Nuclear Operating Company
South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

January 4, 2022
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File No.: G09.19
10 CFR 50.54(a)
STI: 35254798

Attention: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498 and STN 50-499
Submittal of Operations Quality Assurance Plan Changes QA-089, QA-091, and Revision 25

In accordance with 10 CFR 50.54(a), STP Nuclear Operating Company (STPNOC) submits the attached Revision 25 of the Operations Quality Assurance Plan (OQAP). This revision incorporates change notices (QA-089 and QA-091) that have been completed during the last two years. Change notice QA-090 is not incorporated into Revision 25 of the OQAP as this change notice was voided and its content added to QA-091. Change notices QA-089 and QA-091, including their associated 10 CFR 50.54(a) evaluations and change summaries, are attached.

Change notices QA-089 and QA-091 were reviewed as they were processed and determined to not reduce any commitments nor reduce any element of or responsibilities for implementation of the QA program.

The affected chapter revision numbers have been increased to the next revision level (Approval Page, Table of Contents, and Chapters 1.0, 2.0, 4.0, and 7.0) and the OQAP has been updated to accurately reflect changes made since the previous revision submittal. The OQAP chapters that have not been changed are being submitted to provide for a complete document.

There are no commitments in this letter.

If there are any questions regarding this matter, please contact Tim Hammons at (361) 972-7347 or Chris Younie at (361) 972-7142.

G. T. Powell
President and Chief
Executive Officer

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Attachments:

1. Operations Quality Assurance Plan Change QA-089
2. Operations Quality Assurance Plan Change QA-091
3. Operations Quality Assurance Plan, Revision 25

cc:

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
1600 East Lamar Boulevard
Arlington, TX 76011-4511

Operations Quality Assurance Plan Change QA-089

ATTACHMENT

10CFR50.54(a) EVALUATION

QA-089

The purpose of this change is to revise the criterion for extending supplier audits and evaluations from a 90-day grace period to a total combined time interval for any three consecutive inspection or audit intervals to not exceed 3.25 times the three-year inspection or audit interval. The Nuclear Regulatory Commission previously deemed this criterion for extending audit intervals acceptable as stated in Southern Nuclear Operating Company Safety Evaluation dated June 17, 2005 (ADAMS Accession No.: ML051570349). The bases for their determination was that Southern Nuclear quality assurance programs "continue to satisfy the quality assurance requirements of Appendix B to 10 CFR Part 50." Likewise, South Texas Project's quality assurance programs continue to satisfy the quality assurance requirements of Appendix B to 10 CFR Part 50. Therefore, this change of the Operations Quality Assurance Plan (OQAP) does not require NRC approval prior to implementation in accordance with the provisions of 10CFR50.54(a)(3)(ii).

Background: Table I, Program Commitments, of Chapter 2 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. STP's OQAP is similar to the operational QA programs of Southern Nuclear Company's Hatch, Vogtle and Farley plants because it also follows the guidance of ANSI N18.7-1976, as endorsed by Regulatory Guide (RG) 1.33, Rev 2.

Regarding Southern Nuclear Operating Company Safety Evaluation dated June 17, 2005 (ADAMS Accession No.: ML051570349), section 3.4, Standard Criteria for Extending Audit Intervals (Change 4), STP evaluated the following standard criteria for extending audit intervals.

A. Audits shall be performed at the intervals designated herein for each audit area. Schedules shall be based on the month in which the audit starts. **Response:** STP will incorporate this into implementing procedures.

B. A maximum extension not to exceed 25 percent of the audit interval shall be allowed. That is to say that, for audits on a 24-month frequency, the maximum time between specific audits shall not exceed 30 months. Likewise, audits on an annual (12 month) frequency shall not be extended beyond 15 months. **Response:** STP already defines this in implementing procedures.

C. When an audit interval extension greater than one month is used, the next audit for that particular audit area will be scheduled from the original anniversary month rather than from the month of the extended audit. **Response:** STP already defines this in implementing procedures.

D. Item B shall also apply to supplier audits and evaluations except that a total combined time interval for any three consecutive inspection or audit intervals should not exceed 3.25 times the specified inspection or audit interval. **Response:** STP will incorporate this into implementing procedures.

CHANGE QA-089
SUMMARY OF CHANGES

SECTIONS (TEXT) WITH CHANGES IN BOLD TYPE

CHAPTER	LOCATION	ACTION	TEXT
TOC	CH 2.0	INSERT	**QA-089**
CH 2.0	Table 1, page 10 of 19	Add	**Add "Also refer to the Southern Nuclear Operating Company Safety Evaluation dated June 17, 2005 (ADAMS Accession No.: ML051570349), section 3.4, change 4." to the cell containing "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."**
	Table 1, page 10 of 19	INSERT	**QA-089**

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 (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 (SSCs) 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), 10CFR72, Subpart G (those features, activities, and SSCs of an Independent Spent Fuel Storage Installation (ISFSI), Dry Cask Storage System (DCSS), or a transportation package important to safety that maintain the conditions required to prevent damage to a container during handling and storage, or provide reasonable assurance that radioactive material can be received, handled, stored, and retrieved without undue risk to the health and safety of the public), ASME Boiler and Pressure Vessel Code, Sections III, V, IX, 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.

2.3 Additional quality requirements specific to ISFSI and DCSS are located in Reference 4.9.

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 applied to safety-related SSCs categorized as High Safety Significant (HSS), as prescribed in Table I to this chapter and throughout individual OQAP chapters.

3.4 Basic program controls - Levels of control and oversight, lower than in the Full Program, applied to safety-related SSCs categorized as Medium Safety Significant (MSS), 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-related SSCs categorized as either HSS or MSS.

3.6 Limited program controls – Limited controls applied to safety-related SSCs categorized as either Low Safety Significant (LSS) or Non-Risk Significant (NRS).

3.7 Graded Approach to Quality – Used as required by 10CFR72 to apply to all activities affecting the important to safety functions of those SSCs of the ISFSI or DCSS that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. The identification of important to safety SSCs for each type of DCSS used at STP is contained within its own unique 10CFR72 (Certificate Holder's) Final Safety Analysis Report (FSAR) (as updated), and Certificate of Compliance (C of C).

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)

4.7 Updated Final Safety Analysis Report

4.8 Safety Evaluation on Exemption Requests from Special Treatment Requirements of 10 CFR Parts 21, 50, and 100 (TAC NOS. MA6057 AND MA6058)

4.9 OQAP Chapter 20.0, Dry Cask Storage System and Independent Spent Fuel Storage Installation

4.10 10CFR72, Subpart G

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 (Units 1 & 2) and the DCSS/ISFSI.

5.1.2 The President and Chief Executive Officer has overall responsibility for quality assurance. The Manager, Nuclear Oversight 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, 10CFR72, Subpart G, and 10CFR71, Sub-Part H (except design and fabrication of NRC certified radioactive waste shipping casks). These regulations are not applicable to LSS and NRS safety-related components, to the extent that the Nuclear Regulatory Commission has granted STP an exemption from the regulations as described in Reference 4.8.

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).

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 the risk significance of system functions, components' contribution to core damage frequency and large early release frequency, components' critical attributes (needed to support risk significant system functions), 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 four graded applications (i.e., "Full", "Basic", "Targeted", and "Limited").

5.3.6 "Full" program controls are applied to safety-related SSCs categorized as HSS. 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 MSS. These are lower levels of control and oversight, designed to maintain/preserve those identified critical attributes of SSCs needed to support risk significant system functions. These controls are intended to reflect economical and efficient business practices. Table I to this OQAP chapter prescribes the program commitments applicable to "Basic" program activities.

5.3.8 "Limited" program controls are applied to safety-related SSCs categorized as either LSS or NRS. Only specific program controls related to the activities listed in the following subparagraphs are applicable to these SSCs. The other chapters of the OQAP are not applicable to safety-related LSS and NRS SSCs. Instead, the treatment processes applicable to these SSCs are described in the Updated Final Safety Analysis Report Section 13.7.3.3 and implementing procedures:

5.3.8.1 Those elements in Chapter 1.0 that are needed to implement and control activities described above;

5.3.8.2 Applicable requirements in this Chapter;

5.3.8.3 Modification/design activities as described in Chapter 6.0; and

5.3.8.4 Corrective action as described in Chapter 13.0.

5.3.9 “Targeted” program controls are applied to non-safety related SSCs, for which 10CFR50, Appendix B is not applicable, categorized as HSS or MSS . 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 risk significant.

5.3.10 Safety-related 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 significance to ensure that Full program controls are applied to their critical attributes.

5.3.11 SSCs governed by the OQAP shall retain their current program coverage until such time as prescribed risk-informed, performance-based analyses are completed and approved, and they are placed into the graded program categories (i.e., “Full”, “Basic”, “Targeted”, or “Limited”) as appropriate.

5.3.12 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.

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 to the extent not exempted. 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 Manager, Nuclear Oversight 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, DCSS, ISFSI and of the interfacing organizations' activities.

5.10.2 Independent oversight of the implementation of the OQAP is conducted under the cognizance of the Senior Management Team 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 N45.2, 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. Also refer to the Southern Nuclear Operating Company Safety Evaluation dated June 17, 2005 (ADAMS Accession No.: ML051570349), section 3.4, change 4. 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. 1.58 regarding use of personnel not qualified in accordance with ANSI N45.2.6. Same as full. Same as full.

QA-089

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
ANSI N18.7/ANS 3.2 (cont'd)		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.
	5.2.1 - These activities do not constitute an "inspection" as defined in ANSI/ASME NQA-1, 1983, Supplement S-1, Terms and Definitions. Therefore, the requirements for qualification to ANSI N45.2.6 as stated in Section 2.4 do not apply to personnel performing these activities.	Same as Full
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

TABLE I

PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI N45.2.6, 1978 (cont'd)		tested. These individuals shall also receive training to the applicable inspection procedure, 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.
	Personnel performing the activities stated in ANSI N45.2.2, Section 5.2.1 do not require qualification to this Standard. (see exception to ANSI N45.2.2)	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.

TABLE I

PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI N45.2.11, 1974 (Con't.)		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.
ANSI N45.2.10, 1973	Same as R.G. 1.74 above.	Same as full.
R.G. 1.88, rev. 2 (10/76)	No exceptions taken.	Same as full.
ANSI N45.2.9, 1974	Section 5.6 – supplement the provisions of this section by providing for alternate temporary storage of records. Allow the use of 1-hour fire rated cabinets to store records that are awaiting processing (e.g., processing into Optical Disk Storage). Storage of these records in 1-hour fire rated cabinets will be controlled by procedure which specify a maximum allowable time limit. Cabinets housing these records shall be controlled for access and shall be located in an area protected by sprinklers.	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.	Same as full.

TABLE I

PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI N45.2.13, 1976 (cont'd)	3.2.3 – When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally-recognized accrediting body, the procurement documents are not required to impose a quality assurance program consistent with 10CFR50, Appendix B. In such cases, accreditation may be accepted in lieu of the Purchaser imposing a QA Program consistent with 10CFR50, Appendix B, provided all of the following are met: 1) The accreditation is to ANSI/ISO/IEC 17025 2) The accrediting body is either the National Voluntary Laboratory Accrediting Program (NVLAP) administered by the National Institute of Standards and Technology (NIST) or American Association for Laboratory Accreditation (A2LA). The A2LA accreditation is recognized by NVLAP through the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA). 3) The published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties. This requires the supplier to provide a measurement of collective uncertainty and obviates the need to impose the four-to-one ratio requirement discussed in NIST Information Report (NISTIR) 6989. 4) The purchase documents impose additional technical and administrative requirements, as necessary, to satisfy STPNOC QA Program and technical requirements. This requires the calibration certificate/report include identification of the laboratory equipment/standards used. 5) Purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance. 6) The alternative method is limited to the domestic calibration service suppliers. 7) The alternative method is applicable to sub-suppliers of calibration service suppliers, provided the above conditions are met.	Same as full
	5.3 and 5.4 – Provision are established for, in special cases and with management approval, completion of these activities after award of contract.	Same as full.

TABLE I

PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI N45.2.13, 1976 (cont'd)	9.0 – This section will be implemented based on the scope, complexity and safety significance of the items being procured.	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.	Same as full.
	C.3a(1) – refer to table coverage of R.G. 1.33 regarding audit frequency.	Same as full.

TABLE I

PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
R.G. 1.144, rev. 1 (9/80) (cont'd)	C.3.b(2) – When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally-recognized accrediting body, the accreditation process and accrediting body may be credited with carrying out a portion of the Purchaser's duties of verifying acceptability and effective implementation of the calibration service supplier's quality assurance program. In lieu of performing an audit, accepting an audit by another licensee, or performing a commercial-grade survey, a documented review of the supplier's accreditation shall be performed by the Purchaser. This review shall include, at a minimum, verification of the following: 1)The accreditation is to ANSI/ISO/IEC 17025 2) The accrediting body is either NVLAP or A2LA. The A2LA accreditation is recognized by NVLAP through the ILAC MRA. 3) The published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties. This requires the supplier to provide a measurement of collective uncertainty and obviates the need to impose the four-to-one ratio requirements discussed in NISTIR 6989. 4) The purchase documents impose additional technical and administrative requirements, as necessary, to satisfy STPNOC QA Program and technical requirements. This requires the calibration certificate/report include the identification of the laboratory equipment/standards used. 5) Purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance. 6) The alternative method is limited to the domestic calibration service suppliers. 7) The alternative method is applicable to sub-suppliers of calibration service suppliers, provided the above conditions are met. The licensee is responsible for ensuring that the procured services are within the accredited scope of the NVLAP and A2LA certificates.	Same as full for commercial-grade calibration services 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.	Same as full.
	1.4 – refer to table coverage of R.G. 1.74.	Same as full.
	2.21 – refer to table coverage of R.G. 1.28.	Same as full.
	2.3.3.1 – refer to table coverage of R.G 1.28.	Same as full.
	2.3.4 - In lieu of the requirements of section 2.3.4 of ANSI N45.2.23-1978 the following alternative is acceptable: Prospective lead auditors shall demonstrate their ability to properly implement the audit process and effectively lead an audit team. This demonstration process will be described in implementing procedures and will include the evaluation and documentation of the results of the demonstration. Regardless of the methods used for the demonstration, the prospective lead auditor is required to participate in at least one nuclear quality assurance audit within the year preceding the individual's effective date of qualification. Upon successful demonstration of the ability to effectively implement the audit process and effectively lead audits, and having met the other provisions of Section 2.3 of ANSI N45.2.23-1978, the individual may be certified as being qualified to lead audits.	Same as full

TABLE I

PROGRAM COMMITMENTS

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)

Operations Quality Assurance Plan Change QA-091

ATTACHMENT
10CFR50.54 (a) EVALUATION
QA-091

PURPOSE: The purpose of this change is to update the Operations Quality Assurance Plan (OQAP) with the following changes.

A. CR 17-21718: Chapter 4.0 step 4.6 references a superseded ACAD document. Specifically, ACAD 02-004 is taken the place of ACAD 92-004, Guidelines for the Conduct of Training and Qualification.

B. CR 20-4063: The Nuclear Regulatory Commission (NRC) endorsed Nuclear Energy Institute (NEI) 14-05 (Revision 1). Users of the International Laboratory Accreditation Cooperation (ILAC) process will need to update Quality Assurance Program Manuals/procedures, as applicable, to include the revised guidance, restrictions, and limits of use.

C. CR 21-5159: Site organizational changes removed the General Manager, Projects. The position of General Manager, Projects, needs to be removed from OQAP Chapter 1.0.

SUMMARY:

The South Texas Project's quality assurance programs continue to satisfy the quality assurance requirements of Appendix B to 10 CFR Part 50. Therefore, this change of the Operations Quality Assurance Plan (OQAP) does not require NRC approval prior to implementation in accordance with the provisions of 10CFR50.54(a)(3)(i) for Section A, 10CFR50.54(a)(3)(ii) for Section B, and 10CFR50.54(a)(3)(iii) for Section C listed below.

BACKGROUND:

A. The Institute of Nuclear Power Operations (INPO) has updated Tier 2, Guidelines for the Conduct of Training and Qualification Activities and is superseding ACAD 92-004 and replacing with ACAD 02-004 (Revision 0). This guideline revision (0) consolidates key aspects and responsibilities for training and qualification endorsed by the National Academy for Nuclear Training. This change was to clarify sections of the document with additional guidance, to include guidance on training program areas not previously addressed, to reflect current industry practices, and to update references to other INPO or National Academy documents that have been revised.

   Chapter 4.0 step 4.6 of the OQAP will be revised to reflect the change to the ACAD reference.

B. Licensees that utilize the "ILAC Process" for qualification of suppliers and acceptance accredited calibration and testing services provided by laboratories that signatories to the ILAC Mutual Recognition Agreement (MRA) in lieu of performing a commercial grade survey as part of the commercial grade dedication process will need to change their QA programs to incorporate the requirements of NEI 14-05A, Revision 1. By letter dated April 16, 2019, the NRC gave provisional recognition to the NEI for use of the 2017 edition of the International Standardized Organization (ISO)/International Electrotechnical Commission (IEC) Standard No. 17025 for the ILAC accreditation process. The NRC completed the Safety Evaluation report, dated November 23, 2020, and endorsed NEI 14-05A (Revision 1), Guidelines for the Use and Accreditation in lieu of Commercial Grade Surveys for Procurement of Laboratory Calibration and Test Services. The NRC staff concludes that Revision 1 of NEI 14-05A continues to provide an acceptable approach for licensees and suppliers subject to the QA requirements of Appendix B to 10 CFR Part 50 for using laboratory accreditation by Accreditation Bodies (AB) that are signatories to the ILAC MRA in lieu of performing commercial-grade surveys as part of the commercial-grade dedication process for procurement of calibration and testing services performed by domestic and international laboratories accredited by signatories to the ILAC MRA.

ATTACHMENT
10CFR50.54 (a) EVALUATION
QA-091

Appendix A of NEI 14-05A (Revision 1) is to be incorporated into the OQAP Chapters based on NRC approval (Ref. NRC's SER, ML 20322A019):

2.0 Table I (ANSI N45.2.13 (1976)),

2.0 Table I R.G. 1.144 (Revision 1 (9/80)), and

7.0 steps 5.2.2 and 5.6.3.a, 5.6.3.b and 5.6.3.c as described below:

Chapter 2.0 Table I
ANSI N45.2.13 (1976)

3.2.3 When purchasing commercial grade calibration or testing services from a laboratory holding accreditation by an accrediting body recognized by the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA), commercial grade surveys need not be performed provided each of the following conditions are met:

1. A documented review of the laboratory's accreditation is performed and includes a verification of the following:
   - The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."
   - For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.
   - For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.
   - The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.
2. The purchase documents require that:
   - The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.
   - As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).
   - The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).
   - Subcontracting of these accredited services is prohibited.
   - The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.
   - Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.

- Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.

3. It is validated, at receipt inspection, that the laboratory's documentation certifies that:
   - The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and
   - The purchase order's requirements are met.

Chapter 2.0 Table I
R.G. 1.144 (Revision 1 (9/80)
Note: Items 1-7 under C.3.b(2) were replaced with items 1-3 under C.3.b(2) as provided below

C.3.b(2) When purchasing commercial grade calibration or testing services from a When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally-recognized accrediting body, the accreditation process and accrediting body may be credited with carrying out a portion of the STPNOC's duties of verifying acceptability and effective implementation of the calibration service supplier's quality assurance program. (*no changes*)

In lieu of performing an audit, accepting an audit by another licensee, or performing a commercial-grade survey, a documented review of the supplier's accreditation shall be performed by STPNOC. This review shall include, at a minimum, verification of the following: . (*no changes*)

1. A documented review of the laboratory's accreditation is performed and includes a verification of the following:
   - The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."
   - For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.
   - For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.
   - The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.
2. The purchase documents require that:
   - The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.
   - As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).
   - The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).
   - Subcontracting of these accredited services is prohibited.

- The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.
- Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.
- Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.

3. It is validated, at receipt inspection, that the laboratory's documentation certifies that:
   - The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and
   - The purchase order's requirements are met.

   STPNOC is responsible for ensuring that the procured services are within the accredited scope of the NVLAP and A2LA certificates. *(no changes*)

Chapter 7.0

5.2.2 Commercial grade items (items not originally designed or manufactured as a basic component) are subject to a commercial grade dedication process as defined and authorized by Engineering in accordance with procedures that meet the requirements of the NRC, before such items are approved for safety-related applications. Commercial grade dedication also applies to a commercial grade service that is associated with basic component hardware, design certification, design approval, or information in support of an early site permit application under 10 CFR Part 52, whether these services are performed by the component supplier or others (e.g., safety-related design, analysis, inspection, testing, or fabrication that is associated with a basic component).

Procedures are established to describe the responsibilities for Engineering to perform a technical evaluation, select applicable critical characteristics, and determine an appropriate dedication method for acceptance. Procedures are also established to enhance the detection of counterfeit and fraudulent items and to minimize the likelihood of the introduction of such items in safety-related applications.

STP Nuclear Operating Company (STPNOC) may utilize commercial grade items or services in its supply of basic components in a manner consistent with the guidance in [Generic Letter (GL) 89-02, "Actions to Improve the Detection of Counterfeit and Fraudulently Marked Products." GL 89-02 documents the NRC's conditional endorsement of EPRI NP-5652, "Guideline for the Utilization of Commercial grade Items in Nuclear Safety Related Applications" (NCIG-07).] In addition, Regulatory Guide 1.164 documents the NRC's endorsement of EPRI TR 3002002982, "Plant Engineering: Guideline for the Acceptance of Commercial-Grade Items in Nuclear Safety-Related Applications," Revision 1 to EPRI NP-5652 and TR-.102260.

