# TEXAS UTILITIES SERVICES INC.

2001 BRYAN TOWER · DALLAS, TEXAS 75201

TXX-2945

January 31, 1979

Mr. R. Naventi Licensing Project Manager Light Water Reactors Branch No. 4 Division of Project Management Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, D.C. 20555

#### COMANCHE PEAK STEAM ELECTRIC STATION NRC QUALITY ASSURANCE BRANCH QUESTIONS DOCKET NOS. 50-445 & 50-446 FILE NO. 10010

Dear. Mr. Naventi:

Enclosed are our initial responses to QAB questions (Q421.1-Q421.42). As agreed, these are being transmitted to you by letter to expedite response time. These responses will be retransmitted to the Commission in FSAR Amendment 4.

If you have any questions about this matter, please contact this office.

Sincerely,

E.J. Leonard

E. J. Leonard

EJL:tls Enclosure cc: H. C. Schmidt

7902050720

# Quality Assurance

The response in Section C (pages 9.5-235 through 9.5-240) 0421.1 of your June 15, 1978 submittal does not indicate whether the QA program for fire protection is under the management control of the OA organization. This control consists of (1) formulating and/or verifying that the tire protection QA program incorporates suitable requirements and is acceptable to the management responsible for fire protection and (2) verifying the effectiveness of the QA program for fire protection through review, surveillance, and audits. Performance of other QA program functions for meeting the fire protection program requirements may be performed by personnel outside of the QA organization. The QA program for fire protection should be part of the overall plant QA program. These QA criteria apply to those items within the scope of the fire protection program, such as fire protection systems, emergency lighting, communication and emergency breathing apparatus as well as the fire protection requirements of applicable safety-related equipment.

> We find that your response does not describe sufficient detail to address the ten specific quality assurance criteria in Branch Technical Position APCSB 9.5-1. In order for the QAB to fully evaluate your plan to meet these criteria, additional detailed description is necessary. Examples of the detail we would expect Texas Utilities Generating Company/Texas Utilities Service, Inc. (TUGCO/TUSI) to consider are provided in Attachment 6 to Mr. D. B. Vassallo's letter of August 29, 1977. If, however, you choose not to provide this detail, you may apply the same controls to each criterion that are commensurate with the controls described in your QA program

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description, Section 17.2. These controls would apply to the remaining construction activities and for the operations phase of Unit Nos. 1 and 2. If you select this method, a statement to this effect would be adequate for our review of the QA program for fire protection.

R421.1 See revised section 13.3B. Section 9.5.1 will be revised in a later amendment.

- Q421.2 Describe TUSI's specific responsibilities in executing the QA program, and describe the responsibility and authority of the TUGCO QA Manager over TUSI's QA activities. Also address the QA Manager's involvement in the review and concurrence of TUSI's quality-related documents and qualification of QA/QC personnel.
- R421.2 Texas Utilities Generating Company (TUGCO), as licensee, has overall responsibility for the operation of the Comanche Peak Steam Electric Station (CPSES). TUGCO may, from time to time, assign responsibility for executing certain portions of the QA Plan to TUSI.

The Executive Vice President and General Manager of TUGCO has assigned to the Manager, Quality Assurance the responsibility for assuring the effective implementation of the quality assurance program for operations at CPSES.

TUSI is responsible, as TUGCO's agent, for providing certain technical and administrative services in support of CPSES operations.

- Q421.3 Identify on Organizational Charts (Figures 17.2-1 and 17.2-2) the "cosite" and "offsite" organizational elements of TUGCO and TUSI which function under the control of the QA program.
- R421.3 The "onsite" and "offsite" organizational elements of TUGCO and TUSI are identified on Figure 17.2-1 and 17.2-2.

- Q421.4 Identify the management level responsible for the final review and approval of the TUGCO and Comanche Peak Steam Electric Station (CPSES) QA program and manual(s) including changes thereto, and describe the involvement of the QA Division and QA Supervisor in the review and concurrence of these documents.
- R421.4 The CPSES QA Plan is approved by the Executive Vice President and General Manager via a signed statement of policy. The initial issue of the Plan, and all subsequent revisions thereto, shall be reviewed by the TUGCO Manager, Quality Assurance and approved by the CPSES General Superintendent.

