SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION OPERATIONS QUALITY ASSURANCE PLAN TABLE OF CONTENTS	NUMBER Chapter TABLE OF CONTENT	REV. NO. 14
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1.0 PURPOSE

1.1 The purpose of this chapter is to describe the organizational structure as related to quality assurance and to establish the responsibilities of organizations for the South Texas Project Electric Generating Station (STP).

2.0 SCOPE

2.1 STP Nuclear Operating Company (STPNOC), as licensee, has the Quality responsibility for design, engineering, procurement, fabrication, modification, maintenance, repair, in-service inspection, refueling, testing, and operation of the STP.

2.2 The requirements of this chapter are applicable for structures, systems, and components designated as "Full", "Targeted", or "Basic".

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 None

5.0 RESPONSIBILITIES

5.1 The STPNOC is comprised of Generation, Engineering & Technical Services, Business Services, and Safety and Quality Concerns Program. The senior management of these groups report to the President and Chief Executive Officer.

5.1.1 The President and Chief Executive Officer has overall responsibility for the implementation of the Operations Quality Assurance Program and approving the Operations Quality Assurance Plan (OQAP) and revisions thereto.

5.1.2 The Vice President, Generation is responsible for implementing quality program requirements applicable to staffing STP with qualified personnel and acquiring and coordinating the assistance of internal and external organizations for the following functions including: plant management, generation support, outage and installation, plant projects & programs, and metrology & radiological laboratories. The senior management of these functions report to the Vice President, Generation.

5.1.2.1 The Plant Manager has prime responsibility for the safe operations of the units. The plant staff, under the direction of the Plant Management, develop detailed procedures and instructions for testing, operation, modification, and maintenance of the STP.

5.1.3 The Vice President, Engineering & Technical Services (E&TS) is responsible for implementing quality program requirements applicable to the following functions: design engineering and control, systems engineering, fuels & analysis, engineering support, quality & licensing, operating experience, risk management & industry relations, and training functions. The senior management of these functions report to the Vice President, E&TS.

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The Vice President, E&TS is responsible for the development, maintenance, and independent verification of implementation of the STP Quality Program; making periodic reports on its effectiveness; review of selected documents which control activities within its scope; and preparation, control, and approval of the OQAP and revisions thereto.

The Vice President, E&TS is responsible for implementing quality program requirements applicable to corrective action, licensing, and independent oversight activities, and administration of the Nuclear Safety Review Board (NSRB).

The Vice President, E&TS has the authority to identify, initiate, recommend, or provide solutions to quality-related problems and verify the implementation and effectiveness of the solutions. This position has the independence to conduct Quality activities without undue pressure of cost or schedule.

5.1.3.1 The NSRB administratively reports to the senior management of the Risk Management & Industry Relations function. The NSRB functionally reports directly to and advises the President and Chief Executive Officer.

5.1.3.2 The senior management of the Quality & Licensing function is responsible for independent oversight activities, including audits, independent assessments, evaluations, surveillances, performance monitoring, inspections and independent oversight of NDE examinations.

5.1.3.3 The senior management of the Quality & Licensing function, at his discretion, reports directly to the President and Chief Executive Officer. During performance of independent oversight of activities relating to Licensing, the management of the Plant Support function, at his discretion, may report to the President and Chief Executive Officer.

5.1.3.4 The senior management of the Quality & Licensing function has the authority to stop work for cause. This authority has been granted by the President and Chief Executive Officer. The Quality organization, including the inspection staff, is based upon the anticipated Quality involvement in operations, modification, and maintenance activities.

5.1.3.5 The senior management of the Risk Management & Industry Relations function is responsible for activities related to the Comprehensive Risk Management Program, including oversight of Probabilistic Safety Assessment activities. The senior management of the Risk Management & Industry Relations function also serves as the Graded Quality Assurance Expert Panel chairperson.

5.1.4 The Vice President, Business Services is responsible for implementing quality program requirements applicable to the following functions: human resources, planning & controls, information systems, plant protection, records management services and administration, and purchasing and material management for STP. The senior management of these functions report to the Vice President, Business Services.