STPNOC utilizes a commercial grade dedication process consistent with Generic Letter 89-02 and 10 CFR 21 for the supply of basic components. When a commercial grade item is modified, inspected, and/or tested to demonstrate compliance to requirements more restrictive than the manufacturer's original specifications such item is uniquely identified as different from the commercial grade (off-the-shelf) item and traceable to documents that record the difference.

When purchasing commercial grade calibration or testing services from a laboratory holding accreditation by an accrediting body recognized by the International Laboratory Accreditation

Cooperation (ILAC) Mutual Recognition Arrangement (MRA), commercial grade surveys need not be performed provided each of the following conditions are met:

5.2.2.1 A documented review of the laboratory's accreditation is performed and includes a verification of the following:

- The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."
- For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.
- For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.
- The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.

5.2.2.2 The purchase documents require that:

- The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.
- As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).
- The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).
- Subcontracting of these accredited services is prohibited.
- The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.
- Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.
- Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.

5.2.2.3 It is validated, at receipt inspection, that the laboratory's documentation certifies that:

- The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and
- The purchase order's requirements are met.

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Note: Bullets 1-7 under step 5.6.3 were replaced with a-c under step 5.6.3 as provided below.

5.6.3. When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally-recognized accrediting body, the accreditation process and accrediting body may be credited with carrying out a portion of the STPNOC's duties of verifying acceptability and effective implementation of the calibration service supplier's quality assurance program. (*no changes*)

In lieu of performing an audit, accepting an audit by another licensee, or performing a commercial-grade survey, a documented review of the supplier's accreditation shall be performed by STPNOC. This review shall include, at a minimum, verification of the following: (*no changes*)

a. A documented review of the laboratory's accreditation is performed and includes a verification of the following:

- The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."
- For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.
- For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.
- The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.

b. The purchase documents require that:

- The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.
- As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).
- The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).
- Subcontracting of these accredited services is prohibited.
- The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.
- Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.
- Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.

c. It is validated, at receipt inspection, that the laboratory's documentation certifies that:

- The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and

- The purchase order's requirements are met.

STPNOC is responsible for ensuring that the procured services are within the accredited scope of the NVLAP and A2LA certificates. (*no changes*)

C. STP Nuclear Operating Company (STPNOC) makes business decisions regarding positions, titles, etc., as needs dictate. Following the retirement of the previous General Manager, Projects, STPNOC determined that the title would change from "General Manager, Projects" to "Manager, Projects".

Chapter 1.0 step 5.3.1.1 of the OQAP will be changed to reflect the change to the position title.

CHANGE QA-091
SUMMARY OF CHANGES

ALL CHANGES ARE IN **BOLD** TYPE

CHAPTER	LOCATION	ACTION	TEXT
TOC	CH 1.0	Insert	**QA-091**
CH 1.0	Step 5.3.1.1, page 2 of 4	Revise	The ~~**General**~~ Manager, Projects (Out/PIP/PMPI) is responsible for implementing quality program requirements applicable to the following functions: strategic projects, projects, outage management, Spent Fuel Management Project, major, and corporate projects. The management of these functions report to the ~~**General**~~ Manager, Projects (Out/PIP/PMPI).
	Step 5.3.1.1, page 2 of 4	Insert	**QA-091**
CH 2.0	Table I ANSI N45.2.13 (1976), items 1) through 7), page 13 of 15 Note: Wording changed in 1) for QA-091, so the wording was replaced as listed in QA-090 with that in NEI 14-05A (Revision 1) in QA-091	Delete	~~**3.2.3 When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally recognized accrediting body, the procurement documents are not required to impose a quality assurance program consistent with 10CFR50, Appendix B. In such cases, accreditation may be accepted in lieu of the Purchaser imposing a QA Program consistent with 10CFR50, Appendix B, provided all of the following are met:**~~ ~~**1) The accreditation is to ANSI/ISO/IEC 17025:2017.**~~ ~~**2) The accrediting body is either the National Voluntary Laboratory Accrediting Program (NVLAP) administered by the National Institute of Standards and Technology (NIST) or American Association for Laboratory Accreditation (A2LA). The A2LA accreditation is recognized by NVLAP through the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA).**~~ ~~3) **The published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties. This requires the supplier to provide a measurement of collective uncertainty and obviates the need to impose**

			~~**the four-to-one ratio requirement discussed in NIST Information Report (NISTIR) 6989.**~~ ~~**4) The purchase documents impose additional technical and administrative requirements, as necessary, to satisfy STPNOC QA Program and technical requirements. This requires the calibration certificate/report include identification of the laboratory equipment/standards used.**~~ ~~**5) Purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance.**~~ ~~**6) The alternative method is limited to the domestic calibration service suppliers.**~~ ~~7) **The alternative method is applicable to sub-suppliers of calibration service suppliers, provided the above conditions are met.**~~
	Table I ANSI N45.2.13 (1976), step 3.2.3 and items 1) through 3), page 14-15 of 19	Insert	**3.2.3 When purchasing commercial grade calibration or testing services from a laboratory holding accreditation by an accrediting body recognized by the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA), commercial grade surveys need not be performed provided each of the following conditions are met:** **1. A documented review of the laboratory's accreditation is performed and includes a verification of the following:** • **The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."** • **For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.**

			• **For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.** • **The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.** **2. The purchase documents require that:** • **The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.** • **As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).** • **The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).** • **Subcontracting of these accredited services is prohibited.** • **The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.** • **Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.**

			• **Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.** **3. It is validated, at receipt inspection, that the laboratory's documentation certifies that:** • **The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and** • **The purchase order's requirements are met.**
CH 2.0	Table I R.G. 1.144 (Revision 1 (9/80)), items 1-7 of C.3.b(2), page 14-15 of 15 Note: Wording changed in 1) for QA-091, so the wording was replaced as listed in QA-090 with that in NEI 14-05A (Revision 1) in QA-091	Delete	~~**1) The accreditation is to ANSI/ISO/IEC 17025:2017**~~ ~~**2) The accrediting body is either NVLAP or A2LA. The A2LA accreditation is recognized by NVLAP through the ILAC MRA.**~~ ~~**3) The published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties. This requires the supplier to provide a measurement of collective uncertainty and obviates the need to impose the four-to-one ratio requirements discussed in NISTIR 6989.**~~ ~~**4) The purchase documents impose additional technical and administrative requirements, as necessary, to satisfy STPNOC QA Program and technical requirements. This requires the calibration certificate/report include the identification of the laboratory equipment/standards used.**~~ ~~**5) Purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance.**~~ ~~**6) The alternative method is limited to the domestic calibration service suppliers.**~~

			~~**7) The alternative method is applicable to sub-suppliers of calibration service suppliers, provided the above conditions are met.**~~ ~~**The licensee is responsible for ensuring that the procured services are within the accredited scope of the NVLAP and A2LA certificates.**~~
CH 2.0	Table I R.G. 1.144 (Revision 1 (9/80)), items 1-3 of step C.3.b(2), page 16-18 of 19	Insert	**1. A documented review of the laboratory's accreditation is performed and includes a verification of the following:** • **The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."** • **For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.** • **For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.** • **The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.** **2. The purchase documents require that:** • **The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.** • **As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).**

			• **The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).** • **Subcontracting of these accredited services is prohibited.** • **The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.** • **Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.** • **Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.** **3. It is validated, at receipt inspection, that the laboratory's documentation certifies that:** • **The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and** • **The purchase order's requirements are met.**
Chapter 2.0	Table I R.G. 1.144 (Revision 1 (9/80)), items 1-3 of step C.3.b(2), page 16-18 of 19	Insert	**QA-091**
CH 4.0	Step 4.6, page 1 of 3	Revise	INPO ACAD ~~**92-004**~~ **02-004**, Guidelines for the Conduct of training and Qualification
	Step 4.6, page 1 of 3	Insert	**QA-091**

CH 7.0	Steps 5.2.2 and 5.2.2.1 including bullets 1-7, page 5 of 12 Note: Wording changed in 1) for QA-091, so the wording was replaced as listed in QA-090 with that in NEI 14-05A (Revision 1) in QA-091.	Delete	~~**When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally recognized accrediting body, the procurement documents are not required to impose a quality assurance program consistent with 10CFR50, Appendix B.**~~ ~~**5.2.2.1: In such cases, accreditation may be accepted in lieu of imposing a QA Program consistent with 10CFR50, Appendix B, provided all of the following are met:**~~ • ~~**The accreditation is to ANSI/ISO/IEC 17025:2017.**~~ • ~~**The accreditation body is either the National Voluntary Laboratory Accrediting Program (NVLAP) administered by National Institute of Standards and Technology (NIST) or American Association for Laboratory Accreditation (A2LA). The A2LA accreditation is recognized by NVLAP through the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA).**~~ • ~~**The published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties. This requires the supplier to provide a measurement of collective uncertainty and obviates the need to impose the four-to-one ratio requirement discussed in NIST Information Report (NISTIR) 6989.**~~ • ~~**The purchase documents impose additional technical and administrative requirements, as necessary, to satisfy STPNOC QA Program and technical requirements. This requires the calibration certificate/report include identification of the laboratory equipment/standards used.**~~ • ~~**Purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance.**~~ • ~~**The alternative method is limited to the domestic calibration service suppliers.**~~ • ~~**The alternative method is applicable to sub-suppliers of calibration service suppliers, provided the above conditions are met.**~~

	Steps 5.2.2 and 5.2.2.1 through 5.2.2.3, pages 5-7 of 13	Insert	**(5.2.2) Commercial grade items (items not originally designed or manufactured as a basic component) are subject to a commercial grade dedication process as defined and authorized by Engineering in accordance with procedures that meet the requirements of the NRC, before such items are approved for safety-related applications. Commercial grade dedication also applies to a commercial grade service that is associated with basic component hardware, design certification, design approval, or information in support of an early site permit application under 10 CFR Part 52, whether these services are performed by the component supplier or others (e.g., safety-related design, analysis, inspection, testing, or fabrication that is associated with a basic component).** **Procedures are established to describe the responsibilities for Engineering to perform a technical evaluation, select applicable critical characteristics, and determine an appropriate dedication method for acceptance. Procedures are also established to enhance the detection of counterfeit and fraudulent items and to minimize the likelihood of the introduction of such items in safety-related applications.** **STP Nuclear Operating Company (STPNOC) may utilize commercial grade items or services in its supply of basic components in a manner consistent with the guidance in [Generic Letter (GL) 89-02, "Actions to Improve the Detection of Counterfeit and Fraudulently Marked Products." GL 89-02 documents the NRC's conditional endorsement of EPRI NP-5652, "Guideline for the Utilization of Commercial grade Items in Nuclear Safety Related Applications" (NCIG-07).] In addition, Regulatory Guide 1.164 documents the NRC's endorsement of EPRI TR 3002002982, "Plant Engineering: Guideline for the Acceptance of Commercial-Grade Items in Nuclear Safety-Related Applications," Revision 1 to EPRI NP-5652 and TR-.102260.** **STPNOC utilizes a commercial grade dedication process consistent with Generic Letter 89-02 and 10 CFR 21 for the supply of basic components. When a commercial grade item is modified, inspected, and/or tested to demonstrate compliance to requirements more**

			restrictive than the manufacturer's original specifications such item is uniquely identified as different from the commercial grade (off-the-shelf) item and traceable to documents that record the difference. **When purchasing commercial grade calibration or testing services from a laboratory holding accreditation by an accrediting body recognized by the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA), commercial grade surveys need not be performed provided each of the following conditions are met:** **(5.2.2.1) A documented review of the laboratory's accreditation is performed and includes a verification of the following:** • **The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."** • **For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.** • **For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.** • **The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.** **(5.2.2.2) The purchase documents require that:** • **The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.** • **As-found calibration data must be reported in the certificate of calibration when**

			calibrated items are found to be out-of-tolerance (for calibration services only). • **The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).** • **Subcontracting of these accredited services is prohibited.** • **The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.** • **Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.** • **Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.** **(5.2.2.3) It is validated, at receipt inspection, that the laboratory's documentation certifies that:** • **The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and** • **The purchase order's requirements are met.**
	Steps 5.2.2 and 5.2.2.1 through 5.2.2.3, page 5-7 of 13	Insert	**QA-091**
	Step 5.6.3 bullets 1-7, page 11 of 12	Delete	• ~~**The accreditation is to ANSI/ISO/IEC 17025:2017.**~~ • ~~**The accrediting body is either NVLAP or A2LA. The A2LA accreditation is recognized by NVLAP through the ILAC MRA.**~~

			~~• The published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties. This requires the supplier to provide a measurement of collective uncertainty and obviates the need to impose the four-to-one ratio requirement discussed in NISTIR 6989.~~ ~~• The purchase documents impose additional technical and administrative requirements, as necessary, to satisfy STPNOC QA Program and technical requirements. This requires the calibration certificate/report include the identification of the laboratory equipment/standards used.~~ ~~• Purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance.~~ ~~• The alternative method is limited to the domestic calibration service suppliers.~~ • ~~The alternative method is applicable to sub-suppliers of calibration service suppliers, provided the above conditions are met.~~
	Steps 5.6.3.a. through 5.6.3.c, page 11 of 12	Insert	**(5.6.3.a.) A documented review of the laboratory's accreditation is performed and includes a verification of the following:** • **The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."** • **For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.** • **For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.** • **The laboratory has achieved accreditation based on an on-site accreditation assessment**

			by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments. **(5.6.3.b.) The purchase documents require that:** • **The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.** • **As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).** • **The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).** • **Subcontracting of these accredited services is prohibited.** • **The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.** • **Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.** • **Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.** **(5.6.3.c.) It is validated, at receipt inspection, that the laboratory's documentation certifies that:** • **The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and** • **The purchase order's requirements are met.**

CHANGE QA-091
SUMMARY OF CHANGES

	Steps 5.6.3.a. through 5.6.3.c, page 11 of 12	Insert	**QA-091**

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 (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 Units 1 & 2, Dry Cask Storage System (DCSS), and Independent Spent Fuel Storage Installation (ISFSI).

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 None

5.0 RESPONSIBILITIES

5.1 The STPNOC organization includes the Executive Vice President and Chief Nuclear Officer, the Executive Vice President and Chief Administrative Officer, and the Executive Vice President and Chief Financial Officer. The senior management of these groups report to the President and Chief Executive Officer.

5.2 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. The President and Chief Executive Officer shall designate those members of senior management to function as the Senior Management Team.

5.3 The Executive Vice President and Chief Nuclear Officer is responsible for implementing quality program requirements applicable to the following functions: generation, engineering, and projects. The management of these functions report to the Executive Vice President and Chief Nuclear Officer.

5.3.1 The Site Vice President is responsible for implementing quality program requirements applicable to the following functions: Projects (Out/PIP/PMPI) and staffing STP with qualified personnel and acquiring and coordinating the assistance of internal and external organizations for the following functions including plant general management and training. The senior management of these functions report to the Site Vice President.

5.3.1.1 The Manager, Projects (Out/PIP/PMPI) is responsible for implementing quality program requirements applicable to the following functions: strategic projects, projects, outage management, Spent Fuel Management Project, major, and corporate projects. The management of these functions report to the Manager, Projects (Out/PIP/PMPI). QA-091 QA-091

5.3.1.2 The Plant General Manager has prime responsibility for the safe operations of the units. The plant staff, under the direction of the Plant General Manager, develops detailed procedures and instructions for testing, operation, modification, and maintenance of the STP. The Plant General Manager is responsible for implementing quality program requirements applicable to the following functions including: operations, maintenance, chemistry, health physics, and work control. The management of these functions report to the Plant General Manager.

5.3.1.3 The General Manager, Engineering is responsible for implementing quality program requirements applicable to the following functions: design engineering, testing/program engineering (includes NDE and weld inspections, ref: CR 18-7326), strategic engineering, plant engineering and nuclear fuel & analysis (includes risk management). The management of these functions report to the General Manager, Engineering.

5.3.1.3.1 The Manager, Nuclear Fuel & Analysis is responsible for implementing quality program requirements applicable to the following functions: reactor engineering, core design, reload safety analysis, nuclear fuel performance and supply, and risk management (probabilistic risk assessment and risk-informed applications).

Activities related to the Comprehensive Risk Management Program include oversight of Probabilistic Safety Assessment activities. The Comprehensive Risk Management Expert Panel guides the implementation of the Comprehensive Risk Management Program and is composed of a Chairman and additional senior level management designated by the President and Chief Executive Officer.

5.4 The Executive Vice President and Chief Administrative Officer is responsible for implementing quality program requirements applicable to the following functions: corporate services, quality assurance, plant protection, emergency response, access authorization, fitness for duty, and performance improvement. The management of these functions report to the Executive Vice President and Chief Administrative Officer.

5.4.1 The Manager, Nuclear Oversight is responsible for implementing quality program requirements applicable to quality assurance.

5.4.1.1 The Manager, Nuclear Oversight has the independence to conduct Quality activities without undue pressure of cost or schedule and is responsible for the following:

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;

Identify, initiate, recommend, or provide solutions to quality-related problems and verify the implementation and effectiveness of the solutions; and

Independent oversight activities, including audits, independent assessments, evaluations, surveillances, performance monitoring, inspections, independent oversight of NDE and weld inspections, vendor oversight, and administration of organizational unit independent review activities.

5.4.1.2 The Manager, Nuclear Oversight, at his discretion, has unfettered access to the President and Chief Executive Officer and the Board of Directors.

5.4.1.3 The Manager, Nuclear Oversight 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.

5.4.2 The General Manager, Corporate Services is responsible for implementing quality program requirements applicable to the following functions: information technology, cyber security, records management and technical support services. The management of these functions report to the General Manager, Corporate Services.

5.4.3 The Director Emergency Response Services is responsible for implementing quality program requirements applicable to plant protection, emergency response, fitness for duty and access authorization. The management of these functions report to the Director Emergency Response Services.

5.5 The Executive Vice President and Chief Financial Officer is responsible for implementing quality program requirements applicable to contracts & procurement. The management of this function reports to the Executive Vice President and Chief Financial Officer.

5.6 The Vice President Regulatory Affairs and General Counsel is responsible for implementing quality program requirements applicable to regulatory affairs, employee concerns and general counsel. The management of this function reports to the Vice President Regulatory Affairs and General Counsel.

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 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. Line organizational details and responsibilities for Units 1 & 2 are further described in STP UFSAR Chapter 13.1.

7.0 DOCUMENTATION

7.1 None

8.0 ATTACHMENTS

8.1 None

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 (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 (SSCs) 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), 10CFR72, Subpart G (those features, activities, and SSCs of an Independent Spent Fuel Storage Installation (ISFSI), Dry Cask Storage System (DCSS), or a transportation package important to safety that maintain the conditions required to prevent damage to a container during handling and storage, or provide reasonable assurance that radioactive material can be received, handled, stored, and retrieved without undue risk to the health and safety of the public), ASME Boiler and Pressure Vessel Code, Sections III, V, IX, 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.

2.3 Additional quality requirements specific to ISFSI and DCSS are located in Reference 4.9.

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 applied to safety-related SSCs categorized as High Safety Significant (HSS), as prescribed in Table I to this chapter and throughout individual OQAP chapters.

3.4 Basic program controls - Levels of control and oversight, lower than in the Full Program, applied to safety-related SSCs categorized as Medium Safety Significant (MSS), 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-related SSCs categorized as either HSS or MSS.

3.6 Limited program controls – Limited controls applied to safety-related SSCs categorized as either Low Safety Significant (LSS) or Non-Risk Significant (NRS).

3.7 Graded Approach to Quality – Used as required by 10CFR72 to apply to all activities affecting the important to safety functions of those SSCs of the ISFSI or DCSS that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. The identification of important to safety SSCs for each type of DCSS used at STP is contained within its own unique 10CFR72 (Certificate Holder's) Final Safety Analysis Report (FSAR) (as updated), and Certificate of Compliance (C of C).

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)

4.7 Updated Final Safety Analysis Report

4.8 Safety Evaluation on Exemption Requests from Special Treatment Requirements of 10 CFR Parts 21, 50, and 100 (TAC NOS. MA6057 AND MA6058)

4.9 OQAP Chapter 20.0, Dry Cask Storage System, and Independent Spent Fuel Storage Installation

4.10 10CFR72, Subpart G

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 (Units 1 & 2) and the DCSS/ISFSI.

5.1.2 The President and Chief Executive Officer has overall responsibility for quality assurance. The Manager, Nuclear Oversight 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, 10CFR72, Subpart G, and 10CFR71, Sub-Part H (except design and fabrication of NRC certified radioactive waste shipping casks). These regulations are not applicable to LSS and NRS safety-related components, to the extent that the Nuclear Regulatory Commission has granted STP an exemption from the regulations as described in Reference 4.8.

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).

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 the risk significance of system functions, components' contribution to core damage frequency and large early release frequency, components' critical attributes (needed to support risk significant system functions), 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 four graded applications (i.e., "Full", "Basic", "Targeted", and "Limited").

5.3.6 "Full" program controls are applied to safety-related SSCs categorized as HSS. 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 MSS. These are lower levels of control and oversight, designed to maintain/preserve those identified critical attributes of SSCs needed to support risk significant system functions. These controls are intended to reflect economical and efficient business practices. Table I to this OQAP chapter prescribes the program commitments applicable to "Basic" program activities.