All manuals, including changes thereto, which fall under the requirements of the QA plan will be reviewed by the QA Supervisor and approved by the CPSES General Superintendent. The QA Division will not be involved in review and concurrence to Site Manuals.

The Corporate QA program is also approved by the Executive Vice President and General Manager.

- Q421.5 Describe the involvement of the QA Manager in the review and concurrence of CPSES operations, administrative control, and QA plan.
- P.421.5 The initial issue of the Plan, and all subsequent revisions "hereto, shall be reviewed for content and suitability by the TUGCO Manager, Quality Assurance.

Q421.6 Describe the amount of nuclear quality assurance experience required for the position of Quality Assurance Manager. This description should be at least equal to the one year experience as listed in paragraph 4.4.5 of ANSI/ANS-3.1-1978, "Selection and Training of Nuclear Power Plant Personnel."

R421.6 See FSAR Section 17.1.1.1.2.

Q421.7 Describe the quality assurance and quality control related experience qualifications required of the QA Supervisor.

R421.7 The following qualification requirements have been established for the Quality Assurance Supervisor:

Six years experience in the field of quality assurance, preferably at an operating nuclear plant, or operations supervisory experience. At least one year of this six years experience shall be nuclear power plant experience in the overall implementation of the quality assurance program. A minimum of one year of this six years experience shall be related technical or academic training. A maximum of four years of this six years experience may be fulfilled by related technical or academic training.

Also see Question 422.8.

- Q421.8 Describe measures which assure that personnel (including those outside the QA/QC organization) performing QA/QC functions have sufficient authority and organizational freedom to:
  - a) Identify quality problems,
  - b) Initiate, recommend, or provide solutions through designated channels, and
  - c) Verify implementation of solutions.
- R421.8 The CPSES Operations Administrative Control and Quality Assurance Plan, establishes the quality assurance requirements and controls to be implemented throughout the testing and operations phases of the CPSES. This plan defines responsibilities and prescribes measures for the control and accomplishment of activities affecting the quality and operation of safety-related items at CPSES.

Implementing procedures and instructions, contained in several procedure manuals, ensure that personnel have sufficient authority and organizational freedom to identify quality problems, initiate, recommend, or provide solutions and verify implementation of solutions.

- Q421.9 Describe those measures which assure the designated QA individuals have the responsibility and authority, delineated in writing, to stop unsatisfactory work and control furthur processing, delivery, or installation of nonconforming material.
- R421 Procedures and instructions shall provide for the identification and disperition of nonconforming items and materials fabricated or constructed at CPSES or received from suppliers to prevent inadvertent use. Nonconforming material is dispositioned, by procedures in applicable manuals, and its use shall not be permitted until the nonconformance has been corrected, accepted or conditionally released. Stop work authority is realized through reporting function of QA Supervisor to the General Superintendent on all quality related matters with communications to TUGCO Manager, Quality Assurance.

- Q421.10 Clarify the responsibility of the QA Supervisor to communicate and interface with the QA Manager, and describe those conditions for determining when these actions should take place.
- R421.10 The QA Supervisor has reporting responsibilities to the TUGCO Manager, Quality Assurance. Those responsibilities include keeping the TUGCO Manager, Quality Assurance apprised of the Status of Quality Assurance activities at CPSES, and any conditions which are adverse to quality. The conditions for determining when actions between the QA Supervisor and QA Manager should take place, will be handled on an as-needed basis as determined by the QA Supervisor.

- Q421.11 Identify the organizational position responsible for inspection functions, including responsibilities for selection and qualification of inspection personnel, review and concurrence of inspection procedures, and assurance of proper independence from work being inspected. Describe the involvement of the QA division and QA Supervisor in this area.
- R421.11 Inspection functions shall be conducted by Maintenance Inspectors, who report to the Maintenance Engineer. These inspectors shall be certified as Level I or II inspectors and shall be independent of those individuals performing the activity being inspected.

The Quality Assurance Supervisor shall conduct reviews of station activities to verify conformance to those activities of the QA Plan.