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5.1.5 The Manager, Safety Quality Concerns Program is responsible for implementing quality program requirements applicable to this function.

6.0 REQUIREMENTS

6.1 The fundamental responsibility for implementing quality program requirements is assigned to all personnel performing activities affecting the safe and reliable operation of the STP. These personnel and their management are responsible for implementing through approved procedures and other work documents, the quality assurance program controls described in the OQAP.

6.2 Attachment 1 depicts the organizational structure of the STP as it relates to the implementation of the Operations Quality Assurance Plan. The structure reflects the reporting alignment for key functions. Line organizational details and responsibilities are further described in STP UFSAR Chapter 13.1.

7.0 DOCUMENTATION

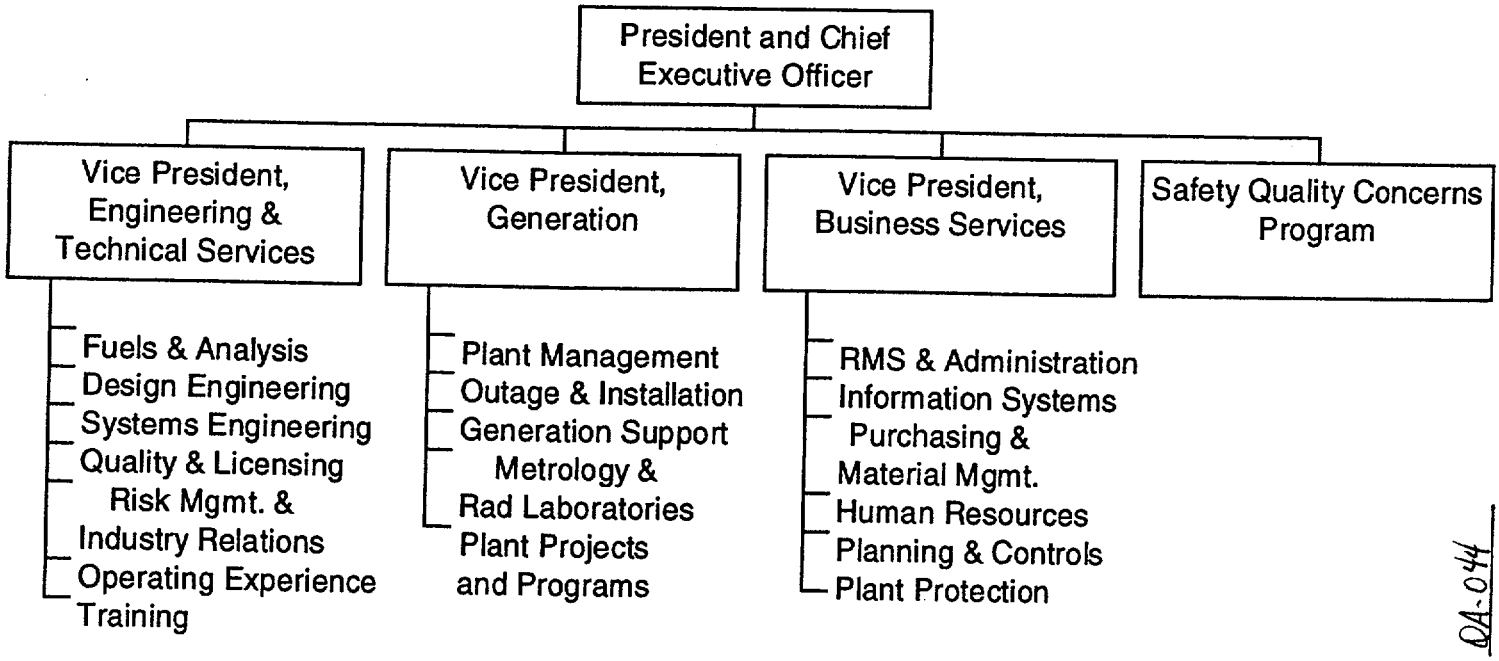
7.1 None

8.0 ATTACHMENTS

8.1 Attachment 1 - STPNOC Organization

ATTACHMENT 1

STPNOC ORGANIZATION



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1.0 PURPOSE

1.1 The purpose of this chapter is to define criteria and establish administrative controls for implementation of the Quality Assurance (QA) Program for the South Texas Project Electric Generating Station (STP).