5.3.8 "Limited" program controls are applied to safety-related SSCs categorized as either LSS or NRS. Only specific program controls related to the activities listed in the following subparagraphs are applicable to these SSCs. The other chapters of the OQAP are not applicable to safety-related LSS and NRS SSCs. Instead, the treatment processes applicable to these SSCs are described in the Updated Final Safety Analysis Report Section 13.7.3.3 and implementing procedures:

5.3.8.1 Those elements in Chapter 1.0 that are needed to implement and control activities described above;

5.3.8.2 Applicable requirements in this Chapter;

5.3.8.3 Modification/design activities as described in Chapter 6.0; and

5.3.8.4 Corrective action as described in Chapter 13.0.

5.3.9 "Targeted" program controls are applied to non-safety related SSCs, for which 10CFR50, Appendix B is not applicable, categorized as HSS or MSS. 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 risk significant.

5.3.10 Safety-related 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 significance to ensure that Full program controls are applied to their critical attributes.

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

5.3.12 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.

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 to the extent not exempted. 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 Manager, Nuclear Oversight 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, DCSS, ISFSI and of the interfacing organizations' activities.

5.10.2 Independent oversight of the implementation of the OQAP is conducted under the cognizance of the Senior Management Team 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 N45.2, 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.	Same as full.
	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. Also refer to the Southern Nuclear Operating Company Safety Evaluation dated June 17, 2005 (ADAMS Accession No.: ML051570349), section 3.4, change 4.	Same as full.
	C.4.a.b.c - STP performs these audits in accordance with a nominal biennial frequency.	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.	Same as full.
		3.4.2 - refer to R.G. 1.58 regarding use of personnel not qualified in accordance with ANSI N45.2.6.
	4.5 - refer to R.G. 1.33 coverage regarding audit frequency.	Same as full.
	5.2.6 (5th paragraph) - independent verification may be concurrent with (same time as) work performance.	Same as full.
	5.2.7 (1st paragraph) - STP will use current approved design bases as opposed to original design bases.	Same as full.

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TABLE I
PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI NI8.7, 1976/ANS 3.2 (cont'd)		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.

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PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI NI8.7, 1976/ANS 3.2 (cont'd)		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.
	5.2.1 - These activities do not constitute an "inspection" as defined in ANSI/ASME NQA-1, 1983, Supplement S-1, Terms and Definitions. Therefore, the requirements for qualification to ANSI N45.2.6 as stated in Section 2.4 do not apply to personnel performing these activities.	Same as Full
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.

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PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
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, 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.
	Personnel performing the activities stated in ANSI N45.2.2, Section 5.2.1 do not require qualification to this Standard. (see exception to ANSI N45.2.2)	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.

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PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
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.
ANSI N45.2.10, 1973	Same as R.G. 1.74 above.	Same as Full.
R.G. 1.88, rev. 2 (10/76)	No exceptions taken.	Same as Full.
ANSI N45.2.9, 1974	Section 5.6 - supplement the provisions of this section by providing for alternate temporary storage of records. Allow the use of 1-hour fire rated cabinets to store records that are awaiting processing (e.g., processing into Optical Disk Storage). Storage of these records in 1-hour fire rated cabinets will be controlled by procedure which specify a maximum allowable time limit. Cabinets housing these records shall be controlled for access and shall be located in an area protected by sprinklers.	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.	

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PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
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.	Same as Full.
	3.2.3 When purchasing commercial grade calibration or testing services from a laboratory holding accreditation by an accrediting body recognized by the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA), commercial grade surveys need not be performed provided each of the following conditions are met:	Same as Full.
	1. A documented review of the laboratory's accreditation is performed and includes a verification of the following:	Same as Full.
	• The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."	Same as Full.
	• For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.	Same as Full.
	• For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.	Same as Full.
	• The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.	Same as Full.
	2. The purchase documents require that:	Same as Full.
	• The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.	Same as Full.

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R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI N45.2.13, 1976 (cont'd)	• As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).	Same as Full.
	• The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).	Same as Full.
	• Subcontracting of these accredited services is prohibited.	Same as Full.
	• The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.	Same as Full.
	• Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.	Same as Full.
	• Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.	Same as Full.
	3. It is validated, at receipt inspection, that the laboratory's documentation certifies that:	Same as Full.
	• The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and	Same as Full.
	• The purchase order's requirements are met.	Same as Full.
	5.3 and 5.4 - Provision is established for, in special cases and with management approval, completion of these activities after award of contract.	Same as Full.

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PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI N45.2.13, 1976 (cont'd)	9.0 - This section will be implemented based on the scope, complexity and safety significance of the items being procured	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.	Same as Full.
	C.3a(1) - refer to table coverage of R.G. 1.33 regarding audit frequency.	Same as Full.
	C.3.b(2) - When purchasing commercial grade calibration or testing services from a When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally-recognized accrediting body, the accreditation process and accrediting body may be credited with carrying out a portion of the STPNOC's duties of verifying acceptability and effective implementation of the calibration service supplier's quality assurance program.	Same as Full for commercial-grade calibration services.
	In lieu of performing an audit, accepting an audit by another licensee, or performing a commercial-grade survey, a documented review of the supplier's accreditation shall be performed by STPNOC. This review shall include, at a minimum, verification of the following:	Same as Full.
	1. A documented review of the laboratory's accreditation is performed and includes a verification of the following:	Same as Full.
	• The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."	Same as Full.

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R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
R.G. 1.144, rev. 1 (9/80) (cont'd)	• For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.	Same as Full.
	• For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.	Same as Full.
	• The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.	Same as Full.
	2. The purchase documents require that:	Same as Full.
	• The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.	Same as Full.
	• As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).	Same as Full.
	• The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).	Same as Full.
	• Subcontracting of these accredited services is prohibited.	Same as Full.
	• The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.	Same as Full.
	• Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.	Same as Full.

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PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
R.G. 1.144, rev. 1 (9/80) (cont'd)	• Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.	Same as Full.
	3. It is validated, at receipt inspection, that the laboratory's documentation certifies that:	Same as Full.
	• The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and	Same as Full.
	• The purchase order's requirements are met.	Same as Full.
	STPNOC is responsible for ensuring that the procured services are within the accredited scope of the NVLAP and A2LA certificates.	Same as Full.
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.	Same as Full.
	1.4 - refer to table coverage of R.G. 1.74.	Same as Full.
	2.21 - refer to table coverage of R.G. 1.28.	Same as Full.
	2.3.3.1 - refer to table coverage of R.G. 1.28.	Same as Full.

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	2.3.4 - In lieu of the requirements of section 2.3.4 of ANSI N45.2.23-1978 the following alternative is acceptable:	Same as Full.
	Prospective lead auditors shall demonstrate their ability to properly implement the audit process and effectively lead an audit team. This demonstration process will be described in implementing procedures and will include the evaluation and documentation of the results of the demonstration. Regardless of the methods used for the demonstration, the prospective lead auditor is required to participate in at least one nuclear quality assurance audit within the year preceding the individual's effective date of qualification. Upon successful demonstration of the ability to effectively implement the audit process and effectively lead audits and having met the other provisions of Section 2.3 of ANSI N45.2.23-1978, the individual may be certified as being qualified to lead audits.	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 establish requirements for qualification, training, and certification of personnel whose activities may affect structures, systems, components and activities at the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter provides for the qualification, training, and certification of personnel performing activities related to the structures, systems, and components under the jurisdiction of the Operations Quality Assurance Plan (OQAP).

2.2 Additional requirements specific to Dry Cask Storage System and Independent Spent Fuel Storage Installation activities are provided in Reference 4.7.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 OQAP Chapter 2.0, Table I

4.2 SNT-TC-1A, Recommended Practice for Nondestructive Personnel Qualification and Certification

4.3 10CFR55 Operator's Licenses

4.4 ASME Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components

4.5 OQAP Chapter 14.0, Records Control

4.6 INPO ACAD 02-004, Guidelines for the Conduct of Training and Qualification Activities

4.7 OQAP Chapter 20.0, Dry Cask Storage System and Independent Spent Fuel Storage Installation

5.0 REQUIREMENTS

5.1 General

5.1.1 Position qualification requirements shall be established for personnel in accordance with References 4.1, 4.2, 4.3, 4.4.

5.1.2 Programs shall be developed for the qualification, training, and certification of personnel. The programs shall provide for:

5.1.2.1 Establishing individual training files.

5.1.2.2 Documented certification, when required (e.g., NRC licensed personnel, NDE personnel).

5.1.2.3 Continuing training and retraining.

5.2 General Employee Training

5.2.1 A general employee training program shall be developed and administered to personnel requiring unescorted access within the protected and/or vital areas. This program shall address but not be limited to the following:

5.2.1.1 Job related procedures and instructions

5.2.1.2 Quality program indoctrination

5.2.1.3 Radiological health and safety

5.2.1.4 Industrial safety and fire protection

5.2.1.5 Emergency Plan

5.2.1.6 Security program

5.2.2 Temporary personnel employed at the STP shall be trained in the above areas to the extent necessary to assure satisfactory performance of their duties.

5.3 Specialized Training Programs

5.3.1 NRC licensed operators shall be qualified, trained and certified in accordance with Reference 4.1 and 4.3.

5.3.2 Inspection, testing and examination personnel shall be qualified, trained, and certified in accordance with Reference 4.1.

5.3.3 Nondestructive examination personnel shall receive training, which meets the requirements of Reference 4.1, 4.2, 4.4, and 4.7.

5.3.4 Audit personnel shall be qualified, trained and certified to the requirements of Reference 4.1.

5.3.5 Other personnel shall be qualified, trained and certified commensurate with the functions they perform (e.g., welding, coating, chemical cleaning, maintenance, etc.).

5.4 Experienced personnel may be considered for exemption from prerequisite training. Training exemptions shall be controlled in accordance with approved station procedures.

5.5 Procedures shall provide for the evaluation of performance of employees to determine the capabilities of the individual to meet established qualification requirements.

5.6 Procedures shall provide for the recertification of appropriate personnel in accordance with applicable standards.

5.7 Training and certification of personnel, to the degree necessary for the activity, shall be completed prior to assignment of work on items or activities.

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 4.5.

7.0 ATTACHMENTS

7.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to establish the requirements for procurement of items and services for the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter applies to the procurement of items and services for use at STP which are subject to the controls of this Quality program. These activities include procurement document control, bid evaluation, vendor evaluation, verification of vendor activities and receiving inspection.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 10CFR50, Appendix B

4.2 10CFR21, Reporting of Defects and Noncompliance

4.3 OQAP Chapter 2.0, Table I

4.4 EPRI NP-5652 (NCIG-07), Guideline for the Utilization of Commercial Grade Items in Nuclear Safety Related Application

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

4.6 OQAP Chapter 13.0, Control of Conditions Adverse to Quality

4.7 OQAP Chapter 14.0, Records Control

4.8 Generic Letter 89-02, Actions to Improve the Detection of Counterfeit and Fraudulent Marketed Products

5.0 REQUIREMENTS

5.1 Procurement Document Preparation, Review and Control

5.1.1 Responsibility for procurement is a joint effort of all the departments within the STP Nuclear Operating Company (STPNOC). The department requesting the material or service provides technical content and quality requirements. Engineering/Contracts & Procurement is responsible to provide input to the requesting department on technical content and quality requirements, as requested. Quality will concur with all changes to quality requirements.

5.1.2 The sequence of preparation, review, approval, and issuance of procurement documents is generally as follows:

5.1.2.1 Purchase Requisitions

- Purchase requisition forms shall be used to initiate the procurement of materials, parts, components, and services. Procurement may be initiated by any STPNOC personnel.

- Purchase requisitions shall include material and component identification requirements, drawings, specifications, standards, inspection and test requirements, and special process instructions as appropriate.

- Purchase requisitions for materials, parts, components, or services shall be reviewed by the cognizant technical organization to verify that adequate technical and quality requirements have been specified.

- The reviews for technical and quality requirements shall be performed by someone other than the originator of the requisition. Quality will concur with all changes to quality requirements.

5.1.2.2 Purchase Orders and Contracts

- Purchase orders and contracts are prepared and issued by Contracts & Procurement and establish for the suppliers the technical and quality requirements which must be met.

- Purchase orders and contracts shall accurately reflect the technical and quality requirements established by the purchase requisition. If, during the bid negotiations with the supplier, it becomes necessary or commercially desirable to change the technical or quality requirements, such changes shall be presented for approval to the cognizant technical organization which approved the original requirements.

5.1.2.3 Change Controls

- Changes to procurement document quality and technical requirements shall require a review and approval equivalent to that of the original document. Commercial consideration changes not affecting the technical or quality requirements do not require review and concurrence by the originator.

5.1.3 For the procurement of spare or replacement parts, equipment, materials, and services, the quality and technical requirements shall be equal to or greater than the design basis requirements for the original part, equipment, materials, or services; except where less stringent quality or technical requirements may be established based on specific evaluations and justification. The cognizant technical organization shall document such justification.

5.1.3.1 Items may be procured as Commercial Grade Items (CGIs) if a documented engineering evaluation indicates the CGI will provide equivalent performance. CGI dedication will comply with established procedures designed to satisfy the requirements of References 4.2 and 4.8.

5.1.3.2 The cognizant technical organization shall verify that quality requirements are correctly stated, verifiable, and controllable; that acceptance/rejection criteria are included; and that the documents have been prepared, reviewed, and approved in accordance with STP Quality Program requirements.

5.2 Procurement Document Content

5.2.1 Procurement document control measures shall assure that appropriate regulatory requirements, design bases, and other requirements are included in the procurement process. The following shall be included or invoked by reference in procurement documents as appropriate:

5.2.1.1 Applicable regulatory, code, and design requirements, including material and component identification requirements, drawings, specifications, standards, inspection and test requirements, special process instructions and handling, preservation, cleaning, storage, packaging, and shipping requirements. These requirements shall equal or exceed the original requirements (unless changed by established design control processes).

5.2.1.2 Extent that supplier QA program shall comply with 10CFR50, Appendix B or the QA program requirements of other nationally recognized codes and standards, as applicable; or for CGIs to be dedicated for safety related use by STPNOC based on the results of a survey of the vendor's controls, the vendor's STPNOC approved and/or surveyed program.

5.2.1.3 Requirements for supplier documents, such as instructions, procedures, drawings, specifications, inspection and test records, and suppliers' QA records to be prepared, submitted, or be made available for review and/or approval by STP personnel.

5.2.1.4 Requirements for suppliers to maintain the status of required inspections or tests throughout the manufacturing process to preclude inadvertent bypassing of inspections and tests.

5.2.1.5 Requirements for STPNOC's right of access to suppliers' facilities and work documents for inspection and audit.

5.2.1.6 Requirements for extending applicable STP procurement requirements to lower-tier suppliers and subcontractors, including STPNOC's access to facilities and records.

5.2.1.7 Requirements for supplier reporting to STP nonconformances to procurement document requirements and conditions for their disposition.

5.2.1.8 Requirements for the retention, control, and maintenance of supplier QA records that are not maintained by STPNOC. Supplier-furnished records shall include:

- Documentation (e.g., certification) that identifies the purchased item and the specific procurement requirements (e.g., codes, standards, and specifications) met by the item.
- Documentation identifying any procurement requirements that have not been met.
- A description of those nonconformances from procurement requirements dispositioned "accept-as-is" or "repair".

5.2.1.9 Requirement for the supplier to submit a copy of its QA program description (does not apply for CGIs).

5.2.1.10 Requirements for the performance of maintenance and receipt inspection checks where applicable.

5.2.1.11 Applicability of 10CFR21 reporting requirements.

- The reporting requirements of 10CFR21 do not apply to vendors of CGIs to be dedicated for use by STPNOC.
- The reporting requirements of 10CFR21 do not apply to suppliers of commercial-grade calibration services.

5.2.2 Commercial grade items (items not originally designed or manufactured as a basic component) are subject to a commercial grade dedication process as defined and authorized by Engineering in accordance with procedures that meet the requirements of the NRC, before such items are approved for safety-related applications. Commercial grade dedication also applies to a commercial grade service that is associated with basic component hardware, design certification, design approval, or information in support of an early site permit application under 10 CFR Part 52, whether these services are performed by the component supplier or others (e.g., safety-related design, analysis, inspection, testing, or fabrication that is associated with a basic component).
Procedures are established to describe the responsibilities for Engineering to perform a technical evaluation, select applicable critical characteristics, and determine an appropriate dedication method for acceptance. Procedures are also established to enhance the detection of counterfeit and fraudulent items and to minimize the likelihood of the introduction of such items in safety-related applications.

STP Nuclear Operating Company (STPNOC) may utilize commercial grade items or services in its supply of basic components in a manner consistent with the guidance in [Generic Letter (GL) 89-02, "Actions to Improve the Detection of Counterfeit and Fraudulently Marked Products." GL 89-02 documents the NRC's conditional endorsement of EPRI NP-5652, "Guideline for the Utilization of Commercial grade Items in Nuclear Safety Related Applications" (NCIG-07).] In addition, Regulatory Guide 1.164 documents the NRC's endorsement of EPRI TR 3002002982, "Plant Engineering: Guideline for the Acceptance of Commercial-Grade Items in Nuclear Safety-Related Applications," Revision 1 to EPRI NP-5652 and TR-.102260.
STPNOC utilizes a commercial grade dedication process consistent with Generic Letter 89-02 and 10 CFR 21 for the supply of basic components. When a commercial grade item is modified, inspected, and/or tested to demonstrate compliance to requirements more restrictive than the manufacturer's original specifications such item is uniquely identified as different from the commercial grade (off-the-shelf) item and traceable to documents that record the difference.

When purchasing commercial grade calibration or testing services from a laboratory holding accreditation by an accrediting body recognized by the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA), commercial grade surveys need not be performed provided each of the following conditions are met:

5.2.2.1 A documented review of the laboratory's accreditation is performed and includes a verification of the following:

- The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."

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- For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed surveys need measurement parameters, ranges, and uncertainties.

- For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.

- The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.

5.2.2.2 The purchase documents require that:

- The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.

- As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).

- The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).

- Subcontracting of these accredited services is prohibited.

- The customer must be notified of any condition that adversely impacts the laboratory’s ability to maintain the scope of accreditation.

- Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.

- Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.

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5.2.2.3 It is validated, at receipt inspection, that the laboratory's documentation certifies that:

- The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and
- The purchase order's requirements are met.

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5.3 Bid Evaluation

Bid Evaluations shall be performed to evaluate adherence to technical and quality assurance requirements.

5.4 Supplier Selection

5.4.1 Suppliers of items (for CGIs, when basis for dedication includes commercial grade survey) or services shall be required to submit copies of their QA program description for evaluation prior to the issuance of a purchase order or execution of a contract, and acceptability shall be documented. The process by which suppliers are judged as being a capable procurement source is described as follows:

5.4.1.1 Procurement source evaluation and selection involves Engineering, Quality, Contracts & Procurement, and STP plant personnel, as appropriate. These organizations participate in the qualification evaluation of suppliers in accordance with written procedures.

5.4.1.2 Measures for the evaluation and selection of procurement sources shall be specified in procedures and may vary depending upon the complexity and risk significance of the item or service. When procurement source evaluations are performed, the information to be considered shall include one or more of the following:

- Experience of users of identical or similar products of the prospective supplier, other utility or approved contractor audits/evaluations, audits/evaluations by cooperative utility groups, American Society of Mechanical Engineers (ASME) Certificates of Authorization, STP records accumulated in previous procurement actions, and STP product operating experience may be used in this evaluation. When other utility, contractor or cooperative utility audits/evaluations are used, the documentation will be obtained and reviewed. Supplier history shall reflect recent capability. Previous favorable experience with suppliers may be an adequate basis for judgments attesting to suppliers' capability.

- An evaluation of the suppliers' current quality records supported by documented qualitative and quantitative information which can be objectively evaluated. This may include review and evaluation of the suppliers' QA Program Manual, procedures, and responses to questionnaires, as appropriate.

- A source evaluation of the suppliers' technical and quality capability as determined by a direct evaluation of facilities and personnel (audit, survey, or surveillance) and quality program implementation. Resolution or a commitment to resolve unacceptable technical or quality requirements identified by the bid evaluation or vendor evaluation shall be obtained prior to the award of a purchase order or contract.

5.4.1.3 Procurement source evaluations involve a review of technical and quality considerations to an extent considered appropriate by each participant. Technical considerations include the design or manufacturing capability and technical ability of suppliers to produce or provide the design, service, item, or component. Quality considerations include one of the previously stated methods of supplier evaluation and a consideration of a suppliers' current quality program or capabilities.

5.4.1.4 A documented quality assurance evaluation of a vendor's quality program shall be performed to assure it meets the appropriate requirements of 10CFR50 Appendix B, or where applicable, other nationally recognized codes and standards, or, for CGIs, to assure the program provides adequate control over established critical characteristics.

5.4.1.5 Vendors may be placed on the Approved Vendors List after passing this evaluation.

5.4.1.6 A vendor shall not be issued a purchase order or contract unless they h been accepted for placement on the Approved Vendors List or an exce has been approved by the Manager, Nuclear Oversight.

5.4.1.7 Service organizations which will supply only manpower and no other s are not required to be on the Approved Vendors List or have an STP a quality assurance program as long as the supplied personnel are traine work under the auspices of the STP Operations Quality Assurance Plan.

5.4.2 Each vendor on the Approved Vendors List shall be periodically evaluated by Quality as provided by Reference 4.3 (i.e., annually for "Full" program, biennially for "Basic" program).

5.4.2.1 A vendor may be removed from the Approved Vendors List if evaluation determines the vendor is unacceptable, the vendor requests removal or by direction of the Manager, Nuclear Oversight.