- Q421.12 Describe provisions which assure that management (i.e., above or outside the QA organization) annually assesses the scope, status, implementation, and effectiveness of the QA program to assure that the program is adequate and complies with 10 CFR Part 50, Appendix B criteria.
- R421.12 The Operations Review Committee will meet at a frequency of not less that twice a year and will function as an independent body to review safety-related matters. It will report its findings and recommendations to the Executive Vice President and General Manager of TUGCO. The Manager, Quality Assurance, through audit and surveillance of the implementation of the quality assurance program, evaluates the effectiveness of the QA Program for adequacy and compliance to 10CFR50, Appendix B.

- Q421.13 Provide a brief summary of the Policy Statement of the CPSES Operations Administrative Control and Quality Assurance Plan.
- R421.13 The Policy Statement establishes that the authority to implement the requirements of the Plan is delegated to the General Superintendent who has the complete support of the Company's management. It also states that all aspects of administration and implementation of the program are subject to the concurrence of the Manager, Quality Assurance and subject to review and audit by the Operation Review Committee and both Corporate and Site Quality Assurance Groups.

- Q421.14 Describe those provisions established to control the distribution of the QA manuals and revisions thereto.
- R421.14 Appendix A of the Operations Administrative Control and Quality Assurance Plan describes the necessary instructions and requirements for the approval, control, and revisions of the QA Plan. Other Station Manuals and Procedures are covered by procedures which adequately describe the control and distribution of these manuals.

- Q421.15 Describe provisions which assure that the QA program for operations will be implemented at least ninety days prior to fuel loading.
- R421.15 The Operations Administrative Control and Quality Assurance Plan, which describes the quality assurance requirements and controls for the operations phase, has been written and issued as a controlled document at the CPSES.

- Q421.16 Clarify whether TUGCO/TUSI reviews and documents agreement with the QA program provisions of CPSES suppliers to assure the provisions of Appendix B to 10 CFR 50 will be implemented.
- R421.16 TUGCO/TUSI reviews and documents agreement with the QA program provisions of CPSES Suppliers to assure provisions of Appendix B to 10CFR50 are implemented by procedures at both site and corporate levels since purchase documents are handled by the corporate offices for final review and handling.

- Q421.17 Table 17A-1 of the FSAR addresses those structures, systems, and components covered by the operational QA program. We note that there are certain items not identified which we believe should be under the control of the QA program. Therefore, consideration should be given to identify and include the following items under the control of the QA program:
  - Reactor Pressure Vessel Internals (e.g., Fuel assemblies, control element assemblies, flow skirt, etc.);
  - All Reactor Coolant System Valves and Supports;
  - 3. Reactor Internals Lifting Device; and
  - 4. Turbine Overspeed Protection System.

Also, please correct the apparent typo on page 17.2-10 referencing Section 17.3 which should be Table 17A-1.

R421.17 The Reactor Pressure Vesse! Internals, Reactor Coolant System Valves and Reactor Internals Lifting Device will be controlled under the QA Program as they are related to the safety of the Plant. The Tarbine Overspeed Protection System is not safety-related and will not be under the control of the OA Program.

The apparent ".ypo on page 17.2-10 has been corrected.

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Q421.18 Identify the organizational position with the authority and responsibility to approve changes to the plant Q-List and describe those provisions for controlling the distribution of the plant Q-List, including signature approval and revision numbers and/or dates. Describe the involvement of QA and/or QC personnel in this area.

R421.18 The plant Q-List shall be reviewed and approved by the ORC and shall be maintained by the General Superintendent.

Implementing procedures and instructions establish a system for distribution and control of the list. The TUGCO Manager, Quality Assurance, as a member of the ORC, is involved in all changes to the plant Q-List. Q421.19 Table 17.2-2 does not provide a complete list of quality-related Regulatory Guides. Also, some Regulatory Guides identified have the wrong effectivity date. Accordingly, update the table to assure it is consistent with the following, and to preclude any misinterpretation regarding the commitment statement, the following wording is recommended:

> "CPSES will commit to comply with the regulatory positions in the following Regulatory Guides and ANSI standard (identify by no. and rev. no. and/or date): 1.8-Rev. 1-R; 1.28 (6/7/72); 1.30 (8/11/73); 1.33-Rev. 1; 1.37 (3/16/73); 1.38 (3/16/73); 1.39-Rev. 2; 1.58 (8/73); 1.64-Rev. 2; 1.74 (2/74), 1.88-Rev. 2; 1.94-Rev. 1; 1.116-Rev. 0-R; 1.123-Rev. 1; ANSI N45.2.12, Draft 3, Rev. 4 (2/22/74); or ANSI N45.2.12, Draft 4, Rev. 2 (1/1/76) as supplemented by regulatory position 4 of Regulatory Guide 1.33-Rev. 2 (2/78)."

Any alternatives or exceptions should be identified with sufficient supporting detail to allow review and NRC acceptance.

R421.19 CPSES will commit to comply with the regulatory positions in the following Regulatory Guides and ANSI standard: 1.28 (6/7/72); 1.30 (8/11/72); 1.33-Rev. 1; 1.37 (3/16/73); 1.38 (10/76); 1.39-Rev. 2; 1.58 (8/73); 1.64-Rev. 2; 1.74 (2/74); 1.88-Rev. 2; 1.116-Rev. 0-R; 1.123-Rev. 1; ANSI N45.2.12, Draft 4, Rev. 2 (1/1/76) as supplemented by regulatory postion 4 of Regulatory Guide 1.33-Rev. 2 (2/78).

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CPSES recognizes Regulatory Guide 1.8 Rev. 1-R and is working to meet the requirements of this document. The CPSES Chemistry and Health Physics Engineer, who serves as the Radiation Protection Manager, was assigned to this position in September, 1974 and met all of the existing requirements for this position at that time, except for the experience requirements. Our intention was, and still is, to utilize the TUSI Corporate Health Physicist in a supportive role, as allowed by Regulatory Guide 8.8-July 1973, until such time as the Chemistry and Health Physics Engineer meets all of the applicable requirements. The TUSI Corporate Health Physicist meets the requirements of Regulatory Guide 1.8 Rev. 1-R.

It is stated in the title and throughout Regulatory Guide 1.94-Rev. 1 that this Regulatory Guide is intended for use during the construction phase of nuclear power plants. It is not the intention of CPSES to use this Regulatory Guide during the operational phase unless a specific need can be defined. Table 17.2-2 has been revised to reflect this response.

- Q421.20 Describe how CPSES will use the Regulatory Guides and ANSI N45.2.12 listed in Table 17.2-2 to assure that the requirements contained in these documents will be properly implemented.
- R421.20 The Quality Assurance Plan is based upon Quality Assurance Standards and NRC Regulatory Guides which includes those listed in Table 17.2-2.

Therefore, through the QA Plan, implementation of the requirements in these referenced documents is assured.

- Q421.21 Describe provisions which assure that appropriate Appendix B requirements will be applied to the preoperational test program.
- R421.21 The CPSES Startup Program Plan has been developed to describe the administrative organization, methods and procedures to be used by TUGCO to implement, control and document a test program, including preoperational testing. The appropriate Appendix B requirements have been incorporated into this program.

- Q421.22 Describe in more detail the authority and responsibility of the QA Manager in regard to development of the TUGCO QA program and procedures.
- R421.22 The Manager, Quality Assurance is responsible for reviewing the CPSES Operations Administrative Control and Quality Assurance Plan and recommendir., approval to the Executive Vice President and General Manager. Implementing procedures which supplement the CPSES QA Plan are developed and reviewed on Site and the QA Manager is not in the review process for on-site procedures. These are developed, reviewed and approved on site with final approval being by the General Superintendent.

- Q421.23 Describe those provisions for notifying NRC of: (a) programmatic changes (except for those that are editorial in nature) to the QA program prior to implementation of these changes and (b) organizational changes within 30 days after announcement.
- R421.23 Procedures will be developed for reporting information to the NRC including information pertaining to changes in the QA Program as defined in the FSAR, except changes of an editorial nature, prior to implementation of these changes, and information pertaining to rganizational changes which affect safety-related asperts of plant operations within 30 days after these changes are in plemented.