2.0 SCOPE

2.1 The QA Program is implemented and controlled in accordance with the Operations Quality Assurance Plan (OQAP) and is applicable to structures, systems, and components to an extent consistent with their importance to safety, and complies with the requirements of 10CFR50, Appendix B and other program commitments as appropriate.

2.2 The QA Program will also extend, as applicable and/or determined by STP management, to programs including 10CFR71, Subpart H (except design and fabrication of NRC certified radioactive waste shipping casks), ASME Boiler and Pressure Vessel Code, Sections III and XI; and to quality-related areas as defined herein including the Fire Protection Program, Emergency Plan, Radiological Environmental Monitoring Program, Radwaste Management Program, Computer Program Verification and Control, Seismic and Environmental Equipment Qualification Programs, Radiation Protection Program, and Station Blackout (SBO) systems and equipment.

3.0 DEFINITIONS

3.1 Comprehensive Risk Management - A process by which the change in risk to station personnel, the public's health and safety are evaluated as a result of changes in commitments, processes, activities, and human and equipment performance.

3.2 Graded Quality Assurance - The process by which risk-based methodology [i.e., Probabilistic Safety Assessment (PSA)] and deterministic and performance-based information analyses are combined to establish appropriate levels of programmatic controls for SSCs and appropriate levels of first line and independent oversight needed to provide the necessary assurance that SSCs will operate safely.

3.3 Full program controls - The highest levels of controls and oversight, as prescribed in Table I to this chapter and throughout individual OQAP chapters.

3.4 Basic program controls - Good business practice/lower level of control and oversight, as prescribed in Table I to this chapter and throughout individual OQAP chapters.

3.5 Targeted program controls - Selected program controls applied to certain non-safety and/or quality related structures, systems, and components (SSCs) and site programs.

4.0 REFERENCES

4.1 10CFR50, Appendix B

4.2 10CFR71, Subpart H

4.3 ASME B&PV Code

4.4 OQAP Chapter 14.0, Records Control

4.5 10CFR50.63, Loss of All Alternating Current Power

4.6 10CFR50.54(a)

5.0 REQUIREMENTS

5.1 General Program Requirements

5.1.1 The OQAP shall be prepared and maintained to prescribe the STP QA Program. The OQAP reflects the quality program policies to be implemented. The OQAP describes the organization and responsibilities for attainment of quality objectives and verification of conformance to established requirements. The QA Program shall be in effect throughout the operating life of the STP.

5.1.2 The President and Chief Executive Officer has overall responsibility for quality assurance. The Vice President, Engineering & Technical Services (E&TS), is responsible for the development and maintenance of the OQAP.

5.1.3 The operations phase of the STP includes design, procurement, fabrication, repair, testing, operation, maintenance, refueling, inspection, independent oversight, modification, and other activities as discussed Table I to this chapter and throughout the OQAP. STP and its vendors are required, as appropriate, to comply with the criteria established by 10CFR50, Section 50.55a; 10CFR50, Appendix A, General Design Criterion (GDC) 1; 10CFR50, Appendix B, and 10CFR71, Sub-Part H (except design and fabrication of NRC certified radioactive waste shipping casks).

STP will implement, as specified, the Regulatory Guides (RG) and implementing American National Standards Institute (ANSI) standards contained in Table I of this chapter.

5.1.4 STP shall maintain the OQAP as an effective and meaningful document to provide programmatic direction for the station. Changes to the OQAP shall be accomplished as prescribed by 10CFR50.54(a). When changes are made in the OQAP to the organizational elements only, appropriate notification will be made to the NRC within 30 days of implementation.

5.2 Organizational Independence

5.2.1 The reporting arrangement utilized by the Quality organization ensures that those personnel performing independent oversight have the organizational freedom to:

5.2.1.1 Identify quality problems.

5.2.1.2 Initiate, recommend, or provide solutions.

5.2.1.3 Verify implementation of solutions.

5.2.2 Personnel verifying compliance with quality requirements do not have direct responsibility for the performance of or directly supervise the activity being verified.