5.4.3 Planning of verification activities to be employed for item or service acceptance shall begin during the purchase requisition or contract preparation and review stage. The extent of the verification activities will vary and be a function of the relative safety significance, complexity of the purchased item or service, and the supplier's past performance. The verification activities may include vendor surveillance, receipt inspection, or post-installation testing. Verification activities are planned to assure conformance to procurement document requirements. Procedures shall establish the organizational responsibilities for identifying required verifications and methods, performing, and documenting the verification activities.

5.4.3.1 Verification activities shall be performed using plans developed in accordance with procedures with appropriate input from the cognizant technical organization. The plan shall specify the characteristics or processes to be witnessed, inspected or verified.

5.4.3.2 Specified source inspections may be waived by the Manager, Nuclear Oversight.

5.4.3.3 Vendor related reports shall be evaluated to determine the effectiveness vendor's quality assurance program.

5.5 Receiving Activities

5.5.1 Received purchased items shall be observed for shipping damage and the requirements of ANSI N45.2.2 Section 5.2.1. (This activity does not constitute an inspection and does not require qualification in accordance with Reference 4.5).

5.5.2 Receiving inspection shall be coordinated with verification activities. If source inspection is not performed or did not address all applicable attributes, receipt inspection shall be performed and shall include the applicable additional attributes listed in ANSI N45.2.2 Section 5.2.2, except for commercial grade items dedicated by survey which shall be receipt inspected as required by the procurement document.

5.5.3 Receiving inspection checklists shall be developed using the requirements specified in the procurement documents and applicable attributes of ANSI N45.2.2.

5.5.4 Statistical sampling methods may be used for groups of similar items. Sampling shall comply with nationally recognized methods or approved engineering alternates.

5.5.5 Receiving inspections shall be performed by personnel trained and qualified in accordance with Reference 4.5. Technical assistance shall be provided by Contracts & Procurement or Engineering as applicable.

5.5.6 Receiving inspection activities shall include:

5.5.6.1 Identifying materials, parts, and components and their status upon receipt by tagging or other acceptable means of identification or segregating and controlling items in receiving hold areas separate from the storage facilities for acceptable items. Identification of items shall correspond to the identification required by procurement documents and be noted on receiving documentation.

5.5.6.2 Verification of items for acceptance includes correctness of identification and specified quality documentation.

5.5.6.3 Inspecting or testing using approved procedures and calibrated tools, gauges, and measuring equipment for verification acceptance of items, including off-the-shelf items.

5.5.6.4 Items determined to be acceptable for use shall be identified with an "accept" tag or other acceptable means of identification prior to release for storage or use.

5.5.6.5 Received items which do not conform to procurement documents are controlled and segregated (if practical) and processed in accordance with Reference 4.6.

5.5.7 Acceptance by post-installation test may be utilized following one of the preceding verification methods. Post-installation testing may be used for acceptance verification when it is difficult to verify item quality characteristics, the item requires an integrated system checkout or test, or the item cannot demonstrate its ability to perform when not in use. Engineering specifications shall be used for developing post-installation test instruction requirements and acceptance documentation. Post-installation testing is the responsibility of the Plant General Manager and is witnessed by Engineering or Quality personnel at specified hold points.

5.5.8 Acceptance of Procured Items and Services

5.5.8.1 Acceptance of items and services shall be based on one or more of the following:

Written certifications (Note: This shall not be the sole method of acceptance for items in the "Basic" program)

Surveillance/Audit of procured service

Source verification

Receiving inspection/testing

Commercial Grade Item dedication

Vendor surveillance

Post-installation test

5.5.9 Documented evidence from the supplier that procured items meet procurement quality requirements, when required, such as codes, standards, or specifications will be maintained at the plant site. Such evidence shall be provided by the supplier, at the time of source or receipt inspection, for review and verification before acceptance. The documented evidence will be retrievable and available at the plant site prior to installation or use of the procured item, unless otherwise controlled in accordance with Reference 4.6.

5.6 Vendor Surveys, Surveillance and Audit

5.6.1 For items in the Full Program, Suppliers Certificates of Conformance shall be periodically evaluated by audits, independent inspections, surveys, or tests to assure that they are valid, and results are documented. When acceptance is based upon source inspection, documented evidence shall be furnished to the plant receiving organization.

5.6.1.1 Acceptance by source inspection may be considered when the item or service is vital to plant safety; or the quality characteristics are difficult to verify after receipt; or the item or service is complex in design, manufacture, inspection, or test. Vendor surveillance/source inspection involves a physical presence to monitor, by observation, designated activities for the purpose of evaluating supplier performance and product acceptance (source inspection only).

5.6.2 The STP survey and audit program provide for periodic scheduled audits or surveys of suppliers, the site procurement program, contractors, subcontractors, and others performing work. The audit and survey schedule is prepared and updated by Quality. Frequency of these surveys and audits is based upon the safety, complexity, and quality requirements, and as a minimum shall be in compliance with Reference 4.3.

5.6.3 When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally-recognized accrediting body, the accreditation process and accrediting body may be credited with carrying out a portion of the STPNOC's duties of verifying acceptability and effective implementation of the calibration service supplier's quality assurance program.

In lieu of performing an audit, accepting an audit by another licensee, or performing a commercial-grade survey, a documented review of the supplier's accreditation shall be performed by STPNOC. This review shall include, at a minimum, verification of the following:

a. A documented review of the laboratory's accreditation is performed and includes a verification of the following:

- The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."
- For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.
- For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.
- The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based

b. The purchase documents require that:

- The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.
- As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).
- The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).
- Subcontracting of these accredited services is prohibited.

- The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.

- Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.

- Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards. On two consecutive remote accreditation assessments.

c. It is validated, at receipt inspection, that the laboratory's documentation certifies that:

- The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and

- The purchase order's requirements are met.

STPNOC is responsible for ensuring that the procured services are within the accredited scope of the NVLAP and A2LA certificates.

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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 4.7.

7.0 ATTACHMENTS

7.1 None

Operations Quality Assurance Plan, Revision 25

Approved By: G. T. Powell Date: 1-4-22

G. T. Powell, President and Chief Executive Officer

This chapter is provided to define terminology used in chapters of the OQAP. They are derived from standard definitions where possible. Program procedures and documents, which implement the OQAP, may provide variations of these definitions provided the intent of the OQAP definition and requirements are satisfied.

DEFINITIONS

Abnormal Condition - Any of the following:

a. Exceeding a limiting condition for a power plant, independent spent fuel storage installation (ISFSI), or dry cask storage system (DCSS) operation established in the applicable technical specifications or technical requirements manual.

b. Observed inadequacies in the implementation of administrative or procedural controls such that the adequacy causes or threatens to cause the existence or development of an unsafe condition in connection with the operation of a nuclear power plant, ISFSI, or DCSS.

c. Conditions arising from natural or off-site man-made events that affect or threaten to affect the safe operation of a power plant, ISFSI, or DCSS.

Administrative controls - Rules, orders, instructions, procedures, policies, and designations of authority and responsibility written by management to obtain assurance of safety and high-quality operation.

Approval - An act of endorsing or adding positive authorization or both.

Approved Vendors List - A listing of vendors who have been evaluated to specific criteria and have been found to be qualified to provide specific items and/or services.

As-Built Data - Documented data that describe the condition actually achieved in a product.

Assessment/Evaluation - Systematic examination of plant systems/components, various plant activities or incidents to evaluate the effectiveness of work practices and/or management controls (i.e., self-assessments, independent assessments, and combinations of the two).

Audit - A documented activity performed in accordance with written procedures or checklists to verify, by examination and evaluation of objective evidence, that applicable elements of the quality assurance program have been developed, documented, and effectively implemented in accordance with specified requirements. An audit does not include surveillance or inspection for the purpose of process control or product acceptance (ANSI N45.2.12). An audit may include performance monitoring as an input to satisfy a specific portion or aspect of an audit, but should not totally replace an audit.

Authorized Nuclear Inspector (ANI) - Inspectors performing inspections required by Section III of the ASME Code who have been qualified by written examination under the rules of any state of the United States or province of Canada, which has adopted the Code. The inspector shall be an employee of an authorized inspection agency and shall not be an employee of the Certificate of Authorization holder. The ANI shall meet the requirements of ANSI N626.

Authorized Nuclear Inservice Inspector (ANII) - Inspectors performing inspections required by Section XI of the ASME code. The ANII is a representative of an authorized inspection agency or a state or municipality of the United States, Canadian Province, or other enforcement authority having jurisdiction over the Nuclear Power components at the plant site.

Calibration - The process by which standards or working equipment are checked against standards of known higher accuracy and adjusted as necessary to ensure their compliance with designated specifications.

Certification - The action of determining, verifying, and attesting in writing to the qualifications of personnel or material.

Cleanness - A state of being clean in accordance with predetermined standards, and usually implies freedom from dirt, scale, heavy rust, oil, or other contaminating impurities.

Commercial Grade Item - A commercial grade item (as defined in 10CFR21) is one which:

A structure, system, or component, or part thereof that affects its safety function that was not designed and manufactured as a basic component. Commercial grade items do not include items where the design and manufacturing process require in-process inspections and verifications to ensure that defects or failures to comply are identified and corrected (i.e., one or more critical characteristics of the item cannot be verified)

Component - A piece of equipment such as a vessel, piping, pump, valve, or core support structure, which will be combined with other components to form an assembly.

Contaminants - Foreign materials such as mill scale, dirt, oil, chemicals, and any matter that renders a fluid, solid, or surface impure and unclean according to present standards of acceptable cleanness.

Contractor - Any organization under contract for furnishing equipment, material, or services. It includes the term's vendor, supplier, subcontractor, fabricator, and subtier levels of these, where appropriate. Prime contractor is used to indicate either the architect engineer, NSSS supplier, constructor, or nuclear fuel supplier.

Corrective Action - Any appropriate measure applied for the purpose of making less likely the recurrence of the initial deficiency. Examples are:

a. Revision of procedures, practices, and/or design documents.

b. Increased surveillance of procedures and practices.

c. Work stoppage until problem situation is alleviated.

d. Special training of personnel.

Corrective Maintenance - Repair and restoration of equipment or components that have failed or are malfunctioning and are not performing their intended function.

Critical Attribute - An attribute or capability of a component to support a risk significant system function.

Critical Characteristics - Important design, material and performance characteristics of a commercial grade item that, once verified, will provide reasonable assurance that the item will perform its intended safety function.

Dedication - An acceptance process undertaken to provide reasonable assurance that a commercial grade item to be used as a basic component (as defined in 10CFR21) will perform its intended safety function and, in this respect, is deemed equivalent to an item designed and manufactured under a 10CFR50, Appendix B, quality assurance program. This assurance is achieved by identifying the critical characteristics of the item and verifying their acceptability by inspections, tests, or analyses performed by the purchaser or third-party dedicating entity after delivery, supplemented as necessary by one or more of the following: commercial grade surveys; product inspections or witness at holdpoints at the manufacturer's facility, and analysis of historical records for acceptable performance. In all cases, the dedication process must be conducted in accordance with the applicable provisions of 10CFR50, Appendix B. The process is considered complete when the item is designated for use as a basic component (as defined in 10CFR21).

Deficiency - The characteristic of an item or document that makes it nonconforming with the original criteria and is reported as audit findings, supplier deficiencies, event reports, significant defects, nonconformance reports, corrective action reports, or other procedurally controlled mechanisms.

Design - Technical and management processes which commence with identification of design input and which lead to and include the issuance of design output documents.

Design Control - Design control is the process used to verify that the design drawings, design calculations and specifications, including fabrication and inspection procedures for both shop and field, meet the project requirements.

Design Input - Those criteria, parameters, bases, or other design requirements upon which a detailed final design is based.

Design Output - Documents such as drawings, specifications, and other documents defining technical requirements of structures, systems, and components.

Document Review - The process of appraisal of documentation to determine the adequacy of the document with respect to quality/technical requirements.

Drawing - A document which depicts the geometric configuration of an item, or the function of an item.

Equivalency Evaluation - A technical evaluation performed to confirm that an alternative item, not identical to the original item, will satisfactorily perform its intended function once in service. This term is synonymous with "Equal-to-or-Better-Than Evaluation".

Examination - An element of inspection consisting of investigation of materials, components, supplies, or services, to determine conformance to those specified requirements which can be determined by such investigation. Examination is usually nondestructive and includes simple physical manipulation, gaging, and measurement.

Handling - An act of physically moving items by hand or mechanical means but not including transport modes.

Hold Point - A preselected step in any procedure or work process that identifies a portion or portions of the procedure or work process which requires inspection due to the complexity, safety considerations, and/or inaccessibility of the activity and beyond which work may not progress until the required inspection is performed.

In-Service Inspection - The inspection performed generally during a reactor refueling outage or plant shutdown which assures that the nuclear equipment, vessels, and materials are of sufficient integrity to provide protection of public health and safety.

Inspection - Examination or measurement to verify whether an item or activity conforms to specific requirements.

Item - Any level of unit assembly, including structures, system, subsystem, subassembly, component, part, or material.

Material - A substance or combination of substances forming components, parts, pieces, and equipment items. (Intended to include such as machinery, castings, liquids, formed steel shapes, aggregates, and cement.)

Nonconformance - A deficiency in characteristic, documentation, or procedure which renders the quality of an item unacceptable or indeterminate. Examples of nonconformance include: physical defects, test failures, incorrect or inadequate documentation, or deviation from prescribed processing, inspection, or test procedures.

Notification Point - A preselected step established by Quality Control in any procedure or work process which identifies a discretionary inspection point which may be waived based on the availability of Quality Control personnel and other activities of a more critical nature.

Nuclear Fuel - Uranium ore, converted uranium, enriched uranium, fabricated fuel, pins, and assemblies.

Package - A wrapping or container including its contents of material or equipment.

Part - An item which has work performed on it and which is attached to and becomes part of a component before completion of the component.

Plant Modification - A planned physical change to a plant structure, system or component as described in design documents.

Preventive Maintenance - Preventive, periodic and planned maintenance actions taken to maintain a piece of equipment within design operating conditions and extend its life and is performed prior to equipment failure. This includes technical specification surveillances, inservice inspections and other regulatory forms of preventive maintenance.

Procedure - A document that specifies or describes how an activity is to be performed. It may include methods to be employed, equipment, or materials to be used and sequence of operations.

Procurement - Interdisciplinary function by which equipment, materials, or services are acquired.

Procurement Documents - Purchase requisitions, purchase orders, drawings, contracts, specifications or instructions used to define requirements for purchase. (ANSI N45.2.13)

Proposal - A document, which describes the equipment, material, or services which the vendor, proposes to furnish. The proposal should include commercial information and a statement of any exceptions to the provisions of the inquiry.

Purchase Order (or Contract) - A document authorizing a vendor to provide equipment, material or services in accordance with the terms and conditions established in the purchase order or contract.

Qualification (Personnel) - The characteristics or abilities gained through training or experience or both that enable an individual to perform a required function.

Qualified Procedure - A procedure which incorporates all applicable codes and standards, manufacturer's parameters, and engineering specifications and has been proven adequate for its intended purpose.

Quality Assurance - All those planned or systematic actions necessary to provide adequate confidence that an item or facility will perform satisfactorily in service.

Quality Control - Those quality assurance actions, which provide a means to control and measure the characteristics of an item, process, or facility to, established requirements.

Quality-Related - Those activities or items required to be included in the Operations QA program by the UFSAR, Federal Codes, other regulatory licensing requirements or management directive. The term quality-related encompasses safety-related and important to safety activities or items.

Quality-Related Item - A structure, system, or component identified in UFSAR Section 3.2 as requiring applicable quality oversight during the operations of Units 1 & 2, ISFSI, and DCSS.

Receiving - Taking delivery of an item at a designated location.

Records - Those records, physical or electronic media, which furnish documentary evidence of the quality of items and of activities affecting quality. A document is considered a quality assurance record when the document has been completed.

Reference Standard - Standards (that is, primary, secondary and working standards, where appropriate) used in a calibration program. These standards establish the basic accuracy limits for that program.

Repair - The process of restoring a nonconforming characteristic to a condition such that the capability of an item to function reliably and safety is unimpaired even though the item still may not conform to the original statement.

Replacements - Spare and renewal components, appurtenances and subassemblies or parts of a component or system. Replacements also include the addition of components but do not include the addition of complete systems.

Review - A deliberately critical examination, including observation of plant operation, evaluation of audit results, procedures, certain contemplated actions, and after-the-fact investigations of abnormal conditions.

Rework - The process by which a nonconforming item is made to conform to a prior specified requirement by completion, remachining, reassembling, or other corrective means.

Safety-Related - Those plant features necessary to assure the integrity of the reactor coolant pressure boundary, the capability to shut down the reactor and maintain it in a safely shutdown condition, or the capability to prevent or mitigate the consequences of accidents which could result in off-site exposures comparable to the guideline exposure of NRC Regulations 10CFR100.

Special Process - A process, the results of which are highly dependent on the control of the process or the skill of the operators, or both, and in which the specified quality cannot be readily determined by inspection or test of the product.

Specification - A concise statement of a set of requirements to be satisfied by a product, material, or process indicating, whenever appropriate, the procedure by means of which it may be determined whether the requirements given are satisfied. (Specifications may also be used to describe technical services to be provided.)

Standard - The result of a particular standardization effort approved by a recognized authority.

Stop Work - The suspension of an activity.

Storage - The act of holding items at the construction site or in an area other than its permanent location in the plant.

Surveillance/Quality Performance Monitoring - The act of observing real time activities and/or reviewing documentation to verify conformance with specified requirements and industry good practices, and to evaluate their adequacy and effectiveness.

Surveillance Testing - Periodic testing to verify that safety-related structures, systems, and components continue to function or are in a state of readiness to perform their function.

Survey - An activity performed in a vendor's facility to determine the adequacy and implementation of a vendor's quality assurance program. This activity is normally done prior to award of a purchase order.

System - A group of subsystems united by some interaction or interdependence, performing duties but functioning as a single unit.

Testing - The determination or verification of the capability of an item to meet specified requirements by subjecting the item to a set of physical, chemical, environmental, or operating conditions.

Use-as-is - A disposition which may be imposed for a nonconformance when it can be established that the discrepancy will result in no adverse conditions and that the item under consideration will continue to meet all engineering functional requirements including performance, maintainability, fit, and safety.

Verification - An act of confirming, substantiating, and assuring that an activity or condition has been implemented in conformance with the specified requirements.

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 (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 Units 1 & 2, Dry Cask Storage System (DCSS), and Independent Spent Fuel Storage Installation (ISFSI).

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 None

5.0 RESPONSIBILITIES

5.1 The STPNOC organization includes the Executive Vice President and Chief Nuclear Officer, the Executive Vice President and Chief Administrative Officer, and the Executive Vice President and Chief Financial Officer. The senior management of these groups report to the President and Chief Executive Officer.

5.2 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. The President and Chief Executive Officer shall designate those members of senior management to function as the Senior Management Team.

5.3 The Executive Vice President and Chief Nuclear Officer is responsible for implementing quality program requirements applicable to the following functions: generation, engineering and projects. The management of these functions report to the Executive Vice President and Chief Nuclear Officer.

5.3.1 The Site Vice President is responsible for implementing quality program requirements applicable to the following functions: Projects (Out/PIP/PMPI) and staffing STP with qualified personnel and acquiring and coordinating the assistance of internal and external organizations for the following functions including plant general management and training. The senior management of these functions report to the Site Vice President.

5.3.1.1 The Manager, Projects (Out/PIP/PMPI) is responsible for implementing quality program requirements applicable to the following functions: strategic projects, projects, outage management, Spent Fuel Management Project, major, and corporate projects. The management of these functions report to the Manager, Projects (Out/PIP/PMPI).

5.3.1.2 The Plant General Manager has prime responsibility for the safe operations of the units. The plant staff, under the direction of the Plant General Manager, develops detailed procedures and instructions for testing, operation, modification, and maintenance of the STP. The Plant General Manager is responsible for implementing quality program requirements applicable to the following functions including: operations, maintenance, chemistry, health physics, and work control. The management of these functions report to the Plant General Manager.

5.3.1.3 The General Manager, Engineering is responsible for implementing quality program requirements applicable to the following functions: design engineering, testing/program engineering (includes NDE and weld inspections, ref: CR 18-7326), strategic engineering, plant engineering and nuclear fuel & analysis (includes risk management). The management of these functions report to the General Manager, Engineering.

5.3.1.3.1 The Manager, Nuclear Fuel & Analysis is responsible for implementing quality program requirements applicable to the following functions: reactor engineering, core design, reload safety analysis, nuclear fuel performance and supply, and risk management (probabilistic risk assessment and risk-informed applications).

Activities related to the Comprehensive Risk Management Program include oversight of Probabilistic Safety Assessment activities. The Comprehensive Risk Management Expert Panel guides the implementation of the Comprehensive Risk Management Program and is composed of a Chairman and additional senior level management designated by the President and Chief Executive Officer.

5.4 The Executive Vice President and Chief Administrative Officer is responsible for implementing quality program requirements applicable to the following functions: corporate services, quality assurance, plant protection, emergency response, access authorization, fitness for duty, and performance improvement. The management of these functions report to the Executive Vice President and Chief Administrative Officer.

5.4.1 The Manager, Nuclear Oversight is responsible for implementing quality program requirements applicable to quality assurance.

5.4.1.1 The Manager, Nuclear Oversight has the independence to conduct Quality activities without undue pressure of cost or schedule and is responsible for the following:

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;

Identify, initiate, recommend, or provide solutions to quality-related problems and verify the implementation and effectiveness of the solutions; and

Independent oversight activities, including audits, independent assessments, evaluations, surveillances, performance monitoring, inspections, independent oversight of NDE and weld inspections, vendor oversight, and administration of organizational unit independent review activities.