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- Q421.24 Clarify whether the design controls described in 17.2.3 will also apply to new design activities, if such should occur during the operation phase.
- R421.24 Design controls described in 17.2.3 apply to new design activities, if such should occur during the operation phase.

- Q421.25 Clarify whether the documented review and approval of procurement documents are accomplished prior to release.
- R421.25 The GA Plan requires that Purchase documents shall be reviewed to assure that documents transmitted to the prospective suppliers are complete and contain applicable requirements. Such reviews shall be performed and documented prior to release of the documents for bid or contract award.

- Q421.26 Describe provisions which assure that changes and revisions to procurement documents are subject to at least the same review and approval process as the original document.
- R421.26 Changes to purchase documents shall be subject to the same degree of control as that utilized in the preparation of the original documents. This is required by the QA Plan.

- Q421.27 Describe provisions which assure that procurement documents for spare of replacement parts of safety-related structures, systems, and components are subject to controls at least equivalent to those used for the original equipment.
- R421.27 Refer to response to Question 421.26. Also the QA Plan allows items which have been ordered under existing purchase documents (which would include spare parts) to be reordered using that document providing it is verifie! as still reflecting current requirements. If changes to the documents are required, then the provisions of the response to 421.26 above apply. Details on Spare Parts will be covered in procedures for purchasing and warehousing.

- Q421.28 Describe those provisions for assuring that the QA organization is made aware of quality-related procedures, including changes, and that they properly become familiar with these documents such that they can effectively carry out their responsibilities.
- R421.28 The Quality Assurance Supervisor shall review all station procedures including changes to verify compliance with the requirements of the CPSES Operations Administrative Control and Quality Assurance Plan.

The QA Supervisor through communication with his personnel will ensure that they are properly familiar with the proper documents and can effectively carry out their responsibilities.

Procedures for review activities by QA personnel ensure that the reviewers are knowledgable in the areas they are reviewing.

- Q421.29 Describe provisions whereby the evaluation of suppliers includes the supplier's capability to comply with the elements of 10 CFR Part 50, Appendix B that are applicable to the type of material, equipment, or service being procured.
- R421.29 The evaluation of suppliers and supplier's capability to comply with the applicable portions or 10CFR50 Appendix B is covered by procedures developed and ord by the Corporate QA offices under responsibility of the QA Manager.

- Q421.30 Describe provisions which assure that when surveillance of suppliers is performed, procedures provide for:
  - a. Instructions that specify the characteristics or processes to be witnessed, inspected or verified, and accepted; the method of surveillance and the extent of documentation required; and those responsible for implementing these instructions.
  - b. Surveillance on those items where verification or procurement requirements cannot be determined upon receipt.
- R421.30 Surveillance of suppliers will be performed in accordance with established Corporate QA procedures which ensure the above items are met.

- Q421.31 Describe provisions which assure that the results of supplier evaluations are documented and filed.
- R421.31 The QA Plan requires that reporting of activities to verify conformance with requirements cf procurement documents be provided. These measures include reporting of source surveillance and inspections.

These documented records will be filed by procedure under the Corporate QA Program.

- Q421.32 Describe provisions which assure that the supplier furnishes the following records as a minimum to the purchaser:
  - a. Documentation that identifies the purchased material or equipment and the specific procurement requirements (e.g., codes, standards, and specifications) met by the items.
  - b. Documentation that identifies any procurement requirements which have not been met together with a description of those nonconformances dispositioned "accept as is" or "repair".
- R421.32 These requirements will be covered in procedures to be developed later and placed in the CPSES Purchasing Manual.

Q421.33 Describe provisions which assure that spare or replacement parts of safety-related structures, systems, and components are subject to controls at least equivalent to those used for the original equipment.

R421.33 Refer to response on Question 421.27 and Question 421.26.

- Q421.34 Clarify whether there will be recorded evidence of verification in the performance of special processes.
- R421.34 Recorded evidence (records) of special processes will be filed, maintained and available for verification as required by the QA Plan.

- Q421.35 Describe the criteria for determining when inspection hold points are required, including their insertion in procurement documents and plant inspection procedures.
- R421.35 As required by the QA Plan, the Maintenance Engineer shall be responsible for identifying and assigning hold points, where appropriate, within the work procedure sequence to permit witnessing by an inspector.