5.3 Graded Quality Assurance

5.3.1 Graded Quality Assurance (GQA) is fundamental to the STP QA Program. It is described in more detail in the implementing procedure for the STP Comprehensive Risk Management (CRM) Program.

5.3.2 GQA is a process by which risk-based methodology [i.e., Probabilistic Safety Assessment (PSA)], deterministic insights, and performance-based information are combined and analyzed to determine what levels of programmatic controls are needed for structures, systems, and components (SSCs) and what levels of first line and independent oversight are needed to provide assurance that items will operate safely and activities are accomplished as prescribed.

5.3.3 Selected systems are evaluated, at the component level, by a cross-discipline Expert Panel comprised of high level station management. Initial evaluations are performed by the Working Group.

5.3.4 These recommendations are developed in consideration of systems' missions, components' contribution to core damage frequency and risk achievement, components' critical attributes (needed to support system mission), performance, regulatory/QA requirements, and other deterministic considerations as prescribed in the Comprehensive Risk Management procedures.

5.3.5 Program control recommendations are developed by the Working Group and ultimately approved by the Expert Panel and forwarded to the site for implementation. Controls are implemented in three graded applications (i.e., "Full", "Basic", and "Targeted").

5.3.6 "Full" program controls are applied to safety-related SSCs categorized as being "high" safety significant/risk important. These "Full" levels of controls and oversight are designed to provide a high degree of confidence that SSCs perform safely and activities are performed as expected. Table I to the OQAP chapter prescribes the program commitments applicable to "Full" program activities.

5.3.7 "Basic" program controls are applied to safety- related SSCs categorized as "medium" or "low" safety significant/risk important. These are lower levels of control and oversight, designed to maintain/preserve those identified critical attributes of SSCs needed to support systems' critical functions. These controls are intended to reflect economical and efficient business practices. Table I to the OQAP chapter prescribes the program commitments applicable to "Basic" program activities.

5.3.8 "Targeted" program controls are applied to non-safety related SSCs, for which 10CFR50, Appendix B is not applicable, categorized as "high" or "medium" safety significant/risk importance. Specific program controls consistent with applicable portions of the "full" and "basic" program controls are applied to those items in a selected manner, "targeted" at those characteristics or critical attributes that render the SSC significant or important.

5.3.9 Components that are highly reliable, yet whose failure would result in a significant increase in risk, will receive Full program coverage, or will be evaluated based on their risk importance to ensure that Full program controls are applied to their critical attributes.

5.3.10 SSCs governed by the OQAP shall retain "Full" program coverage until such time as prescribed risk-informed, performance-based analyses are completed and approved, and they are placed into other program categories (i.e., "Targeted" or "Basic") as appropriate.

5.3.11 A vital element of the GQA program is the "feedback" loop. On a periodic basis, and as prescribed in the Comprehensive Risk Management procedure, the GQA Working Group and Expert Panel shall review any changes to the PSA information and performance/operating experience that could result in recategorization of an SSC. These reviews are also used to assess the effectiveness and appropriateness of in-place quality program controls. Adjustments shall be made as determined necessary. Those components for which an increase in failure rates results in a significant increase in risk will have Full program controls established.

5.4 Delegation of QA Functions

5.4.1 The OQAP may be executed in whole or part by subcontract personnel. However, STP will retain responsibility for the total quality assurance program, and Quality organization personnel will perform appropriate oversight activities of subcontracted activities.

5.5 Identification of Safety Significant Structures, Systems, and Components

5.5.1 The program described herein is applied to activities affecting the safety functions of those structures, systems, and components which prevent, or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. The structures, systems, and components controlled are listed in UFSAR Section 3.2, along with their associated fire protection systems. UFSAR Section 3.2 also identifies those structures, systems, and components which may not represent a safety significant/risk important concern but to which the STP OQAP is applied.

5.5.2 The fire protection QA Program is part of the overall STP Operations QA Program. Fire protection QA Program criteria are implemented as part of the Operations QA Program.

5.5.3 Expendable or consumable items necessary for the functional performance of structures, systems, and components are subjected to quality assurance requirements as specified in written procedures. These procedures include provisions for review and control in accordance with industry standards and specifications.