5.4.1.2 The Manager, Nuclear Oversight, at his discretion, has unfettered access to the President and Chief Executive Officer and the Board of Directors.

5.4.1.3 The Manager, Nuclear Oversight 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.

5.4.2 The General Manager, Corporate Services is responsible for implementing quality program requirements applicable to the following functions: information technology, cyber security, records management and technical support services. The management of these functions report to the General Manager, Corporate Services.

5.4.3 The Director Emergency Response Services is responsible for implementing quality program requirements applicable to plant protection, emergency response, fitness for duty and access authorization. The management of these functions report to the Director Emergency Response Services.

5.5 The Executive Vice President and Chief Financial Officer is responsible for implementing quality program requirements applicable to contracts & procurement. The management of this function reports to the Executive Vice President and Chief Financial Officer.

5.6 The Vice President Regulatory Affairs and General Counsel is responsible for implementing quality program requirements applicable to regulatory affairs, employee concerns and general counsel. The management of this function reports to the Vice President Regulatory Affairs and General Counsel.

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 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. Line organizational details and responsibilities for Units 1 & 2 are further described in STP UFSAR Chapter 13.1.

7.0 DOCUMENTATION

7.1 None

8.0 ATTACHMENTS

8.1 None

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 (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 (SSCs) 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), 10CFR72, Subpart G (those features, activities, and SSCs of an Independent Spent Fuel Storage Installation (ISFSI), Dry Cask Storage System (DCSS), or a transportation package important to safety that maintain the conditions required to prevent damage to a container during handling and storage, or provide reasonable assurance that radioactive material can be received, handled, stored, and retrieved without undue risk to the health and safety of the public), ASME Boiler and Pressure Vessel Code, Sections III, V, IX, 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.

2.3 Additional quality requirements specific to ISFSI and DCSS are located in Reference 4.9.

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 applied to safety-related SSCs categorized as High Safety Significant (HSS), as prescribed in Table I to this chapter and throughout individual OQAP chapters.

3.4 Basic program controls - Levels of control and oversight, lower than in the Full Program, applied to safety-related SSCs categorized as Medium Safety Significant (MSS), 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-related SSCs categorized as either HSS or MSS.

3.6 Limited program controls – Limited controls applied to safety-related SSCs categorized as either Low Safety Significant (LSS) or Non-Risk Significant (NRS).

3.7 Graded Approach to Quality – Used as required by 10CFR72 to apply to all activities affecting the important to safety functions of those SSCs of the ISFSI or DCSS that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. The identification of important to safety SSCs for each type of DCSS used at STP is contained within its own unique 10CFR72 (Certificate Holder's) Final Safety Analysis Report (FSAR) (as updated), and Certificate of Compliance (C of C).

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)

4.7 Updated Final Safety Analysis Report

4.8 Safety Evaluation on Exemption Requests from Special Treatment Requirements of 10 CFR Parts 21, 50, and 100 (TAC NOS. MA6057 AND MA6058)

4.9 OQAP Chapter 20.0, Dry Cask Storage System, and Independent Spent Fuel Storage Installation

4.10 10CFR72, Subpart G

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 (Units 1 & 2) and the DCSS/ISFSI.

5.1.2 The President and Chief Executive Officer has overall responsibility for quality assurance. The Manager, Nuclear Oversight 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, 10CFR72, Subpart G, and 10CFR71, Sub-Part H (except design and fabrication of NRC certified radioactive waste shipping casks). These regulations are not applicable to LSS and NRS safety-related components, to the extent that the Nuclear Regulatory Commission has granted STP an exemption from the regulations as described in Reference 4.8.

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).

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 the risk significance of system functions, components' contribution to core damage frequency and large early release frequency, components' critical attributes (needed to support risk significant system functions), 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 four graded applications (i.e., "Full", "Basic", "Targeted", and "Limited").

5.3.6 "Full" program controls are applied to safety-related SSCs categorized as HSS. 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 MSS. These are lower levels of control and oversight, designed to maintain/preserve those identified critical attributes of SSCs needed to support risk significant system functions. These controls are intended to reflect economical and efficient business practices. Table I to this OQAP chapter prescribes the program commitments applicable to "Basic" program activities.

5.3.8 "Limited" program controls are applied to safety-related SSCs categorized as either LSS or NRS. Only specific program controls related to the activities listed in the following subparagraphs are applicable to these SSCs. The other chapters of the OQAP are not applicable to safety-related LSS and NRS SSCs. Instead, the treatment processes applicable to these SSCs are described in the Updated Final Safety Analysis Report Section 13.7.3.3 and implementing procedures:

5.3.8.1 Those elements in Chapter 1.0 that are needed to implement and control activities described above;

5.3.8.2 Applicable requirements in this Chapter;

5.3.8.3 Modification/design activities as described in Chapter 6.0; and

5.3.8.4 Corrective action as described in Chapter 13.0.

5.3.9 "Targeted" program controls are applied to non-safety related SSCs, for which 10CFR50, Appendix B is not applicable, categorized as HSS or MSS. 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 risk significant.

5.3.10 Safety-related 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 significance to ensure that Full program controls are applied to their critical attributes.

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

5.3.12 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.

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 to the extent not exempted. 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 Manager, Nuclear Oversight 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, DCSS, ISFSI and of the interfacing organizations' activities.

5.10.2 Independent oversight of the implementation of the OQAP is conducted under the cognizance of the Senior Management Team 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 N45.2, 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.	Same as full.
	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. Also refer to the Southern Nuclear Operating Company Safety Evaluation dated June 17, 2005 (ADAMS Accession No.: ML051570349), section 3.4, change 4.	Same as full.
	C.4.a.b.c - STP performs these audits in accordance with a nominal biennial frequency.	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.	Same as full.
		3.4.2 refer to R.G. 1.58 regarding use of personnel not qualified in accordance with ANSI N45.2.6.
	4.5 - refer to R.G. 1.33 coverage regarding audit frequency.	Same as full.
	5.2.6 (5th paragraph) - independent verification may be concurrent with (same time as) work performance.	Same as full.
	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.

TABLE I
PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI N18.7, 1976/ANS 3.2 (cont'd)	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.
		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)

TABLE I
PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
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.
	5.2.1 - These activities do not constitute an "inspection" as defined in ANSI/ASME NQA-1, 1983, Supplement S-1, Terms and Definitions. Therefore, the requirements for qualification to ANSI N45.2.6 as stated in Section 2.4 do not apply to personnel performing these activities.	Same as Full
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, 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.
	Personnel performing the activities stated in ANSI N45.2.2, Section 5.2.1 do not require qualification to this Standard. (see exception to ANSI N45.2.2)	Same as Full.

TABLE I
PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
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.
ANSI N45.2.10, 1973	Same as R.G. 1.74 above.	Same as Full.
R.G. 1.88, rev. 2 (10/76)	No exceptions taken.	Same as Full.
ANSI N45.2.9, 1974	Section 5.6 - supplement the provisions of this section by providing for alternate temporary storage of records. Allow the use of 1-hour fire rated cabinets to store records that are awaiting processing (e.g., processing into Optical Disk Storage). Storage of these records in 1-hour fire rated cabinets will be controlled by procedure which specify a maximum allowable time limit. Cabinets housing these records shall be controlled for access and shall be located in an area protected by sprinklers.	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.	

TABLE I
PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
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.	Same as Full.
	3.2.3 – When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally-recognized accrediting body, the procurement documents are not required to impose a quality assurance program consistent with 10CFR50, Appendix B. In such cases, accreditation may be accepted in lieu of the Purchaser imposing a QA Program consistent with 10CFR50, Appendix B, provided all of the following are met:	Same as Full.
	1) The accreditation is to ANSI/ISO/IEC 17025:2017	
	2) The accrediting body is either the National Voluntary Laboratory Accrediting Program (NVLAP) administered by the National Institute of Standards and Technology (NIST) or American Association for Laboratory Accreditation (A2LA). The A2LA accreditation is recognized by NVLAP through the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA).	
	3) The published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties. This requires the supplier to provide a measurement of collective uncertainty and obviates the need to impose the four-to-one ratio requirement discussed in NIST Information Report (NISTIR) 6989.	
	4) The purchase documents impose additional technical and administrative requirements, as necessary, to satisfy STPNOC QA Program and technical requirements. This requires the calibration certificate/report include identification of the laboratory equipment/standards used.	
	5) Purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance.	
	6) The alternative method is limited to the domestic calibration service suppliers.	
	7) The alternative method is applicable to sub-suppliers of calibration service suppliers, provided the above conditions are met.	
	5.3 and 5.4 - Provision is established for, in special cases and with management approval, completion of these activities after award of contract.	Same as Full.

TABLE I
PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
ANSI N45.2.13, 1976 (cont'd)	9.0 - This section will be implemented based on the scope, complexity and safety significance of the items being procured.	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.	Same as Full.
	C.3a(1) - refer to table coverage of R.G. 1.33 regarding audit frequency.	Same as Full.
	C.3.b(2) - When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally recognized accrediting body, the accreditation process and accrediting body may be credited with carrying out a portion of the Purchaser's duties of verifying acceptability and effective implementation of the calibration service supplier's quality assurance program.	Same as Full for commercial-grade calibration services
	In lieu of performing an audit, accepting an audit by another licensee, or performing a commercial-grade survey, a documented review of the supplier's accreditation shall be performed by the Purchaser. This review shall include, at a minimum, verification of the following:	STP will audit vendors only as deemed necessary. STP will perform biennial evaluations.
	1) The accreditation is to ANSI/ISO/IEC 17025:2017	
	2) The accrediting body is either NVLAP or A2LA. The A2LA accreditation is recognized by NVLAP through the ILAC MRA.	
	3) The published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties. This requires the supplier to provide a measurement of collective uncertainty and obviates the need to impose the four-to-one ratio requirements discussed in NISTIR 6989.	
	4) The purchase documents impose additional technical and administrative requirements, as necessary, to satisfy STPNOC QA Program and technical requirements. This requires the calibration certificate/report include the identification of the laboratory equipment/standards used.	
	5) Purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance.	

TABLE I
PROGRAM COMMITMENTS

R.G./ANSI STANDARD	FULL PROGRAM	BASIC PROGRAM
R.G. 1.144, rev. 1 (9/80) (cont'd)	6) The alternative method is limited to the domestic calibration service suppliers.	
	7) The alternative method is applicable to sub-suppliers of calibration service suppliers, provided the above conditions are met.	
	The licensee is responsible for ensuring that the procured services are within the accredited scope of the NVLAP and A2LA certificates.	
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.	Same as Full.
	1.4 - refer to table coverage of R.G. 1.74.	Same as Full.
	2.21 - refer to table coverage of R.G. 1.28.	Same as Full.
	2.3.3.1 - refer to table coverage of R.G. 1.28.	Same as Full.
	2.3.4 - In lieu of the requirements of section 2.3.4 of ANSI N45.2.23-1978 the following alternative is acceptable:	Same as Full.
	Prospective lead auditors shall demonstrate their ability to properly implement the audit process and effectively lead an audit team. This demonstration process will be described in implementing procedures and will include the evaluation and documentation of the results of the demonstration. Regardless of the methods used for the demonstration, the prospective lead auditor is required to participate in at least one nuclear quality assurance audit within the year preceding the individual's effective date of qualification. Upon successful demonstration of the ability to effectively implement the audit process and effectively lead audits and having met the other provisions of Section 2.3 of ANSI N45.2.23-1978, the individual may be certified as being qualified to lead audits.	

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 responsibilities for the conduct of plant (Units 1 & 2), Dry Cask Storage System (DCSS), and the Independent Spent Fuel Storage Installation (ISFSI) operations at the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter applies to all personnel performing activities associated with structures, systems, and components during the operations phase of the STP Units 1 & 2, DCSS, and ISFSI.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 STP Technical Specifications

4.2 OQAP Chapter 2.0, Table I

4.3 UFSAR 13.5.2.1 paragraph 4, Emergency Operating Procedures

4.4 OQAP Chapter 14.0, Records Control

4.5 10CFR100, Reactor Site Criteria

4.6 OQAP Chapter 19.0

5.0 REQUIREMENTS

5.1 Activities affecting structures, systems, and components shall be conducted in accordance with written, approved procedures.

5.1.1 Procedural compliance and requirements for procedure use shall be prescribed in writing. Measures shall be established by which temporary changes to approved procedures can be made, including the designation of a person(s) authorized to approve such changes. Temporary changes which clearly do not change the intent of the approved procedure shall be made in accordance with Reference 4.6.

5.1.2 Guidance shall be provided to identify the manner in which procedures are to be implemented. Examples of such guidance include identification of those tasks that require:

5.1.2.1 The written procedure to be present and followed step by step while the task is being performed.

5.1.2.2 The operator to have committed the procedural steps to memory.

5.1.2.3 Verification of completion of significant steps by initial or signatures on checkoff lists.

5.1.3 The types of procedures that shall be present and referred to directly are those developed for extensive or complex tasks where reliance on memory cannot be trusted (e.g., reactor startup, tasks which are infrequently performed, and tasks in which operations must be performed in a specified sequence). Necessary data shall be recorded as the task is performed.

5.1.4 Temporary procedures may be issued to direct operations during testing, refueling, maintenance, and modifications; to provide guidance in unusual situations not within the scope of the normal procedures; and to ensure orderly and uniform operations for short periods when the plant, a system, or a component is performing in a manner not covered by existing detailed procedures or has been modified or extended in such a manner that portions of existing procedures do not apply. Temporary procedures shall include designation of the period of time during which the procedures are to be used and shall be subject to the same review and approval process as permanent procedures.

5.1.5 Emergency Operating Procedures shall be prepared in accordance with Reference 4.3.

5.2 Operating Orders

5.2.1 A mechanism shall be provided for issuing management instructions which have short-term applicability and which require dissemination. Such instructions, sometimes referred to as special orders, operating orders, or standing orders should encompass special operations, job-turnover and relief, data taking, publications and their distribution, plotting process parameters, personnel actions, or other similar matters. These shall not be used in lieu of, or to modify existing procedures.

5.2.2 A mechanism shall be provided for management to issue information and direction to the oncoming evening and night shifts. These night orders shall be signed and dated by a responsible supervisor. These shall not be used in lieu of, or to modify existing procedures.

5.3 Shift Operations

5.3.1 The responsibilities and authorities of Licensed Operations Personnel shall be specified in plant procedures. These procedures shall include responsibilities and authorities for startup, shutdown, and operation of the reactor and associated equipment, for observance of instrumentation and for implementation of the Emergency Plan (Refer to Reference 4.1). The cognizant Shift Manager shall be responsible for maintaining sufficient knowledge of system or equipment tests or inspections in progress to control the overall plant operation. Personnel performing tests or inspections shall keep the Shift Manager or Control Room Operator advised of the current status of tests or inspections in progress which may affect plant operations.

5.3.2 When operating during normal, abnormal, or emergency conditions, the operator shall rely on plant instrumentation, unless proven to be incorrect. When operating parameters are not as expected, the unit shall be placed in a known safe condition. A manual reactor trip or safety system actuation shall be initiated if system parameters for reactor trip or safety systems exceed their actuation setpoint and automatic actuation does not occur.

5.3.3 In the event of an emergency not covered by an approved procedure, operations personnel shall take action to minimize personnel injury, damage to the facility, and maintain offsite exposures within the requirements of 10CFR100.

5.4 Equipment Control

5.4.1 Procedures shall provide for control of equipment as necessary to maintain personnel and reactor safety and to avoid unauthorized operation of equipment. These procedures shall require control measures such as locking or tagging to secure and identify the control status of equipment, and responsibility and action necessary for isolating the equipment. These procedures shall require independent verifications where appropriate to ensure these measures have been correctly implemented.

5.4.2 Procedures shall provide for the identification of required tests and inspections and provide documentary evidence that the tests and inspections have been performed prior to considering the affected system operable.

5.4.3 Permission to release equipment or systems for maintenance shall be granted by designated operations personnel. These operations personnel shall verify before release that, based on a review of the plant technical specifications, the system or component can be released for the time period that it may be out of service. The requirements for equipment operability stated in Reference 4.1 shall be met.

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 None

1.0 PURPOSE

1.1 The purpose of this chapter is to establish requirements for qualification, training, and certification of personnel whose activities may affect structures, systems, components and activities at the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter provides for the qualification, training, and certification of personnel performing activities related to the structures, systems, and components under the jurisdiction of the Operations Quality Assurance Plan (OQAP).

2.2 Additional requirements specific to Dry Cask Storage System and Independent Spent Fuel Storage Installation activities are provided in Reference 4.7.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 OQAP Chapter 2.0, Table I

4.2 SNT-TC-1A, Recommended Practice for Nondestructive Personnel Qualification and Certification

4.3 10CFR55 Operator's Licenses

4.4 ASME Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components

4.5 OQAP Chapter 14.0, Records Control

4.6 INPO ACAD 02-004, Guidelines for the Conduct of Training and Qualification Activities

4.7 OQAP Chapter 20.0, Dry Cask Storage System and Independent Spent Fuel Storage Installation

5.0 REQUIREMENTS

5.1 General

5.1.1 Position qualification requirements shall be established for personnel in accordance with References 4.1, 4.2, 4.3, 4.4.

5.1.2 Programs shall be developed for the qualification, training, and certification of personnel. The programs shall provide for:

5.1.2.1 Establishing individual training files.

5.1.2.2 Documented certification, when required (e.g., NRC licensed personnel, NDE personnel).

5.1.2.3 Continuing training and retraining.

5.2 General Employee Training

5.2.1 A general employee training program shall be developed and administered to personnel requiring unescorted access within the protected and/or vital areas. This program shall address but not be limited to the following:

5.2.1.1 Job related procedures and instructions

5.2.1.2 Quality program indoctrination

5.2.1.3 Radiological health and safety

5.2.1.4 Industrial safety and fire protection

5.2.1.5 Emergency Plan

5.2.1.6 Security program

5.2.2 Temporary personnel employed at the STP shall be trained in the above areas to the extent necessary to assure satisfactory performance of their duties.

5.3 Specialized Training Programs

5.3.1 NRC licensed operators shall be qualified, trained and certified in accordance with Reference 4.1 and 4.3.

5.3.2 Inspection, testing and examination personnel shall be qualified, trained, and certified in accordance with Reference 4.1.

5.3.3 Nondestructive examination personnel shall receive training, which meets the requirements of Reference 4.1, 4.2, 4.4, and 4.7.

5.3.4 Audit personnel shall be qualified, trained and certified to the requirements of Reference 4.1.

5.3.5 Other personnel shall be qualified, trained and certified commensurate with the functions they perform (e.g., welding, coating, chemical cleaning, maintenance, etc.).

5.4 Experienced personnel may be considered for exemption from prerequisite training. Training exemptions shall be controlled in accordance with approved station procedures.

5.5 Procedures shall provide for the evaluation of performance of employees to determine the capabilities of the individual to meet established qualification requirements.

5.6 Procedures shall provide for the recertification of appropriate personnel in accordance with applicable standards.

5.7 Training and certification of personnel, to the degree necessary for the activity, shall be completed prior to assignment of work on items or activities.

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 4.5.

7.0 ATTACHMENTS

7.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to establish requirements for the conduct of maintenance and installation controls for modifications on structures, systems, and components at the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter is applicable to maintenance and the installation of modifications, including related activities such as special processes (e.g., welding, cleaning, and housekeeping), of structures, systems, and components subject to the controls of this OQAP.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 OQAP Chapter 2.0, Table I

4.2 OQAP Chapter 3.0, Conduct of Plant Operations

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

4.4 OQAP Chapter 8.0, Control and Issuance of Documents

4.5 OQAP Chapter 12.0, Instrument and Calibration Control

4.6 OQAP Chapter 14.0, Records Control

4.7 OQAP Chapter 13.0, Control of Conditions Adverse to Quality

5.0 REQUIREMENTS

5.1 Maintenance, the installation of modifications, and related activities which may affect the functioning of structures, systems, or components shall:

5.1.1 Be performed in a manner to ensure quality equivalent to that specified in design bases and requirements, materials specifications, and inspection requirements.

5.1.2 Be preplanned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances which conform to applicable codes, standards, specifications, and criteria, and:

5.1.2.1 Address controls which assure quality of maintenance and modification installation activities (for example: inspections, measurements, tests, welding, heat treatment, cleaning, nondestructive examination, and personnel qualifications) and contain provisions to document the performance thereof.

5.1.2.2 Contain measures, which identify the inspection and test status of material, equipment, and components used in maintenance and modification installation activities.

5.1.2.3 Assure that the equipment has been returned to prescribed operating status at the completion of the work, which includes verification of functional acceptability.

5.1.2.4 Be performed by or under the supervision of qualified personnel and in such a manner that the activity can be safely performed under the existing plant operating conditions.

5.1.2.5 Be performed only after authorized release of equipment in accordance with procedures that meet the requirements of Reference 4.2.

5.1.2.6 Provide measures for the protection of workers and equipment, including personnel entry into enclosed spaces such as tanks and voids.

5.1.2.7 Provide means of preventing unauthorized operation of equipment (e.g., locking or tagging).

5.1.2.8 Assure control of temporary modifications (e.g., blank flanges or temporary electrical jumpers).

5.1.2.9 Provide a method of ensuring that required tests and inspections are complete prior to return to service of the item on which the work was performed.

5.1.3 Assure procedures, and changes thereto, are reviewed and approved in accordance with Reference 4.4.

5.2 Preventive Maintenance

5.2.1 A preventive maintenance program shall be maintained which prescribes the frequency and type of maintenance to be performed. This program is based on service conditions, manufacturer's recommendations, and equipment performance experience.

