directives are approved by the sponsoring organization.</sup>

Department procedures are prepared when interfaces or activities within a department are not defined in a ~~QAP~~ or when they are needed to specify the content of plant, section, or unit <sup>procedures.</sup>

*Control Program*  
As needed, department procedures describe how requirements delineated in a ~~QAP~~ will be implemented at the department level. They describe the interfaces between groups or units within a department and specify requirements to be met by lower-level documents. When two or more departments are closely involved in performing an activity that requires more detailed instructions than are contained in a ~~QAP~~, the activity is controlled by a common department level procedure provided that the managers, or their designee, of the affected departments agree to use this procedure, and managers or their designee, review revisions to those portions of the procedure that affect their department. <sup>an interdepartmental procedure or by</sup>

*Control Program*  
Individual departments are responsible for preparing, issuing, revising, and controlling department procedures. These are prepared and controlled according to a department procedure that describes format, sequence of topics, contents, review and approval, issue and distribution, and requirements for revision and record retention.

Each department procedure is given a technical review by a member of the same department. QAU is required to perform compliance reviews of controlling procedures. Other procedures are reviewed by QAU on a requested basis.

Plant, section, or unit procedures are prepared to describe how requirements delineated for subgroups within a department will be implemented when these requirements are not delineated in sufficient detail in QAPs or department procedures. When two or more departments are closely involved in performing plant activities that require more detailed instructions than are contained in a QAP or department procedure, the activity is controlled by a common plant procedure provided that the managers, or their designee, of the affected departments agree to use this procedure. Managers, or their designee, review revisions to those portions of the procedures that affect their department.

*Control Program, interdepartmental,*

Functional groups within departments prepare, issue, revise, and control the procedures that control their work. Group procedures must be reviewed by a member of the group, and may be reviewed by QAU.

Group procedures are prepared and controlled according to control procedures that describe format, sequence of topics, contents, review and approval, issue and distribution, and requirements for revision and record retention. Control procedures are reviewed by a member of QAU.

Organizations that issue instructions, procedures, specifications, or drawings are required to establish controls that ensure the following:

1. Changes to a document are reviewed and approved by the organization that performed the original review and approval unless the control procedure designates another qualified responsible organization.
2. Approved changes are promptly incorporated into instructions, procedures, drawings, and other documents associated with the change.
3. Obsolete or superseded documents are controlled to reduce the possibility of inadvertent use. Superseded documents retained for reference are marked and stored in separate files. Other superseded documents are removed from the files.

When changes to drawings or specifications are required, change requests are prepared by the organization that desires the change. Requests are reviewed and approved by BG&E RDOs.

#### 1B.7 CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES (5)

NQAD, NSSD, NED, and PMMD personnel are responsible for the control of purchased items and services for SR and designated NSR applications at CCNPP.

The controls include:

Accepting items or services only from vendors who have been evaluated and selected in accordance with this policy.

These procedures are prepared according to appropriate sections of the ASME Code for particular examination methods. Procedures, personnel qualifications, and the records that verify the Performance of Nondestructive Examinations are kept as nuclear plant records. Nondestructive Examination Procedures describing methods not described in the ASME Code and/or SNT-TC-1A and its Supplements are at least equivalent to those recognized by the American Society of Mechanical Engineers and the American Society for Non-destructive Testing. Training programs acceptable to the Principal Metallurgist are developed to complement these alternative methods and to establish the capability of personnel to perform the required examination according to BG&E procedures and to the level of performance to which the individual will be certified.

Methods of Nondestructive Examination include, but are not restricted to, radiographic, ultrasonic, liquid-penetrant, magnetic-particle, eddy-current, visual, and leak-testing examinations. Procedures are prepared to cover these examinations in accordance with a <sup>Control Program</sup> QAP that details the specific examination, requirements for approval, and content of the procedure, such as certification level, accept/reject criteria, examination coverage and sequence, surface preparation, test equipment, records required, permissible marking, cleanup requirements, and reference to applicable sections of the ASME Code.

#### Qualification of Personnel

Special processes are performed by certified personnel using written process sheets, shop procedures, checklists, and travelers (or equivalent), with recorded evidence of verification as follows:

1. BG&E welders, and welders under contract to BG&E, are qualified and certified in accordance with the requirements of Section IX of the ASME Code and the welding procedure specifications they will be using when welding. The Principal Metallurgist maintains records of the welding procedure specifications, including essential variables under which the welders are examined, and the results of the examinations. A welder is not permitted to weld SR and designated NSR items until an appropriate performance qualification record, a letter of certification, or, in an emergency, verbal clearance from the Principal Metallurgist, is on file at CCNPP. Each welder is required to be requalified as specified in the applicable code.
2. Non-BG&E welders are not permitted to weld SR and designated NSR items until they are qualified and certified in accordance with Section IX of the ASME Code to the welding procedure specification they will be using.
3. Nondestructive Examination personnel employed by or responsible to BG&E are certified according to applicable sections of the ASME Code and/or SNT-TC-1A and its Supplements. BG&E employees are trained and certified in accordance with a written procedure. Non-BG&E personnel are qualified to procedures approved by BG&E, and their qualifications and certifications of personnel are verified according to written procedures.

the corrective action(s). Unacceptable corrective action(s) are reported to supervisory or management personnel directly responsible for resolving the adverse condition with progressive escalation to higher levels of management occurring until the adverse condition is resolved.

Significant Conditions Adverse to Quality require the initiation of root cause analysis and the implementation of corrective actions to prevent recurrence and are reported to management for review and assessment.

Conditions Adverse to Quality are periodically analyzed for the identification of adverse quality trends. The existence of an adverse quality trend is resolved in accordance with this section. A Trend Report is issued to management at intervals specified in approved procedures.

#### 1B.17 QUALITY ASSURANCE RECORDS

Controls have been established to ensure that quality assurance records are maintained to provide documentary evidence of the quality of SR and designated NSR items and activities. Applicable design specifications, procurement documents, test procedures, operational procedures, \*QAPs, TSs, and other documents specify records that should be generated, supplied, or maintained by and for BG&E.

Quality assurance records are classified as lifetime or non-permanent.

Lifetime records, maintained for particular items for the life of CCNPP, for particular items have significant value in relation to demonstrating capability for safe operation; maintaining, reworking, repairing, replacing, or modifying an item; determining the cause of an accident or malfunction of an item; and providing required baseline data for in-service inspection.

Non-permanent records, which show evidence that a SR and designated NSR activity was performed in accordance with applicable requirements, are retained for periods sufficient to ensure BG&E's ability to reconstruct significant events and to satisfy applicable regulatory requirements. Retention periods are specified in the TSs or in procedures that control the performance of activities.

Procurement documents specify vendor responsibilities for the generation, retention, and submission to BG&E of quality assurance documentation related to the fabrication, inspection, and test of SR and designated NSR items and services.

Inspection and test records contain the following as appropriate:

1. Description of the type of observation.
2. Date and results of inspection or test.
3. Information related to noted discrepancies, including action taken to resolve them.
4. Identification of inspector or recorder of data.