5.6 QA Program Documents

5.6.1 The QA Program shall be implemented with documented instructions, procedures, and drawings which include appropriate quantitative and qualitative acceptance criteria for determining that prescribed activities have been satisfactorily accomplished. Procedures shall include the control of the sequence of required inspections, tests, and other operations when important to quality. To change these controls, the individual procedure must be changed and shall require the same level of review and approval given to the original procedure. Such instructions, procedures, and drawings are reviewed and approved for compliance with requirements appropriate to their safety significance by individuals qualified to do so.

5.7 Personnel Indoctrination and Training

5.7.1 General indoctrination and training programs shall be provided for site personnel to assure that they are knowledgeable regarding quality programs and requirements. The training requirements for STP personnel are described in UFSAR Section 13.2. Personnel performing complex, unusual, or potentially hazardous work shall be instructed in special indoctrination or briefing sessions. Emphasis shall be on special requirements for safety of personnel, radiation control and protection, unique features of equipment and systems, operating constraints, and control requirements in effect during performance of work. Where required by codes and standards, personnel are trained, qualified, and certified according to written procedures in the principles and techniques of performing specific activities.

5.8 Policies and Goals

5.8.1 STP policy is to assure that the design, procurement, construction, testing, and operation of the STP are in conformance with specifications, procedures, codes, commitments and Nuclear Regulatory Commission (NRC) regulations. The responsibility of each organization supporting the STP is to ensure that the requirements stated in this QA Program are incorporated into procedures. Adherence to those procedures is mandatory for all STP organizations and contractors or vendors providing items or services covered by the QA Program.

5.8.2 The OQAP identifies activities and establishes requirements for procedures which identify, report, and verify the resolution of quality problems. The implementing procedures call for the resolution of quality problems at the lowest possible authorized level. However, if a dispute is encountered in the resolution of a quality problem which cannot be resolved at lower levels, the Vice President, Engineering & Technical Services or senior management of the Quality & Licensing function shall present the problem to the President and Chief Executive Officer for resolution.

5.9 Control of Activities

5.9.1 The OQAP requires Quality department review and/or approval of procedures which control selected activities. These procedures shall require the use of the proper equipment, completion of prerequisites for starting an activity, and suitable environment for performing the activity. Procedures will comply with the appropriate standards.

5.9.2 STP personnel attend planning, scheduling, and status meetings as necessary to assure adequate quality coverage and program application exists.

5.10 Management Review

5.10.1 The implementation of both line and OQAP requirements shall be verified through independent oversight activities. The Quality organization shall conduct independent oversight activities of the operating plant and of the interfacing organizations' activities.

5.10.2 Independent oversight of implementation of the OQAP is conducted under the cognizance of the Nuclear Safety Review Board and results are transmitted to appropriate line and senior management, including the President and Chief Executive Officer for review and/or action.

5.10.3 STP may use the services of architect-engineer firms, Nuclear Steam Supply System (NSSS) suppliers, fuel fabricators, constructors, and others which provide or augment STP efforts during operations. As applicable, the QA programs of such contractors or consultants shall be subject to review, evaluation, and acceptance by the Quality organization before initiation of activities affected by the program.

5.11 Computer Code Programs

5.11.1 The development, maintenance, and use of computer code programs will be controlled. Prior to use of a computer code program, the appropriateness of the program shall be verified. In addition, all such programs shall be appropriately certified for use.

6.0 DOCUMENTATION

6.1 Procedures which are generated as required by this chapter shall identify the records which are required to implement and document those activities. The records shall be controlled in accordance with Reference 4.4.