5.3 Corrective Maintenance

5.3.1 Equipment failures, malfunctions and degradation shall be corrected in accordance with Reference 4.7. This shall include determination of root cause and implementation of recurrence controls, as appropriate.

5.3.2 Replacement components of a new type shall receive adequate testing or be of a design for which experience indicates a high probability of satisfactory performance.

5.3.3 Consideration should be given to an augmented testing and inspection program following a large-scale component replacement (or repair) until a suitable level of performance has been demonstrated.

5.4 Emergency Maintenance

Should operating conditions occur which warrant immediate corrective maintenance in order to prevent or mitigate the release of radioactive material, hazards to personnel, or extensive equipment damage, then the following shall apply:

5.4.1 Direct action shall be taken to stabilize the condition. Procedures shall designate those operating individuals responsible for authorizing this initial action.

5.4.2 Once the condition has stabilized, the initial action taken shall be documented and reviewed in accordance with approved procedures. If the initial action taken is judged to be incorrect or inadequate, alternative action shall be taken.

5.5 Control of Special Process

5.5.1 Special processes include manufacturing processes, inspections, tests, and others, which require qualification of the procedures, technique or personnel to control the quality of the process. Special processes (e.g., welding, heat treating, chemical cleaning, protective coating, and nondestructive examination) shall be performed in accordance with applicable codes, standards, specifications, criteria and other special requirements.

5.5.1.1 Written procedures shall be established and utilized to assure these activities are accomplished in a controlled manner.

5.5.1.2 Special processes shall be performed by qualified personnel using qualified procedures. Personnel shall be qualified under Reference 4.3. Procedures and equipment shall be qualified under applicable codes and standards, or if not covered, the qualification requirements shall be defined.

5.5.1.3 Records shall be maintained and kept current for the qualification of procedures, equipment, and personnel associated with special processes. Records shall be in sufficient detail to clearly define the procedures, equipment, or personnel being qualified, criteria or requirements used for qualification and the individual approving the qualification.

5.5.1.4 Procedures shall provide for the control of special process identification indicators, such as welder's stamps, as appropriate.

5.5.2 Control of Outside Contractors

5.5.2.1 Qualified outside organizations may be employed to perform special processes and shall be required to conform to the requirements described in this chapter. Special process procedures submitted by an outside organization in accordance with procurement document requirements shall receive a technical review by the responsible site organization.

5.6 Housekeeping and Cleanness Control

5.6.1 Housekeeping and cleanness control practices shall be established which assure that:

5.6.1.1 The nature of work activities, conditions, and environments that can affect the quality of structures, systems, and components is controlled. Control measures shall be established to exclude the entry of foreign material into a closed system and to ensure that foreign material is removed before the area is closed.

5.6.1.2 Appropriate cleaning materials, equipment processes, and procedures are used to assure that the quality of an item is not degraded as a result of housekeeping or cleaning practices or techniques and provide for the disposal of combustible material and debris to support fire protection.

5.6.1.3 Access is controlled to prevent foreign material introduction during the maintenance or modification of systems.

- Cleaning following maintenance or modification of radioactively contaminated systems or equipment shall require special consideration for radioactive contamination control and storage of radioactive waste.

- Prior to closure of designated systems or components, an inspection shall be conducted to assure cleanness. The results of the inspection shall be documented.

5.6.1.4 Where necessary, special cleaning requirements associated with certain equipment are addressed in appropriate procedures.

5.7 Documents Associated with Maintenance/Modifications

5.7.1 Documents, such as maintenance, modifications, and installation procedures, maintenance requests, drawings, specifications, and others shall be issued, reviewed, and controlled in accordance with Reference 4.4.

5.7.2 Maintenance, modification, and installation documents shall be traceable to the structure, system or component repaired, replaced, or maintained and shall as a minimum contain the following:

5.7.2.1 Description of components

5.7.2.2 Description of work

5.7.2.3 Names of responsible persons doing work

5.7.2.4 Traceability of parts used

5.7.2.5 Reference to measuring and test equipment used

5.7.2.6 Inspection and test status

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 4.6.

7.0 ATTACHMENTS

7.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to establish the requirements and responsibilities for design and modification control of structures, systems, or components at the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter applies to the design and modification activities associated with the preparation and review of design documents including the translation of applicable Code of Federal Regulation requirements and design bases into design documents.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 STP Technical Specifications

4.2 OQAP Chapter 5.0, Maintenance, Installation of Modifications, and Related Activities

4.3 OQAP Chapter 14.0, Records Control

4.4 10CFR50.59, Changes, Tests and Experiments

4.5 OQAP Chapter 13.0, Control of Conditions Adverse to Quality

4.6 OQAP Chapter 2.0, Table I

5.0 REQUIREMENTS

5.1 Measures shall be established to document selection of design inputs. Changes to specified design inputs, including identification of their source, shall be identified and documented. As the design evolves, a review pursuant to the requirements of 10CFR50.59 shall be performed as required by Reference 4.4.

5.2 Measures shall be established to control design activities to assure design inputs are translated into design documents such as specifications, drawings, procedures, or instructions.

5.2.1 Design activities involving reactor physics; stress, thermal, hydraulic, and accident analysis; materials compatibility; and accessibility for maintenance, inservice inspection, and repair will be performed according to approved procedures by appropriately qualified individuals. Results of analyses will be appropriately verified and documented.

5.2.2 Design documents shall include appropriate quality standards. If an alternate quality requirement is used (e.g., other than the originally specified quality standard) the change shall be documented and approved.

5.2.3 Design analyses shall be sufficiently detailed as to purpose, method, assumptions, design input, references, units, and status (preliminary or final) such that a technically qualified person can review and understand the analyses and verify the adequacy of the results without recourse to the originator.

5.2.4 A review for application suitability of materials, parts, equipment, and processes essential to the functions of structures, systems, and components is done as part of the design document preparation and review process. The procedures, which govern the preparation and review of design documents, require that valid industry standards and specifications be used for this review. Review of standard off-the-shelf commercial materials, parts, and equipment for suitability of application with structures, systems, and components will be conducted before selection.

5.3 Measures shall be established to identify and control design interface among participating organizations (internal and external).

5.4 Measures shall be established to verify adequacy of design and design changes.

5.4.1 The design process shall include verification by qualified persons to assure that the design is adequate and meets specified design input. Design control procedures shall specify requirements for the selection and performance of design verification methods. Design verification shall be either by design review, alternate calculation, qualification testing, or a combination of these. The depth of design verification shall be commensurate with the importance of the system or component to plant safety, complexity of the design, and similarity of design to previous designs.

5.4.1.1 If the verification method performed is only through qualification testing, the following are required.

- Procedures shall provide criteria that specify when verification should be by test.
- Prototype, component, or feature testing shall be performed as early as possible before installation of plant equipment, or before the point when the installation would become irreversible.
- Verification by test shall be performed under conditions that simulate the most adverse design conditions as determined by analysis.

5.4.2 Design verification shall be performed by competent individuals or groups other than those who performed the original design.

5.4.3 Design verification should not be performed by individuals that have immediate supervisory responsibility for the individual performing the design; have specified a singular design approach; have ruled out certain design considerations; or have established the design inputs for that particular design aspect. (This paragraph's recommendation does not apply to verification of design for items in the "Basic" or "Limited" program category)

5.4.4 Design verification will normally be performed prior to release for procurement, manufacture, installation, or use by another organization in other design activities. Exceptions shall be justified and documented. Procedures shall control the justification of exceptions and the completion of the verification of all affected design output documents prior to relying on the component, system, or structure to perform its function.

5.5 Measures shall be established to control the approval, issuance, and changes of design documents to prevent the inadvertent use of superseded design information.

5.6 Changes made to design documents are reviewed and approved by the same groups or organization, which reviewed and approved original design documents. If the organization which originally approved a particular design document is no longer responsible, another organization may be designated if competent in the specific design area, has access to pertinent background information and has an adequate understanding of the requirements and intent of the original design.

5.7 Conditions adverse to quality found in approved design documents, including design methods, that could adversely affect structures, systems, or components shall be documented and action taken to correct and prevent recurrence, in accordance with Reference 4.5.

5.8 Measures shall be established for the identification and control of deviations from specified quality standards.

5.9 Measures shall be established which assure that maintenance and modifications associated with design changes which may affect the functioning of structures, systems, or components are performed in a manner to ensure quality at least equivalent to that specified in the UFSAR or current design bases and requirements.

5.10 Measures shall be established to maintain the list of structures, systems, and components current after modifications are made.

5.11 Measures shall be established to assure that only appropriately verified, qualified and controlled computer codes are authorized for use.

5.12 Modification

5.12.1 Modifications to structures, systems, and components shall be controlled, reviewed, and approved.

5.12.2 Installation and testing of modifications shall be performed in accordance with Reference 4.2 and approved procedures. These procedures shall contain provisions as appropriate to ensure quality of installation and appropriate post modification testing. (This paragraph does not apply to components in the "Limited" program category, unless design verification testing is being performed in accordance with 5.4.1.1.)

5.12.3 Structures, systems, and components shall not be declared operable after a modification until the following provisions are satisfied:

5.12.3.1 Affected procedures are revised and distributed to appropriate users.

5.12.3.2 Appropriate personnel are trained.

5.13 Modifications will be checked against the design change documentation for proper implementation prior to closing out the design change process.

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

1.0 PURPOSE

1.1 The purpose of this chapter is to establish the requirements for procurement of items and services for the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter applies to the procurement of items and services for use at STP which are subject to the controls of this Quality program. These activities include procurement document control, bid evaluation, vendor evaluation, verification of vendor activities and receiving inspection.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 10CFR50, Appendix B

4.2 10CFR21, Reporting of Defects and Noncompliance

4.3 OQAP Chapter 2.0, Table I

4.4 EPRI NP-5652 (NCIG-07), Guideline for the Utilization of Commercial Grade Items in Nuclear Safety Related Application

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

4.6 OQAP Chapter 13.0, Control of Conditions Adverse to Quality

4.7 OQAP Chapter 14.0, Records Control

4.8 Generic Letter 89-02, Actions to Improve the Detection of Counterfeit and Fraudulent Marketed Products

5.0 REQUIREMENTS

5.1 Procurement Document Preparation, Review and Control

5.1.1 Responsibility for procurement is a joint effort of all the departments within the STP Nuclear Operating Company (STPNOC). The department requesting the material or service provides technical content and quality requirements. Engineering/Contracts & Procurement is responsible to provide input to the requesting department on technical content and quality requirements, as requested. Quality will concur with all changes to quality requirements.

5.1.2 The sequence of preparation, review, approval, and issuance of procurement documents is generally as follows:

5.1.2.1 Purchase Requisitions

- Purchase requisition forms shall be used to initiate the procurement of materials, parts, components, and services. Procurement may be initiated by any STPNOC personnel.
- Purchase requisitions shall include material and component identification requirements, drawings, specifications, standards, inspection and test requirements, and special process instructions as appropriate.
- Purchase requisitions for materials, parts, components, or services shall be reviewed by the cognizant technical organization to verify that adequate technical and quality requirements have been specified.
- The reviews for technical and quality requirements shall be performed by someone other than the originator of the requisition. Quality will concur with all changes to quality requirements.

5.1.2.2 Purchase Orders and Contracts

- Purchase orders and contracts are prepared and issued by Contracts & Procurement and establish for the suppliers the technical and quality requirements which must be met.
- Purchase orders and contracts shall accurately reflect the technical and quality requirements established by the purchase requisition. If, during the bid negotiations with the supplier, it becomes necessary or commercially

desirable to change the technical or quality requirements, such changes shall be presented for approval to the cognizant technical organization which approved the original requirements.

5.1.2.3 Change Controls

- Changes to procurement document quality and technical requirements shall require a review and approval equivalent to that of the original document. Commercial consideration changes not affecting the technical or quality requirements do not require review and concurrence by the originator.

5.1.3 For the procurement of spare or replacement parts, equipment, materials, and services, the quality and technical requirements shall be equal to or greater than the design basis requirements for the original part, equipment, materials, or services; except where less stringent quality or technical requirements may be established based on specific evaluations and justification. The cognizant technical organization shall document such justification.

5.1.3.1 Items may be procured as Commercial Grade Items (CGIs) if a documented engineering evaluation indicates the CGI will provide equivalent performance. CGI dedication will comply with established procedures designed to satisfy the requirements of References 4.2 and 4.8.

5.1.3.2 The cognizant technical organization shall verify that quality requirements are correctly stated, verifiable, and controllable; that acceptance/rejection criteria are included; and that the documents have been prepared, reviewed, and approved in accordance with STP Quality Program requirements.

5.2 Procurement Document Content

5.2.1 Procurement document control measures shall assure that appropriate regulatory requirements, design bases, and other requirements are included in the procurement process. The following shall be included or invoked by reference in procurement documents as appropriate:

5.2.1.1 Applicable regulatory, code, and design requirements, including material and component identification requirements, drawings, specifications, standards,

inspection and test requirements, special process instructions and handling, preservation, cleaning, storage, packaging, and shipping requirements. These requirements shall equal or exceed the original requirements (unless changed by established design control processes).

5.2.1.2 Extent that supplier QA program shall comply with 10CFR50, Appendix B or the QA program requirements of other nationally recognized codes and standards, as applicable; or for CGIs to be dedicated for safety related use by STPNOC based on the results of a survey of the vendor's controls, the vendor's STPNOC approved and/or surveyed program.

5.2.1.3 Requirements for supplier documents, such as instructions, procedures, drawings, specifications, inspection and test records, and suppliers' QA records to be prepared, submitted, or be made available for review and/or approval by STP personnel.

5.2.1.4 Requirements for suppliers to maintain the status of required inspections or tests throughout the manufacturing process to preclude inadvertent bypassing of inspections and tests.

5.2.1.5 Requirements for STPNOC's right of access to suppliers' facilities and work documents for inspection and audit.

5.2.1.6 Requirements for extending applicable STP procurement requirements to lower-tier suppliers and subcontractors, including STPNOC's access to facilities and records.

5.2.1.7 Requirements for supplier reporting to STP nonconformances to procurement document requirements and conditions for their disposition.

5.2.1.8 Requirements for the retention, control, and maintenance of supplier QA records that are not maintained by STPNOC. Supplier-furnished records shall include:

- Documentation (e.g., certification) that identifies the purchased item and the specific procurement requirements (e.g., codes, standards, and specifications) met by the item.

- Documentation identifying any procurement requirements that have not been met.

- A description of those nonconformances from procurement requirements dispositioned "accept-as-is" or "repair".

5.2.1.9 Requirement for the supplier to submit a copy of its QA program description (does not apply for CGIs).

5.2.1.10 Requirements for the performance of maintenance and receipt inspection checks where applicable.

5.2.1.11 Applicability of 10CFR21 reporting requirements.

- The reporting requirements of 10CFR21 do not apply to vendors of CGIs to be dedicated for use by STPNOC.

- The reporting requirements of 10CFR21 do not apply to suppliers of commercial-grade calibration services.

5.2.2 Commercial grade items (items not originally designed or manufactured as a basic component) are subject to a commercial grade dedication process as defined and authorized by Engineering in accordance with procedures that meet the requirements of the NRC, before such items are approved for safety-related applications. Commercial grade dedication also applies to a commercial grade service that is associated with basic component hardware, design certification, design approval, or information in support of an early site permit application under 10 CFR Part 52, whether these services are performed by the component supplier or others (e.g., safety-related design, analysis, inspection, testing, or fabrication that is associated with a basic component).
Procedures are established to describe the responsibilities for Engineering to perform a technical evaluation, select applicable critical characteristics, and determine an appropriate dedication method for acceptance. Procedures are also established to enhance the detection of counterfeit and fraudulent items and to minimize the likelihood of the introduction of such items in safety-related applications.

STP Nuclear Operating Company (STPNOC) may utilize commercial grade items or services in its supply of basic components in a manner consistent with the guidance in

[Generic Letter (GL) 89-02, “Actions to Improve the Detection of Counterfeit and Fraudulently Marked Products.” GL 89-02 documents the NRC’s conditional endorsement of EPRI NP-5652, “Guideline for the Utilization of Commercial grade Items in Nuclear Safety Related Applications” (NCIG-07).] In addition, Regulatory Guide 1.164 documents the NRC's endorsement of EPRI TR 3002002982, "Plant Engineering: Guideline for the Acceptance of Commercial-Grade Items in Nuclear Safety-Related Applications," Revision 1 to EPRI NP-5652 and TR-.102260.
STPNOC utilizes a commercial grade dedication process consistent with Generic Letter 89-02 and 10 CFR 21 for the supply of basic components. When a commercial grade item is modified, inspected, and/or tested to demonstrate compliance to requirements more restrictive than the manufacturer’s original specifications such item is uniquely identified as different from the commercial grade (off-the-shelf) item and traceable to documents that record the difference.

When purchasing commercial grade calibration or testing services from a laboratory holding accreditation by an accrediting body recognized by the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA), commercial grade surveys need not be performed provided each of the following conditions are met:

5.2.2.1 A documented review of the laboratory’s accreditation is performed and includes a verification of the following:

- The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC-17025:2017, “General Requirements for the Competence of Testing and Calibration Laboratories.”

- For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed surveys need measurement parameters, ranges, and uncertainties.

- For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.

- The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's

accreditation cannot be based on two consecutive remote accreditation assessments.

5.2.2.2 The purchase documents require that:

- The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.
- As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).
- The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).
- Subcontracting of these accredited services is prohibited.
- The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.
- Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.
- Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.

5.2.2.3 It is validated, at receipt inspection, that the laboratory's documentation certifies that:

- The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and • The purchase order's requirements are met.

5.3 Bid Evaluation

Bid Evaluations shall be performed to evaluate adherence to technical and quality assurance requirements.

5.4 Supplier Selection

5.4.1 Suppliers of items (for CGIs, when basis for dedication includes commercial grade survey) or services shall be required to submit copies of their QA program description for evaluation prior to the issuance of a purchase order or execution of a contract, and acceptability shall be documented. The process by which suppliers are judged as being a capable procurement source is described as follows:

5.4.1.1 Procurement source evaluation and selection involves Engineering, Quality, Contracts & Procurement, and STP plant personnel, as appropriate. These organizations participate in the qualification evaluation of suppliers in accordance with written procedures.

5.4.1.2 Measures for the evaluation and selection of procurement sources shall be specified in procedures and may vary depending upon the complexity and risk significance of the item or service. When procurement source evaluations are performed, the information to be considered shall include one or more of the following:

- Experience of users of identical or similar products of the prospective supplier, other utility or approved contractor audits/evaluations, audits/evaluations by cooperative utility groups, American Society of Mechanical Engineers (ASME) Certificates of Authorization, STP records accumulated in previous procurement actions, and STP product operating experience may be used in this evaluation. When other utility, contractor or cooperative utility audits/evaluations are used, the documentation will be obtained and reviewed. Supplier history shall reflect recent capability. Previous favorable experience with suppliers may be an adequate basis for judgments attesting to suppliers' capability.

- An evaluation of the suppliers' current quality records supported by documented qualitative and quantitative information which can be objectively evaluated. This may include review and evaluation of the

suppliers' QA Program Manual, procedures, and responses to questionnaires, as appropriate.

- A source evaluation of the suppliers' technical and quality capability as determined by a direct evaluation of facilities and personnel (audit, survey, or surveillance) and quality program implementation. Resolution or a commitment to resolve unacceptable technical or quality requirements identified by the bid evaluation or vendor evaluation shall be obtained prior to the award of a purchase order or contract.

5.4.1.3 Procurement source evaluations involve a review of technical and quality considerations to an extent considered appropriate by each participant. Technical considerations include the design or manufacturing capability and technical ability of suppliers to produce or provide the design, service, item, or component. Quality considerations include one of the previously stated methods of supplier evaluation and a consideration of a suppliers' current quality program or capabilities.

5.4.1.4 A documented quality assurance evaluation of a vendor's quality program shall be performed to assure it meets the appropriate requirements of 10CFR50 Appendix B, or where applicable, other nationally recognized codes and standards, or, for CGIs, to assure the program provides adequate control over established critical characteristics.

5.4.1.5 Vendors may be placed on the Approved Vendors List after passing this evaluation.

5.4.1.6 A vendor shall not be issued a purchase order or contract unless they have been accepted for placement on the Approved Vendors List or an exception has been approved by the Manager, Nuclear Oversight.

5.4.1.7 Service organizations which will supply only manpower and no other service are not required to be on the Approved Vendors List or have an STP approved quality assurance program as long as the supplied personnel are trained and work under the auspices of the STP Operations Quality Assurance Plan.

5.4.2 Each vendor on the Approved Vendors List shall be periodically evaluated by Quality as provided by Reference 4.3 (i.e., annually for "Full" program, biennially for "Basic" program).

5.4.2.1 A vendor may be removed from the Approved Vendors List if evaluation determines the vendor is unacceptable, the vendor requests removal or by direction of the Manager, Nuclear Oversight.

5.4.3 Planning of verification activities to be employed for item or service acceptance shall begin during the purchase requisition or contract preparation and review stage. The extent of the verification activities will vary and be a function of the relative safety significance, complexity of the purchased item or service, and the supplier's past performance. The verification activities may include vendor surveillance, receipt inspection, or postinstallation testing. Verification activities are planned to assure conformance to procurement document requirements. Procedures shall establish the organizational responsibilities for identifying required verifications and methods, performing, and documenting the verification activities.

5.4.3.1 Verification activities shall be performed using plans developed in accordance with procedures with appropriate input from the cognizant technical organization. The plan shall specify the characteristics or processes to be witnessed, inspected or verified.