Purchase documents are also required to identify hold points.

- Q421.36 Describe the criteria for determining the accuracy requirements of measuring and test equipment used for inspections and tests.
- R421.36 The criteria for the accuracy requirements of measuring and test equipment is based on ensuring the accuracy of field installed instrumentation. Procedures will be written to generally ensure, depending on the state of the art, a 4 to 1 accuracy ratio for pneumatic and physical measuring devices and a 10 to 1 accuracy ratio for electrical and electronic measuring devices.

- Q421.37 Describe provisions which assure that inspection procedures or instructions are used with necessary drawings and specifications when performing inspection operations.
- R421.37 The QA Plan requires that items received on site shall be identified that they are traceable to the appropriate quality verification records such as drawings and specifications, as required by applicable codes and standards. Inspections of work performed on site also provides that inspection procedures, instructions, drawings, etc. be used in performing work functions.

- Q421.38 Clarify whether provisions are established that identify mandatory inspection hold points for witness by an inspector during all aspects of the operations phase (i.e., maintenance, in-service inspection, etc.).
- R421.38 The QA Plan specifies provisions for identifying mandatory inspection hold points for witnessing by an inspector. This requires provisions for all aspects of the operations phase since the QA Plan specifies quality assurance requirements and controls to be implemented throughout the testing and operations phases of the CPSES for all maintenance or construction-like activities such as certain machining operations, inservice inspections, etc.

- Q421.39 Describe provisions which assure that bypassing of required inspections, tests, and other critical operations is procedurally controlled under the cognizance of the QA organization.
- R421.39 All procedures, including revisions, are reviewed by the QA Supervisor. Bypassing of required inspections, tests or other critical operations will be addressed through temporary changes to procedures and since the QA organization is involved in this review cycle, they will be cognizant of such changes.

- Q421-40 Clarify whether significant conditions adverse to quality, the cause of the conditions, and the corrective action taken are reported to cognizant levels of both "offsite" or "onsite" management, including QA for review and assessment.
- R421.40 Significant conditions adverse to quality, the cause of the conditions, and the corrective action taken are reported "onsite" to the General Superintendent through deficiency reports, reviews and nonconformance reports. The Quality Assurance Supervisor is cognizant of all of these reports by procedure and is involved in the review and assessment of these items with the General Superintendent.

Offsite management is aware of corrective actions taken or planned through the Operations Review Committee which reviews these reports.

- Q421.41 Describe provisions which assure that audits include an objective evaluation of work areas, activities, and processes; and a review of documents and records, quality-related practices, procedures, and instructions for effective implementation.
- R421.41 The QA Plan requires that the audit program provide that audits are performed in accordance with checklists which identify the work areas, activities, processes, items and documentation that are to be audited.

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- Q421.42 Describe provisions which assure that audits are performed by CPSES's principal contractors to verify and evaluate their suppliers' QA programs, procedures, and activities.
- R421.42 The QA Plan requires that organizations performing activities affecting quality, including contractors, consultants, and suppliers of quality related items or services, are subjected to auditing.

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4. Knowledge of quality assurance requirements for nuclear plants.

5. Registered Professional Engineer.

17.2.1.6.2 Quality Assurance Supervisor

The following qualification requirements have been established for the Quality Assurance Supervisor:

Six years experience in the field of quality assurance, preferably at an operating nuclear plant, or operations supervisory experience. At least one year of this six years experience shall be nuclear power plant experience in the overall implementation of the quality assurance program. A minimum of one year of this six years experience shall be related technical or academic training. A maximum of four years of this six years experience may be fulfilled by related technical or academic training.

17.2.2 QUALITY ASSURANCE PROGRAM

The TUGCO/TUSI Corporate Quality Assurance Program Manual establishes general policies and requirements for the quality assurance program to be implemented for all TUGCO nuclear power plants. The Corporate Quality assurance Program Manual requires that quality assurance plans be developed for each nuclear power plant prescribing the specific measures to assure the quality of safety-related activities, structures, systems, and components of that facility. One quality assurance plan establishes the quality assurance requirements and

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controls for the design and construction phase, and another plan establishes the quality assurance requirements and controls for the operations phase. The quality assurance requirements and controls implemented during design and construction of the CPSES are established by the CPSES Quality Assurance Plan (Design and Construction), which is described in Section 17.1.