7.0 ATTACHMENTS

7.1 Table I - Program Commitments

TABLE I

PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
R.G. 1.8, rev. 1 (9/75)	No exceptions taken.	No exceptions taken.
ANSI N18.1, 1971	4.2.2-The Operations Manager requirements regarding holding a Senior Reactor Operator license are met by the Unit Operations Managers.	Same as full.
R.G. 1.28, rev. 0 (6/72)	This R.G. is not applicable to operations phase activities.	Same as full.
ANSI 45.2, 1971	This standard is not applicable to operations phase activities.	Same as full.
R.G. 1.33, rev. 2 (2/78)	C.2 - the specific revisions of the listed standards to which STP is committed are in this table and are not necessarily the "latest" revision. C.4 – Chapter 15.0 of the STP OQAP describes the audit program at STP that meets the intent of R.G. 1.33, rev. 2, position C.4 regarding frequency of audits C.4.a.b.c – STP performs these audits in accordance with a nominal biennial frequency.	Same as full. Same as full. Same as full.
ANSI NI8.7 – 1976/ANS 3.2	3.4.2 – refer to R.G. 1.8 regarding Operations Manager holding a Senior Reactor Operator license. 4.5 – refer to R.G. 1.33 coverage regarding audit frequency. 5.2.6 (5th paragraph) – independent verification may be concurrent with (same time as) work performance.	Same as full. 3.4.2 refer to R.G. refer to R.G. 1.5.8 regarding use of personnel not qualified in accordance with ANSI N45.2.6. Same as full. Same as full.

TABLE I

PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI N18.7/ANS 3.2 (cont'd)	5.2.7 (1st paragraph) – STP will use current approved design bases as opposed to original design bases.	Same as full. 5.2.7 – STP will perform inspection as deemed necessary, based on the relative complexity of the work.
	5.2.7.1 (5th paragraph) – STP takes exception to use of the word "promptly" with regard to determining, evaluating and recording the causes of malfunctions. The STP Corrective Action Program includes the elements with regard to timeliness of action associated with causal analyses.	Same as full. 5.2.7.2 – refer to table coverage of ANSI N45.2.11, 1974. 5.2.13 (1st paragraph) – refer to table coverage of ANSI N45.2.13, 1976. 5.2.13.1 (1st paragraph) – refer to table coverage of ANSI N45.2, 1971. 5.2.13.4 (5th paragraph) – refer to table coverage of ANSI N45.2.2, 1972.
	5.2.15 (4th paragraph) – Chapter 8.0 of the OQAP describes the requirements for control and issuance of documents, which meets the intent of R.G. 1.33, rev. 2. The intent of the biennial review is accomplished by other controls that assure that procedures are appropriately reviewed and revised to incorporate information based on plant operations, design changes, regulatory requirements, industry experience and other conditions that may impact plant procedures.	Same as full.

TABLE I

PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
		5.2.17 (3rd paragraph) – STP may not implement the requirement for conduct of inspections in a manner similar to that associated with construction phase activities (i.e., regarding use of personnel not qualified to ANSI N45.2.6)
R.G. 1.38, rev. 2 (5/77)	No exceptions taken.	No exceptions taken.
ANSI N45.2.2, 1972	2.4 – Audit personnel are qualified in accordance with STP's commitment to R.G. 1.146/ANSI 45.2.23.	Same as full.
		2.4 – Offsite oversight of vendors of items in the Basic category will only be performed as deemed necessary.
R.G. 1.58, rev. 1 (9/80)	C.2 – STP is committed to ASNT-TC-1A, 1980. STP treats the recommendation ("should") of the 1980 edition as requirements ("shall").	Same as full.
ANSI N45.2.6, 1978		1.2 (1st paragraph) – with the exception of receipt inspection, personnel may perform inspections, examinations and tests provided they are experienced, task qualified journeymen, or supervisors, who did not perform or directly supervised the activity being inspected, examined or tested. These individuals shall also receive training to the applicable inspection procedure,

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TABLE I

PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
		processes, methods in accordance with a Quality approved training program; and Quality will provide periodic oversight of the inspection activities.
	1.2 (3rd paragraph) – refer to table coverage of R.G. 1.28.	Same as full.
	1.4.4 – refer to table coverage of R.G. 1.74/ANSI N45.2.10.	Same as full.
R.G. 1.64, rev. 2 (6/76)	No exceptions taken.	C.2 – STP may implement the requirement regarding design verification as prescribed in ANSI N45.2.11, 1974, 6.1, second paragraph/second sentence, as opposed to R.G. wording.
ASNI N45.2.11, 1974	No exceptions taken.	3.2 (1st paragraph) – STP will require personnel to consider items 1 through 28, but a documented checklist may not be required. 6.3 – Verification and checking of design may be accomplished through supervisory or management review/approval as provided for in 6.1 Personnel will be required to consider items 1 through 19, but a documented checklist may not be required.
R.G. 1.74 (2/74)	Not applicable to STP. STP uses ANSI/ASME NQA-1-1983 for Quality Assurance Terms and Definitions.	Same as full.