5.4.3.2 Specified source inspections may be waived by the Manager, Nuclear Oversight.

5.4.3.3 Vendor related reports shall be evaluated to determine the effectiveness of the vendor's quality assurance program.

5.5 Receiving Activities

5.5.1 Received purchased items shall be observed for shipping damage and the requirements of ANSI N45.2.2 Section 5.2.1. (This activity does not constitute an inspection and does not require qualification in accordance with Reference 4.5).

5.5.2 Receiving inspection shall be coordinated with verification activities. If source inspection is not performed or did not address all applicable attributes, receipt inspection shall be performed and shall include the applicable additional attributes listed in ANSI N45.2.2 Section 5.2.2, except for commercial grade items dedicated by survey which shall be receipt inspected as required by the procurement document.

5.5.3 Receiving inspection checklists shall be developed using the requirements specified in the procurement documents and applicable attributes of ANSI N45.2.2.

5.5.4 Statistical sampling methods may be used for groups of similar items. Sampling shall comply with nationally recognized methods or approved engineering alternates.

5.5.5 Receiving inspections shall be performed by personnel trained and qualified in accordance with Reference 4.5. Technical assistance shall be provided by Contracts & Procurement or Engineering as applicable.

5.5.6 Receiving inspection activities shall include:

5.5.6.1 Identifying materials, parts, and components and their status upon receipt by tagging or other acceptable means of identification or segregating and controlling items in receiving hold areas separate from the storage facilities for acceptable items. Identification of items shall correspond to the identification required by procurement documents and be noted on receiving documentation.

5.5.6.2 Verification of items for acceptance includes correctness of identification and specified quality documentation.

5.5.6.3 Inspecting or testing using approved procedures and calibrated tools, gauges, and measuring equipment for verification acceptance of items, including offthe-shelf items.

5.5.6.4 Items determined to be acceptable for use shall be identified with an "accept" tag or other acceptable means of identification prior to release for storage or use.

5.5.6.5 Received items which do not conform to procurement documents are controlled and segregated (if practical) and processed in accordance with Reference 4.6.

5.5.7 Acceptance by post-installation test may be utilized following one of the preceding verification methods. Post-installation testing may be used for acceptance verification when it is difficult to verify item quality characteristics, the item requires an integrated system checkout or test, or the item cannot demonstrate its ability to perform when not in use. Engineering specifications shall be used for developing post-installation test instruction requirements and acceptance documentation. Post-installation testing is the responsibility of the Plant General Manager and is witnessed by Engineering or Quality personnel at specified hold points.

5.5.8 Acceptance of Procured Items and Services

5.5.8.1 Acceptance of items and services shall be based on one or more of the following:

Written certifications (Note: This shall not be the sole method of acceptance for items in the "Basic" program)

Surveillance/Audit of procured service

Source verification

Receiving inspection/testing

Commercial Grade Item dedication

Vendor surveillance

Post-installation test

5.5.9 Documented evidence from the supplier that procured items meet procurement quality requirements, when required, such as codes, standards, or specifications will be maintained at the plant site. Such evidence shall be provided by the supplier, at the time of source or receipt inspection, for review and verification before acceptance. The documented

evidence will be retrievable and available at the plant site prior to installation or use of the procured item, unless otherwise controlled in accordance with Reference 4.6.

5.6 Vendor Surveys, Surveillance and Audit

5.6.1 For items in the Full Program, Suppliers Certificates of Conformance shall be periodically evaluated by audits, independent inspections, surveys, or tests to assure that they are valid, and results are documented. When acceptance is based upon source inspection, documented evidence shall be furnished to the plant receiving organization.

5.6.1.1 Acceptance by source inspection may be considered when the item or service is vital to plant safety; or the quality characteristics are difficult to verify after receipt; or the item or service is complex in design, manufacture, inspection, or test. Vendor surveillance/source inspection involves a physical presence to monitor, by observation, designated activities for the purpose of evaluating supplier performance and product acceptance (source inspection only).

5.6.2 The STP survey and audit program provide for periodic scheduled audits or surveys of suppliers, the site procurement program, contractors, subcontractors, and others performing work. The audit and survey schedule is prepared and updated by Quality. Frequency of these surveys and audits is based upon the safety, complexity, and quality requirements, and as a minimum shall be in compliance with Reference 4.3.

5.6.3 When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally-recognized accrediting body, the accreditation process and accrediting body may be credited with carrying out a portion of the STPNOC's duties of verifying acceptability and effective implementation of the calibration service supplier's quality assurance program.

In lieu of performing an audit, accepting an audit by another licensee, or performing a commercial-grade survey, a documented review of the supplier's accreditation shall be performed by STPNOC. This review shall include, at a minimum, verification of the following:

a. A documented review of the laboratory's accreditation is performed and includes a verification of the following:

- The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."

- For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.

- For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.

- The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based

b. The purchase documents require that:

- The service must be provided in accordance with their accredited ISO/IEC17025:2017 program and scope of accreditation.

- As-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).

- The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).

- Subcontracting of these accredited services is prohibited.

- The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.

- Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.

- Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards. On two consecutive remote accreditation assessments.

c. It is validated, at receipt inspection, that the laboratory's documentation certifies that:

- The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2017 program, and has been performed within their scope of accreditation, and

- The purchase order's requirements are met.

STPNOC is responsible for ensuring that the procured services are within the accredited scope of the NVLAP and A2LA certificates.

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 4.7.

7.0 ATTACHMENTS

7.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to establish the requirements for review, approval, distribution and use of documents such as instructions, procedures and drawings, including changes thereto for the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter is applicable to documents, which control activities for the licensing, operation, testing, maintenance, and plant modification of the STP. These documents include, but are not limited to, instructions; procedures; specifications; drawings; vendor manuals; status registers (such as drawing lists, equipment list); procurement documents; design documents; design change requests; as-built documents; non-conformance and deficiency reports; Updated Final Safety Analysis Report and program manuals (such as OQAP, Emergency Plan, Inservice Inspection Plan, etc.).

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 OQAP Chapter 6.0, Design and Modification Control

4.2 OQAP Chapter 14.0, Records Control

4.3 OQAP Chapter 2.0, Table I

5.0 REQUIREMENTS

5.1 Procedures shall be established which identify the organizations or individuals responsible for the preparation, review, approval, and issuance of documents and changes thereto.

5.2 Departments responsible for program-implementing documents shall be required to provide and assure the necessary review and approval, prior to use, for instructions, procedures, and drawings. Review and approval assures that issued documents include proper quality and technical requirements, and are correct for their intended use. Additionally, individual departments are responsible for controlling documents generated or reviewed in the department for which the department has preparation and final approval or external interface responsibility.

5.3 Document reviews shall be performed by appropriately qualified personnel with access to pertinent background information to establish a basis for an adequate review. The Quality organization shall review selected documents for quality requirements.

5.4 Procedures shall establish controlled distribution of documents and changes thereto including:

5.4.1 Establishing current and updated distribution lists

5.4.2 Personnel or organizations acknowledging receipt and insertion of controlled documents and changes thereto

5.4.3 Controlling documents to avoid the use of outdated or inappropriate documents

5.4.4 Establishing and maintaining master document lists identifying the current revision of documents

5.4.5 Temporary changes

5.5 Documents shall be available and used at work locations by individuals or organizations performing activities when required based upon the nature of the work. Clearly identified controlled copies of documents shall be available at the point of use prior to commencing activities.

5.6 Revisions or changes to documents shall be reviewed and approved by the same organizations that performed the original review and approval unless other organizations are designated and have knowledge of the requirements and intent of the original document. Personnel using a document to perform activities are responsible for assuring the documents being used are the correct revision prior to such use.

5.7 Safety-related procedures shall be maintained in an accurate and usable condition. Changes to safety-related procedures shall be made as necessary. The root cause of significant deficiencies regarding safety-related procedures shall be identified and corrected. The following activities provide ongoing confirmation of this.

5.7.1 Applicable plant procedures shall be reviewed following an unusual incident such as an accident, an unexpected transient, significant operator error, or equipment malfunction and following any modification to a system.

5.7.2 Non-routine procedures (procedures such as emergency operation procedures, off-normal procedures which implement the Emergency Plan, and other procedures whose usage may be dictated by an event) shall be reviewed at least every two years and revised as appropriate.

5.7.3 At least every two years, quality assurance audits and other independent oversight activities shall review a representative sample of the routine plant procedures that are used more frequently than every two years. These reviews shall ensure the acceptability of the procedures and verify that the procedure review and revision program is being implemented effectively. The root cause of significant deficiencies shall be determined and corrected.

5.7.4 Routine plant procedures that have not been used for two years shall be reviewed before use to determine if changes are necessary or desirable.

5.8 Procedures shall be developed for the control and distribution of vendor/contractor documents such as approved drawings, specifications, technical manuals and instructions.

5.9 Control of design documents is addressed in Reference 4.1.

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 4.2.

7.0 ATTACHMENTS

7.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to describe requirements and assign responsibility for control of material at the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter applies to identification, control and traceability of material, parts and components during receipt, storage, handling, issuance, installation and shipping activities.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 OQAP Chapter 2.0, Table I

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

4.3 OQAP Chapter 7.0, Procurement

4.4 OQAP Chapter 14.0, Records Control

4.5 STP UFSAR Table 3.12-1

5.0 REQUIREMENTS

5.1 Material, equipment, and components shall be handled, stored, shipped, cleaned, and preserved to assure that the quality of items is maintained from fabrication through installation.

5.2 Identification and Traceability Requirements

5.2.1 Physical identification of material (including consumables), parts and components shall be used whenever possible or practical and identification shall be traceable to the appropriate documentation such as drawings, specifications, purchase orders, manufacturing and inspection documents, deviation reports, and physical and chemical test reports.

5.2.2 Identification marking requirements include:

5.2.2.1 Where physical identification marking is used, the marking shall be clear, unambiguous and indelible and shall be applied in such a manner as not to affect the function of the item.

5.2.2.2 Markings shall be transferred to each part of an item whenever possible or practical when subdivided and shall not be hidden or obliterated by surface treatment or coatings unless other means of identification are substituted (e.g., color-coding).

5.2.2.3 Procedures shall specify that identification be maintained, either on the item or on records traceable to the item, and verified as required throughout fabrication, erection, installation, and use of the item. The identification must be verified and documented prior to release for fabrication, erection, installation and/or use of the item.

5.3 Material Storage

5.3.1 Measures shall be established for the control of items in storage which include: storage location, storage levels, procedures which require periodic surveillance of stored items to verify specific protective environmental requirements, inspection results, item care and protective measures, personnel access to storage areas, and material issues.

Control of items in storage shall comply with Reference 4.1. Storage conditions commensurate with the safety classification of the materials will be maintained.

5.3.2 Procedures shall be developed for storage of chemicals, reagents, lubricants, and other consumable materials, which will be used in conjunction with systems. Items having limited shelf or operating life shall be identified and controlled to preclude the use of expired items.

5.4 Material Handling

5.4.1 Measures shall be developed for handling of items which, because of weight, size, susceptibility to shock damage or other conditions, require special handling.

5.4.2 Measures shall be established to rate and inspect hoisting and handling equipment in accordance with Reference 4.1.

5.5 Shipping

5.5.1 Measures shall be established for the packaging, loading and transportation of items in accordance with Reference 4.1.

5.6 Housekeeping

5.6.1 Measures shall be established for housekeeping activities in the storage areas, which include: zone designation, environment control, work area cleanliness, fire protection, inspection, and surveillance. These measures shall meet the applicable requirements of Reference 4.5.

5.7 Personnel performing handling, preservation, storage, cleaning, packaging, shipping, and inspection to the requirements of this chapter shall be trained and qualified per Reference 4.2.

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 None

1.0 PURPOSE

1.1 The purpose of this chapter is to prescribe the requirements and the responsibilities for inspection of activities and structures, systems, and components at the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter is applicable to inspection activities associated with activities and systems, structures and components to demonstrate compliance with design and operational requirements.

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

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, Quality or Engineering personnel. Witnessing or inspection of hold points by Engineering or Quality personnel shall be accomplished before work can proceed. Plant procedures and work instructions shall be reviewed by Engineering and/or Quality personnel for concurrence with the established mandatory hold points.

5.1.7.2 Engineering and/or Quality personnel also establish 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 and/or Quality personnel 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

1.0 PURPOSE

1.1 The purpose of this chapter is to establish requirements for testing of structures, systems, and components at the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter is applicable to the testing of structures, systems, and components during the operational phases to demonstrate compliance with design and operational requirements.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 South Texas Project Electric Generating Station (STP) Technical Specifications

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

4.3 OQAP Chapter 12.0, Instrument and Calibration Control

4.4 OQAP Chapter 14.0, Records Control

4.5 OQAP Chapter 2.0, Table I

5.0 REQUIREMENTS

5.1 The test programs shall be developed to demonstrate that plant structures, systems, and components will perform in accordance with design requirements.

5.1.1 Tests performed following maintenance or modification shall satisfy the original design or test requirements or an engineering approved alternative.

5.1.2 Test programs include operability tests, surveillance tests, and equipment tests, including those associated with plant maintenance, modification, procedure changes, and the acceptance of purchased material.

5.2 Procedures shall be developed to control tests of structures, systems, and components to assure satisfactory service upon completion of maintenance or modifications.

5.3 Procedures shall be developed to schedule and control surveillance testing of those items and systems required by Reference 4.1.

5.4 Test procedures shall provide, as necessary, for the following:

5.4.1 The requirements and acceptance limits contained in applicable licensing, design, and procurement documents.

5.4.2 Instructions for performing the test, including prerequisites, test sequence, and caution or safety notes, and shall be in sufficient detail so that the test operator's interpretation is not required.

5.4.3 Calibrated test equipment with the accuracy required for performing the activity.

5.4.4 Provisions for documenting or recording test data and results

5.4.5 Acceptance criteria.

5.4.6 Inspection hold and/or notification points for inspection/witness by Engineering or Quality.

5.4.7 Provisions for assuring the test prerequisites have been met.

5.4.8 Provisions for control of jumpers, lifted leads, blank flanges, strainers or safety tags, etc.

5.4.9 Provisions for returning a system to normal configuration upon completion of the test.

5.4.10 Environmental conditions shall be noted in test procedures, as appropriate.

5.5 Measuring and Test equipment (M&TE) used during test activities shall be controlled in accordance with Reference 4.3.

5.6 Procedures shall be developed to ensure that test data and results are reviewed by a qualified individual(s) and are evaluated for compliance with applicable test acceptance criteria.

5.7 Personnel performing test activities, including developing and implementing test procedures and evaluating and reporting test results, shall be qualified in accordance with Reference 4.2.

5.8 Administrative procedures shall provide for identification of structure, system, and component test status through the use of status indicators (e.g., clearance tags, markings, records) to assure only items that have passed required tests are used or operated.

5.9 Test records, where applicable, shall include:

5.9.1 Identification of items or systems tested.

5.9.2 Date of test.

5.9.3 Tester and data recorder identification.

5.9.4 Type of observation/test.

5.9.5 Test results and acceptability.

5.9.6 References to nonconformance and corrective action.

5.9.7 Person reviewing and evaluating test results.

5.9.8 Test equipment used.

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 None

1.0 PURPOSE

1.1 The purpose of this chapter is to establish requirements to ensure measuring and test equipment (M&TE), and installed instrument and control devices used in activities or structures, systems and components are properly controlled, maintained, and calibrated at the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter is applicable to equipment used to measure, test, evaluate, and inspect items and systems during operational phases and to installed instrument and control devices used to measure, record, and control plant operations.

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 14.0, Records Control

4.3 OQAP Chapter 2.0, Table I

5.0 REQUIREMENTS

5.1 Procedures shall be developed to establish the method and interval of calibration for installed instrument and control devices. The calibration method and interval shall be based on the type of equipment, stability, and reliability characteristics, required accuracies and other conditions affecting calibration.

5.2 Procedures shall be developed for the control and calibration of measuring and test equipment at prescribed intervals or prior to use. Reference standards having known valid relationships to national standards shall be used. Each organization shall be responsible for assuring that the measuring and test equipment (MTE) it uses has been calibrated to the accuracy required for its intended use.

5.3 Reference standards shall have an uncertainty (error) requirement of no more than 1/4 of the tolerance of the equipment or device being calibrated. When commercial standards with the required uncertainty error are not available; a reference standard may be used if the standard error tolerance is equal to or less than the error tolerance of the equipment being calibrated. The basis of this acceptance shall be documented and authorized by responsible management. In those cases where a reference standard is not traceable to a national standard because a national standard does not exist, the basis for calibration shall be documented.

5.4 Measuring and test equipment shall be uniquely identified. The records directly traceable to the equipment shall indicate the date of calibration, the identity of the person who calibrated the equipment, the results of the calibration and the next calibration due date.

5.4.1 A calibration label will be attached to measuring and test equipment to indicate the calibration due date. If this label interferes with the equipment function or is impractical, the calibration label will be attached to the equipment case.

5.5 Measures shall be established to trace the use of each item of measuring and test equipment. When measuring and test equipment or installed instrument and control devices are found out of calibration, an evaluation shall be made and documented for the validity of previous inspection and test results and for the acceptability of items previously inspected or tested.

5.6 Measuring and test equipment, installed instruments and control devices suspected or known to be in error or defective shall be immediately removed from service or properly tagged to indicate the error or defect.

5.7 Measuring and test equipment, installed instruments and control devices consistently found to be out of calibration shall be repaired or replaced.

5.8 Measuring and test equipment shall be handled and stored commensurate with their environmental and sensitivity requirements.

5.9 Measuring and test equipment, which becomes lost, shall be considered out of tolerance and upon its recovery, it shall be recalibrated.

5.10 Personnel calibrating measuring and test equipment and installed instrument and control devices shall be qualified per Reference 4.1.

5.11 Contractors and vendors, who provide their own measuring and test equipment, shall have a program that meets the requirements of this chapter.

5.12 This chapter does not require the calibration and control of rulers, tape measures, levels and other such devices if normal commercial practices provide adequate accuracy.

5.13 Inspection, test, maintenance, repair, and other procedures shall include provisions to assure that M&TE used in activities affecting quality are the proper range, type, and accuracy.

5.14 Measuring and test equipment, utilized for chemical and radiological control purposes are not required to meet the requirements of this chapter, provided laboratory control practices are implemented to ensure accuracy of analyses.

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 4.2.

7.0 ATTACHMENTS

7.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to establish requirements and responsibilities for the identification, documentation, evaluation, resolution, control and reporting of conditions adverse to quality at the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter applies to conditions adverse to quality discovered in items, services and activities under the scope of the Operations Quality Assurance Plan and the reporting of items to the Nuclear Regulatory Commission (NRC) in accordance with Title 10 Code of Federal Regulations.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 10CFR50, Appendix B

4.2 10CFR21, Reporting of Defects and Noncompliance

4.3 10CFR50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors

4.4 10CFR50.73, Licensee Event Report System

4.5 STP Technical Specifications

4.6 OQAP Chapter 14.0, Records Control

4.7 OQAP Chapter 2.0, Table I

4.8 NRC Regulatory Issue Summary 2005-20

4.9 STP Reporting Manual

5.0 REQUIREMENTS

5.1 All personnel working under the jurisdiction of the Operations Quality Assurance Plan are responsible for reporting conditions adverse to quality to appropriate management for resolution in accordance with approved procedures.

5.2 Procedures shall be developed for the control of items, services or activities which do not conform to established requirements. These procedures shall provide for the following:

5.2.1 Identification and documentation of conditions adverse to quality.

5.2.2 Identification of the requirements, source, or reference information being violated.

5.2.3 Notification of responsible management.

5.2.4 Control of conditions adverse to quality by tagging, segregation, administrative controls, or other appropriate means to prevent inadvertent installation, use, or continuation of the activity and removal of such controls when returned to service or availability.

5.2.5 Resolution and/or disposition approved by authorized personnel prior to closing out the documentation and restoring to normal service.

5.2.5.1 Material conditions adverse to quality disposition categories are:

- "Use-as-is"
- "Reject"
- "Rework" in accordance with documented procedures
- "Repair" in accordance with documented procedures

5.2.5.2 "Use-as-is" and "repair" dispositions shall be approved and justified in writing by Engineering.

5.2.5.3 Evaluations shall be performed to ascertain recurrence control measures.

5.2.6 Documentation of the corrective action taken.

5.2.7 Review and/or verification of the corrective action by the Quality organization, as appropriate.

5.2.8 Repaired and reworked items shall be reinspected in accordance with applicable procedures. Reinspection results are documented on inspection reports or other work process control documents.

5.2.9 Installation of nonconforming material, parts, and components may be performed after the effect of their installation has been evaluated and the installation approved by Plant Management, Quality, and Engineering. Nonconforming items which may not be installed are those which, because of their makeup and intended use, cannot be repaired, or reworked after being installed and those which, if installed and later removed, would degrade that system, structure, or component. Once installed, nonconforming items are not energized, used, or placed in service until the action required by the disposition, including reinspection, has been completed or an engineering evaluation has been prepared to justify the intended use of the nonconforming item.

5.2.10 Conditions adverse to quality identified on installed items will be evaluated for operability and functionality.

5.2.11 Disputes over corrective action are normally resolved by Plant Management. Should this resolution not be satisfactory, the parties may elevate the matter to higher management for resolution.