The CPSES Operations Administrative Control and Quality Assurance Plan, approved by the Executive Vice-President and General Manager, establishes the quality assurance requirements and controls to be implemented throughout the testing and operation phases of CPSES. This plan defines responsibilities and authority, and prescribes measures for the control and accomplishment of activities affecting the quality and operation of safety-related structures, systems, and components of CPSES. The structures, systems, and components covered by the operations quality assurance program are listed in Table 17A-1. The provisions of the plan apply to all activities, such as operating, maintaining, repairing, modifying, and refueling which affect the safety-related functions of those structures, systems, and components.

The Policy Statement of the CPSES Operations Administrative Control and Quality Assurance Plan establishes as its objective the achievement of the maximum possible degree of safety and reliability in the operation of CPSES. This policy Statement, signed by the Executive Vice-President and General Manager, further establishes that compliance with the requirements of the Operations Administrative Control and Quality Assurance Plan are mandatory and shall be enforced.

The operations quality assurance requirements and controls, as established by the CPSES Operations Administrative Control and Quality Assurance Plan, comply with the requirements of 10 CFR Part 50, Appendix B. Table 17.2-1 provides a matrix showing those sections of the plan which satisfy the requirements of each criterion of 10 CFR Part 50, Appendix B. The operations quality assurance requirements and controls

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## TABLE 17.2-2 (Sheet 1 of 2)

## REGULATORY GUIDES AND INDUSTRY STANDARDS

The CPSES operations quality assurance program, as established by the CPSES Operations Administrative Control and Quality Assurance Plan, is consistent with the applicable guidance of the NRC Regulatory Guides and industry standards listed below.

Regula	tory	
Guid	le Date	Title
1.2	8 6/72	Quality Assurance Requirements (Design and
		Construction) (endorses ANSI N45.2-1971)
1.3	0 8/72	Quality Assurance Requirements for
		Installation, Inspection, and Testing of
		Instrumentation and Electric Equipment
		(endorses ANSI N45.2.4-1972)
1.3	3 2/77	Quality Assurance Program Requirements
		(Operations) endorses ANSI N18.7-1976)
1.3	7 3/73	Quality Assurance Requirements for Cleaning of
		Fluid Systems and Associated Components of
		Water-Cooled Nuclear Power Plants (endorses
		ANSI N45.2.1-1973)
1.3	8 10/76	Quality Assurance Requirements for Packaging,
		Shipping, Receiving, Storage, and Handling of
		Items for Water-Cooled Nuclear Power Plants
		(endorses ANSI N45.2.2-1972)
1.3	9/77	Housekeeping Requirements for watercooled
		Nuclear Power Plants (endorses ANSI
.19		N45.2.3-1973) AMENDMENT 4 JANUARY 31, 1979

Q421.

## TABLE 17.2-2 (Sheet 2 of 2)

R	legulatory		양년 야영 양동 의 영영 관람을 알 때 가지 않는 것 같아. 전 전쟁 귀엽
	Guide	Date	Title
	1.58	8/73	Qualification of Nuclear Power Plant Inspection. Examination, and Testing Personnel (endorses ANSI N45.2.6-1973)
	1.64	6/76	Quality Assurance Requirements for Design of Nuclear Power Plants (endorses ANSI N45.2.11-1974)
Q421.19	1.74	2/74	Quality Assurance Terms and Definitions (endorses ANSI N45.2.10-1973)
	1.88	10/76	Collection, Storage and Maintenance of Nuclear Power Plant Quality Assurance Records (endorses ANSI N45.2.9-1974)
	1.116	6/76	Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems (endorses ANSI N45.2.8-1975)
1.123		10/76	Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants (endorses ANSI N45.2.13-1976)
ANSI			
Standard			Title
N45.2.12			Requirements for Auditing of Quality Assurance Programs for Nuclear Power Plants (Draft 4, Rev. 2 - January, 1976)-

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