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TABLE I

PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI N45.2.10, 1973	Same as R.G. 1.74 above.	Same as full.
R.G. 1.123, rev. 1 (7/77)	C.6.b.and e. – The referenced section of ANSI N45.2.13 will be implemented as written.	
ANSI N45.2.13, 1976	Various sections refer to ANSI N45.2. Refer to table coverage of R.G. 1.28 and ANSI N45.2. 5.3 and 5.4 – Provision are established for, in special cases and with management approval, completion of these activities after award of contract. 9.0 – This section will be implemented based on the scope, complexity and safety significance of the items being procured.	Same as full. Same as full. Same as full. 10.3.1 – This section will only be implemented as deemed necessary. 12 – This section will only be implemented as deemed necessary for audits of suppliers.
R.G. 1.144, rev. 1 (9/80)	C.1 – refer to table coverage of R.G. 1.28 and ANSI N45.2. C.3a(1) – refer to table coverage of R.G. 1.33 regarding audit frequency.	Same as full. Same as full. c.3.b STP will audit vendors only as deemed necessary. STP will perform biennial evaluations.

TABLE I

PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI N45.2.12, 1977	No exceptions taken.	STP will audit vendors only as deemed necessary. These audits will be conducted as unplanned/unscheduled audits.
R.G. 1.146, rev. 0 (8/80)	C.1 – refer to table coverage of R.G. 1.28 and ANSI N45.2. Refer to table coverage of R.G. 1.74 and ANSI N45.2.10	Same as full.
ANSI N45.2.23, 1978	1.2 – refer to table coverage of R.G. 1.28. 1.4 – refer to table coverage of R.G. 1.74. 2.21 – refer to table coverage of R.G. 1.28. 2.3.3.1 – refer to table coverage of R.G 1.28.	Same as full. Same as full. Same as full. Same as full.

For Regulatory Guides addressed by the table, and unless specific clarification or exception is indicated, STP will implement the Regulatory Guide positions, including recommendations.

For ANSI Standards addressed by this table, and unless specific clarification or exception is indicated, STP will treat ANSI requirements (i.e., "shall") as such – except in instances where the standard itself provides options or requires a graded approach – this notwithstanding the general applicability statements found in many standards (i.e., section 1.0)

1.0 PURPOSE

1.1 The purpose of this chapter is to prescribe the requirements and the responsibilities for inspection.

2.0 SCOPE

2.1 This chapter is applicable to inspection activities associated with systems, structures and components at the South Texas Project Electric Generating Station (STP).

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 OQAP Chapter 4.0, Qualification, Training and Certification of Personnel

4.2 OQAP Chapter 12.0, Instrument and Calibration Control

4.3 OQAP Chapter 14.0, Records Control

4.4 OQAP Chapter 2.0, Table I

5.0 REQUIREMENTS

5.1 Inspection

5.1.1 Inspections shall be performed in accordance with written and approved procedures. The inspection criteria established for performing inspections and the detail of the inspection process shall be determined based on the complexity of the activity and possible safety impact to the plant. Qualification of individuals performing inspections shall be in accordance with Reference 4.1 and 4.4. These individuals shall be other than those who performed or directly supervised the activity being inspected. Inspection requirements may be included as a part of the document controlling the activity, or a separate inspection procedure prepared to specify, as appropriate, the inspection performance requirements as noted below.

5.1.1.1 Identification of characteristics and activities to be inspected

5.1.1.2 Acceptance and rejection criteria

5.1.1.3 Inspection process utilized

5.1.1.4 Identification of procedures, drawings, specifications, and revisions utilized

5.1.1.5 Specification of the necessary measuring and test equipment including accuracy and calibration due dates as applicable

5.1.2 For "Full" program implementation, when inspections associated with normal operations of the plant are performed by individuals other than those who performed or directly supervised the work, but are within the same group, the following additional controls apply:

5.1.2.1 The quality of work can be demonstrated through a functional test when the activity involves breaching a pressure-retaining item; and

5.1.2.2 The qualification criteria for inspection personnel are reviewed and found acceptable by the Quality organization prior to initiating the inspection.

5.1.3 For "Basic" program implementation, with the exception of receipt inspection, personnel may perform inspections, examinations and tests provided:

5.1.3.1 They are experienced, task qualified journeymen, or supervisors, who did not perform or directly supervise the activity being inspected, examined or tested, and

5.1.3.2 These individuals shall also receive training to the applicable inspection procedure, processes, methods in accordance with a Quality approved training program; and

5.1.3.3 Quality will provide periodic oversight of the inspection activities.

5.1.4 Examples of the activities subject to inspection include:

5.1.4.1 Special processes

5.1.4.2 Modifications

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5.1.4.3 Receipt of materials, parts and components

5.1.4.4 Maintenance

5.1.4.5 Packaging, shipping and handling of radioactive waste material

5.1.5 Process Monitoring

5.1.5.1 Process monitoring of work activities, equipment, and personnel shall be utilized as a control method when direct inspection of processed items is impossible or impracticable. Monitoring shall be performed to verify that activities are performed in accordance with documented instructions, procedures, drawings, and specifications.

5.1.6 Supporting Inspections

5.1.6.1 Both inspections and process monitoring shall be used when control of the activity is inadequate without both. The need for such monitoring shall be determined prior to initiation of the activity, if possible, or may be stipulated later if circumstances warrant.

5.1.7 Mandatory Inspections

5.1.7.1 Mandatory inspection holdpoints are established by the organization performing the work or Engineering & Technical Services personnel. Witnessing or inspection of hold points by Engineering & Technical Services shall be accomplished before work can proceed. Plant procedures and work instructions shall be reviewed by Engineering & Technical Services for concurrence with the established mandatory hold points.

5.1.7.2 Engineering & Technical Services also establishes notification points for the purpose of being informed of upcoming activities (e.g., prior to the start of a test) where a mandatory holdpoint may not be appropriate, but Engineering & Technical Services involvement may be desired.

5.1.8 Inspection results shall be reviewed and approved by qualified personnel to verify that the inspection requirements were satisfied.

5.1.9 Inspection activities shall be documented and as a minimum, shall identify the following:

5.1.9.1 Item inspected

5.1.9.2 Date of inspection

5.1.9.3 Inspector

5.1.9.4 Type of observation/inspection

5.1.9.5 Results and acceptability

5.1.9.6 Reference to information on action taken in connection with nonconformances

5.1.9.7 Test equipment used

5.1.10 Inspection requirements for modifications, repairs, and replacements shall be equivalent to the inspection requirements of the original design or approved alternatives.

5.1.11 Procedures shall be reviewed by personnel sufficiently knowledgeable in the requirements of the activity to ensure that the necessary hold points are designated.

5.1.12 Measuring and test equipment utilized as part of the inspection process shall be controlled by the requirements of Reference 4.2.

5.1.13 Acceptance

5.1.13.1 Procedures shall be established for processing, evaluation, and final acceptance of inspection data. The qualified inspector performing the inspection is responsible for the immediate evaluation and acceptability of inspection results. Designated individuals or groups are responsible for reviewing and evaluating inspection results including recording of data, computations, drawings, or specification interpretations.

5.2 Nondestructive Examination (NDE)

5.2.1 NDE shall be performed in accordance with procedures which address the applicable requirements of ASME, ASTM, or other appropriate codes and standards.

5.2.2 The applicable requirements of Section 5.1 shall apply to the performance, evaluation, and documentation of NDE results.

5.3 Inspection Status

5.3.1 The status of individual item inspections shall be identifiable through the use of stamps, tags, labels, routing cards or documentation traceable to the item.

6.0 DOCUMENTATION

6.1 Procedures which are generated as required by this chapter shall identify the records which are required to implement and document those activities. The records shall be controlled in accordance with Reference 4.3.

7.0 ATTACHMENTS

7.1 None