5.3 Procedures shall provide the following administrative controls:

5.3.1 Unique identification and numbering of conditions adverse to quality.

5.3.2 Preparing and maintaining status reporting of conditions adverse to quality.

5.3.3 Actions to be taken to assure timely corrective action on conditions adverse to quality.

5.4 Procedures which identify and track conditions adverse to quality shall require management review of each report to determine if the condition is significant. For significant conditions adverse to quality, the cause of the condition and the corrective action taken to preclude repetition shall be documented and reported to appropriate levels of management.

5.5 Measures shall be established for review and evaluation of conditions adverse to quality for reportability to the NRC as required by References 4.2 (to the extent not exempted), 4.3, and 4.4, as appropriate.

5.6 The authority to stop work has been assigned to the Manager, Nuclear Oversight for any activity being performed by company personnel or contractors which do not conform to established requirements.

5.7 Measures shall be established for the evaluation and trending of conditions adverse to quality. The results of these reviews and analyses are reported to the affected organization and executive management, and are audited by the Quality organization. Adverse trends shall be evaluated and processed in accordance with controlling procedures.

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 4.6.

7.0 ATTACHMENTS

7.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to describe the requirements and the responsibilities for the collection, storage, retrieval, and maintenance of records.

2.0 SCOPE

2.1 This chapter is applicable to those records acquired and developed as a result of, or in support of, the South Texas Project (STP).

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 OQAP Chapter 2.0, Table I

4.2 ST-HL-AE-2722, Request for Optical Disc Storage of Plant Records dated July 15, 1988

4.3 ST-AE-HL-91757, Optical Disc Storage of Plant Records for the South Texas Project, Units 1 and 2 dated August 29, 1988

4.4 NRC Regulatory Issue Summary 2000-18, Guidance on Managing Quality Assurance Records in Electronic Media dated October 23, 2000

5.0 REQUIREMENTS

5.1 Records shall be collected, filed, stored, maintained, and dispositioned.

5.1.1 Records include, but are not limited to: plant history; operating logs; records of principal maintenance and modification activities; reportable occurrences and other records required by the Technical Specifications; results of reviews, inspections, tests, audits, and material analyses; monitoring of work performance; qualification of personnel, procedures, and equipment; drawings, specifications, procurement documents, warehousing documents, calibration procedures and calibration reports; and nonconformance and corrective action reports.

5.1.1.1 The records control program provides evidence that activities affecting quality are defined and implemented, and that inspection and test documents contain a description of the type of observation; the identification of inspector or data recorder; the date and inspection or test results; acceptability of the results; and reference any action taken in documenting or resolving any nonconformances.

5.2 Record storage facilities shall meet the requirements of Reference 4.1.

5.3 A list of record types and the classification of these record types as to retention period shall be maintained.

5.4 An index of stored records shall be maintained. The index shall include retention period and location of the records within the storage area. The STP DTL (an electronic database) is used as a record index/checklist. If a conflict of retention times exists between regulatory, standard, technical specification requirements, or the technical requirements manual, the longer retention period shall be specified.

5.5 Records indexing systems shall provide sufficient cross-reference between the record and items or activities to which the record applies.

5.6 The receipt, processing, and handling of records shall be controlled by procedures.

5.7 To ensure that records are identifiable and retrievable, a computerized records management system has been developed. This system provides for a method to identify the document(s)/record(s) or document/ record package(s) for retrieval purposes. The system also provides the ability to cross-reference the identification with other possible identifiers of the document (i.e., specification number, purchase order number, equipment number). Records may be stored on photographic, optical, or electronic media; the file locations of documents are available from the computer.

5.8 Controlled access to the record storage facility shall be established.

5.9 Records may be corrected/supplemented in accordance with procedures, which provide for appropriate review or approval by the originating or other authorized organization. Corrections/supplements shall include the date and identification of the person making the correction/supplement, and

5.9.1 For hard copy (i.e. paper) originals, shall be in ink and be entered in a manner such that the original information is not obliterated, or

5.9.2 For originals in an electronic format, shall be annotated in a manner such that the correction/supplement is easily identified as a correction or supplement and the original information is not obliterated.

5.10 Organizations generating records are responsible for ensuring activities are documented accurately, legibly, and with sufficient traceability; and submitting designated documents for independent review prior to entering into the records system in accordance with appropriate procedures.

5.11 Record Retention

5.11.1 In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for at least the minimum period indicated.

5.11.2 The following records shall be retained for at least 5 years:

5.11.2.1 Records and logs of unit operation covering time interval at each power level;

5.11.2.2 Records and logs of principal maintenance activities, inspections, repair, and replacement of principal items of equipment related to nuclear safety;

5.11.2.3 All REPORTABLE EVENTS;

5.11.2.4 Records of surveillance activities, inspections, and calibrations required by the Technical Specifications;

5.11.2.5 Records of changes made to the procedures required by Technical Specification 6.8 and Technical Requirements Manual 6.8;

5.11.2.6 Records of sealed source and fission detector leak tests and results; and

5.11.2.7 Records of annual physical inventory of all sealed source material of record.

5.11.3 The following records shall be retained for the duration of the unit Operating License:

5.11.3.1 Records and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report;

5.11.3.2 Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories;

5.11.3.3 Records of doses received by all individuals for whom monitoring was required;

5.11.3.4 Records of gaseous and liquid radioactive material released to the environs;

5.11.3.5 Records of transient or operational cycles for those unit components identified in the Updated Final Safety Analysis Report;

5.11.3.6 Records of reactor tests and experiments;

5.11.3.7 Records of training and qualification for current members of the unit staff;

5.11.3.8 Records of inservice inspections performed pursuant to the Technical Specifications;

5.11.3.9 Records of quality assurance activities required by the Operations Quality Assurance Plan;

5.11.3.10 Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10CFR50.59;

5.11.3.11 Records of meetings of the PORC;

5.11.3.12 Records of organizational unit independent reviews;

5.11.3.13 Records of secondary water sampling and water quality;

5.11.3.14 Records of analyses required by the Radiological Environmental Monitoring Program that would permit evaluation of the accuracy of the analysis at a later date. This should include procedures effective at specified times and QA records showing that these procedures were followed;

5.11.3.15 Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM; and

5.11.3.16 Records of radioactive shipments.

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 this chapter.

7.0 ATTACHMENTS

7.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to establish requirements for a system of independent oversight activities of quality assurance programs for the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter provides for implementing a program of independent oversight activities which includes audits, assessments, evaluations, performance monitoring, and surveillances to ensure the requirements of the Operations Quality Assurance Program are being properly implemented.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 OQAP Chapter 2.0, Table I

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

4.3 OQAP Chapter 7.0, Procurement

4.4 OQAP Chapter 13.0, Control of Conditions Adverse to Quality

4.5 OQAP Chapter 14.0, Records Control

5.0 REQUIREMENTS

5.1 Independent Oversight Activities

5.1.1 Procedures shall be developed to control independent oversight activities. These activities include, but are not limited to, audits, assessments, evaluations, performance monitoring, and surveillances. These activities shall be used to observe and verify that activities are accomplished in accordance with prescribed requirements.

5.2 Audits

5.2.1 A comprehensive audit program in compliance with Reference 4.1 shall be established and implemented by STP Nuclear Operating Company (STPNOC) to verify internal and external quality activity compliance with the Quality Program. The audit program shall assure that applicable elements of the program have been developed, documented, and are effectively implemented and shall provide for reporting and reviewing audit results by appropriate levels of management. These audits shall encompass:

5.2.1.1 The conformance of unit operation to provisions contained within the Technical Specifications and applicable license conditions;

5.2.1.2 The training and qualification of the unit staff;

5.2.1.3 Actions taken to correct deficiencies occurring in equipment, structures, systems, components, or method of operation that affect nuclear safety;

5.2.1.4 The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix B, 10CFR50;

5.2.1.5 The fire protection programmatic controls including the implementing procedures;

5.2.1.6 The fire protection equipment and program implementation utilizing either a qualified offsite licensee fire protection engineer or an outside independent fire protection consultant;

5.2.1.7 The Radiological Environmental Monitoring Program and the results thereof;

5.2.1.8 The OFFSITE DOSE CALCULATION MANUAL and implementing procedures;

5.2.1.9 The PROCESS CONTROL PROGRAM and implementing procedures for processing and packaging of radioactive wastes;

5.2.1.10 The performance of activities required by the Quality Assurance Program for effluent and environmental monitoring; and

5.2.1.11 Other activities and documents as requested by the Senior Management Team or the President and Chief Executive Officer.

5.2.2 Qualified personnel assigned auditing responsibilities shall be independent of any direct responsibility for the performance of the activities which they audit; shall be experienced or trained commensurate with the scope, complexity, or special nature of the activities to be audited; and shall be qualified in accordance with the requirements of Reference 4.2.

5.2.2.1 An audit team consists of one (or more) qualified person(s). A qualified lead auditor shall be appointed as the audit team leader. The audit team leader shall be responsible for the written plans, checklists, team orientation, audit notification, pre-audit conference, audit performance, post-audit conference, reporting, and follow-up activity to assure corrective action. The audit team leader shall promptly report conditions requiring immediate corrective action to the appropriate management of the audited organization. Other audit findings will be identified to the audited organization at the post-audit conference.

5.2.2.2 Other qualified personnel may assist in the conduct of audits, such as technical specialists or management representatives.

5.2.3 Internal Audits

5.2.3.1 Internal audits shall be conducted by the Quality Department and performed with a frequency commensurate with their safety significance, past performance and regulatory requirements. Audits are scheduled on a nominal biennial frequency, except those audits whose frequency is specifically governed by regulation.

If a decision is made to extend an audit beyond that nominal frequency, the basis for that decision shall be documented. Decisions shall be approved by the Manager, Nuclear Oversight and notifications made to the President and Chief Executive Officer and the Senior Management Team.

5.2.3.2 Review of the audit program shall be performed at least semiannually by the Senior Management Team or by a management representative to verify that audits are being accomplished in accordance with the requirements of the Quality Program.

5.2.3.3 Audit results shall be reviewed periodically by the Quality organization for quality trends and overall audit program effectiveness. The results of these reviews shall be reported to appropriate management in periodic summary reports.

5.2.3.4 Audited organizations are responsible for providing timely corrective action including action to prevent recurrence for programmatic problems identified by an audit.

5.2.4 Supplemental audits shall be conducted when:

5.2.4.1 Significant changes are made to the quality assurance program.

5.2.4.2 It is necessary to determine the root cause of problem areas which may impact the effectiveness of the quality assurance program.

5.2.4.3 A systematic, independent assessment of program effectiveness is necessary.

5.2.4.4 Requested by appropriate management.

5.2.5 Audit implementation shall include the following:

5.2.5.1 Written notification to the audited organization of the audit, if an announced audit.

5.2.5.2 Development of an individual audit plan/scope. The audit plan and any necessary reference documents shall be available to the audit team members.

5.2.5.3 A pre-audit and post-audit conference with responsible organizational management.

5.2.5.4 Use of a checklist or procedure as a guide during the performance of the audit.

5.2.5.5 Identifying and documenting conditions adverse to quality.

5.2.5.6 Audit reports shall be prepared and submitted to the audited organization, Senior Management Team, and the President and Chief Executive Officer within thirty days after the post-audit conference. The audit report shall address those items required by Reference 4.1.

5.2.5.7 Audited organizations provide timely and thorough corrective action and recurrence control to discrepancies identified during the audit. In the event that corrective action cannot be completed within thirty days, the audited organization's response shall include a scheduled date for the corrective action. Earlier dates for corrective action may be established if circumstances dictate.

5.2.5.8 Evaluation of corrective action for conditions adverse to quality and follow-up verification as appropriate.

5.3 Surveillance/Quality Performance Monitoring

5.3.1 Procedures and/or instructions shall be developed to control surveillance/quality performance monitoring activities. Surveillance/quality performance monitoring activities shall be used to observe and verify that activities are accomplished in accordance with prescribed procedures.

5.3.2 Surveillance/quality performance monitoring activities will be performed during refueling outages, startup activities, and normal and off-normal operational activities. Areas to be monitored will be determined based on safety significance, past performance, regulatory requirements, and customer request.

5.3.3 The frequency of surveillance/quality performance monitoring activities is based upon the complexity of the activity, importance of the activity, and severity level of conditions noted during previous oversight activities.

5.3.4 Surveillance/quality performance monitoring results shall be documented and a summary shall be prepared and transmitted to responsible management.

5.4 Assessments/Evaluations

5.4.1 Assessments are conducted on a nominal biennial frequency in accordance with written procedures to assess the Quality organization's implementation of the Operations Quality Assurance Plan.

5.4.1.1 These assessments will be conducted by organizations independent of the activities performed to assure the STPNOC OQAP is being properly implemented.

5.4.1.2 The Senior Management Team shall review the scope and schedule of the assessment.

5.4.1.3 The results of these assessments will be transmitted to the President and Chief Executive Officer and the Senior Management Team.

5.4.2 Other assessments/evaluations may be performed to verify activities are accomplished in accordance with applicable requirements and prescribed procedures.

5.4.2.1 These assessments/evaluations will be performed on areas based on their safety significance, past performance, regulatory requirements, and customer request.

5.4.2.2 Assessment/evaluation results shall be documented and transmitted to appropriate management.

5.5 An approved oversight plan shall be issued annually to include:

5.5.1 Activities/organizations to receive independent oversight.

5.5.2 Time frame in which the oversight activity will be conducted.

5.6 Conditions adverse to quality identified during an independent oversight activity shall be documented in accordance with Reference 4.4.

5.7 Personnel performing independent oversight activities shall be trained and qualified in accordance with Reference 4.2.

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 4.5.

7.0 ATTACHMENTS

7.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to describe the requirements and responsibilities for independent technical review for the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter describes the independent technical review activities within the scope of the Operations Quality Assurance Plan (OQAP).

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 OQAP Chapter 1.0, Organization

4.2 OQAP Chapter 2.0, Program Description

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

4.4 OQAP Chapter 13.0, Deficiency Control

4.5 OQAP Chapter 14.0, Records Control

4.6 OQAP Chapter 15.0, Quality Oversight Activities

5.0 RESPONSIBILITIES

5.1 The Executive Vice President and Chief Administrative Officer is responsible for implementing quality program requirements including independent technical review.

5.2 The Manager, Nuclear Oversight is responsible for independent oversight activities performed to accomplish the independent technical reviews.

6.0 REQUIREMENTS

6.1 Independent oversight activities, as described in Reference 4.6, shall be performed in accordance with implementing procedures to ensure the completion of independent technical reviews.

6.2 Independent technical reviews shall be used to observe and verify that activities are performed correctly and that human errors are reduced as much as practical.

6.3 Independent technical reviews shall include, but not be limited to, the following activities:

6.3.1 Unit-operating characteristics

6.3.2 Nuclear Regulatory Commission issuances

6.3.3 Industry advisories

6.3.4 Licensee Event Reports

6.3.5 Other sources of unit design and operating experience information, including units of similar design, which may indicate areas for improving unit safety.

6.3.6 Plant operations

6.3.7 Maintenance activities

6.3.8 Equipment modifications

6.3.9 Independent Spent Fuel Storage Installation and Dry Cask Storage System

6.4 As determined by Quality management, several personnel performing independent technical reviews will be required to have a degree in engineering or related science and at least 3 years of professional level experience in the nuclear field.

6.5 Personnel performing independent technical reviews should be independent of performance function, signoff function, and the plant management chain while performing this oversight activity.

6.6 The results of independent technical reviews will be periodically transmitted to appropriate line and senior management, the Senior Management Team, and the President and Chief Executive Officer for review and/or action and to advise management on the overall quality and safety of operations.

6.7 Conditions adverse to quality and recommendations identified during the performance of independent technical reviews shall meet the requirements of Reference 4.4

7.0 DOCUMENTATION

7.1 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 4.5.

8.0 ATTACHMENTS

8.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to prescribe requirements and responsibilities for repair and replacement activities governed by ASME Boiler and Pressure Vessel Code, Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components.

2.0 SCOPE

2.1 This chapter is applicable to examination, repair and replacement activities performed on ASME Class 1, 2, 3, CC, and MC components.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 ASME Code Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components

4.2 OQAP Chapter 14.0, Records Control

4.3 Generic Letter 89-009, ASME Section III Component Replacements

4.4 10CFR50.55a, Codes and Standards

5.0 RESPONSIBILITIES

5.1 The Plant General Manager is responsible for the planning, management, and control of the performance of repairs, replacements and tests.

5.2 The General Manager, Engineering is responsible for developing the repair and replacement program including specifications for design, fabrication, testing, and examination. The General Manager, Engineering is responsible for providing qualified personnel to perform examinations of component repairs and replacements and verifying the requirements of this chapter are implemented.

6.0 REQUIREMENTS

6.1 Repair and replacement activities required by Reference 4.1 shall be conducted in accordance with written and approved procedures or instructions.

Areas to be addressed include:

6.1.1 Accessibility for component examination, repair or replacement.

6.1.2 Identification of system boundaries and code class for each component.

6.1.3 The method for interfacing with the authorized nuclear inspection agency.

6.1.4 Qualification of nondestructive examination methods.

6.1.5 Qualification requirements for nondestructive examination personnel.

6.1.6 Qualification requirements for welders and welding operators.

6.1.7 Qualification of welding procedures.

6.1.8 Conduct of examinations and inspections.

6.1.9 A component repair or replacement package including installation and test procedures and quality assurance requirements.

6.1.10 Conduct of system pressure and functional tests.

6.1.11 A component replacement package including specifications for design, fabrication and examination as applicable for the replacements.

6.1.12 Preparation, submittal and retention of required records and reports.

6.1.13 Procurement, in accordance with Reference 4.3, of component replacements not available in full compliance with ASME code stamping and documentation requirements.

7.0 DOCUMENTATION

7.1 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 4.2.

8.0 ATTACHMENTS

8.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to prescribe requirements and responsibilities for the in-service examination and testing programs at the South Texas Project (STP).

2.0 SCOPE

2.1 This chapter applies to the inservice examination and testing of Class 1, 2, 3, CC, and MC pressure retaining components and component supports as specified in Section XI of the ASME Boiler and Pressure Vessel Code, the ASME OM Code, and additional ISI commitments as specified in the UFSAR.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 ASME Code Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components

4.2 10CFR50.55a, Codes and Standards

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

4.4 OQAP Chapter 14.0, Records Control

4.5 ASME OM Code

5.0 RESPONSIBILITIES

5.1 The General Manager, Engineering is responsible for developing and implementing the inservice examination and testing programs as required by ASME Code Section XI and ASME OM Code. The General Manager, Engineering is responsible for verifying the implementation of the inservice examination and testing programs through appropriate quality oversight activities, interfacing with the Authorized Inspection Agency, and performance of nondestructive examinations as requested.

6.0 REQUIREMENTS

6.1 The inservice examination and testing programs consist of plans and implementing procedures for the examination and testing of Class 1, 2, 3, CC, and MC pressure retaining components and their supports and the inservice testing of Class 1, 2, and 3 pumps and valves.

6.1.1 Examination and Testing of Pressure Retaining Components and Component Supports:

6.1.1.1 Engineering shall develop plans for examination and testing of Class 1, 2, 3, CC, and MC components and their supports. These plans shall prescribe the requirements for nondestructive examinations and tests and the schedule for their performance.

6.1.1.2 Inspection plans (e.g., specifications, vendor documents, etc.) shall be developed which identify the nature and extent of examination and testing activities including the acceptance criteria which must be met.

6.1.1.3 Procedures shall be developed which provide measures for the performance of activities identified in the plans.

6.1.2 In-service Testing of Pumps and Valves and System Pressure Testing

6.1.2.1 Engineering shall develop the Inservice Testing Program for pumps and valves and the System Pressure Testing Program. These programs shall include the requirements and the schedule for their performance.

6.1.3 Examination and test results shall be evaluated by specified personnel and verified by the Authorized Nuclear Inservice Inspector.

6.1.4 Coordination of involved STP Nuclear Operating Company (STPNOC) departments, including the use of contractors for the performance, documentation and evaluation of inservice inspection activities, shall be controlled by approved procedures.

6.1.5 When contractors are used to perform activities within the scope of this section, their quality assurance program shall be approved by STPNOC.

6.1.6 Exceptions to code examination and testing requirements shall be documented in accordance with Reference 4.2.

6.1.7 Personnel performing examinations and tests shall be qualified as required by Reference 4.1 and Reference 4.3.

6.1.8 Plans and reports for inservice examinations and tests shall be submitted to the appropriate regulatory and enforcement authorities as required by Section XI.

7.0 DOCUMENTATION

7.1 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.

8.0 ATTACHMENTS

8.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to describe the administrative controls (as previously documented in the Technical Specifications) as related to quality assurance for the South Texas Project (STP).

2.0 SCOPE

2.1 STP Nuclear Operating Company (STPNOC), as licensee, has the Quality responsibility for administrative controls of the STP.

3.0 DEFINITIONS

3.1 None

4.0 REFERENCES

4.1 OQAP Chapter 2.0, Table I

4.2 STP Technical Specifications

4.3 Updated Final Safety Analysis Report

4.4 OQAP Chapter 8, Control and Issuance of Documents

4.5 OQAP Chapter 14, Records Control

4.6 OQAP Chapter 15, Quality Oversight Activities

4.7 10CFR72, Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater Than Class C Waste

5.0 REQUIREMENTS

5.1 The Plant Operations Review Committee (PORC) shall function to advise the Plant General Manager on all matters related to nuclear safety.

5.1.1 The PORC shall be composed of six members, who shall be appointed in writing by the Plant General Manager from senior experienced onsite individuals, at the manager level or equivalent, representing each of the following disciplines: engineering, operations, chemistry, health physics, quality assurance/quality control and maintenance. The quality assurance/quality control representatives shall not be appointed as PORC Chairman.

5.1.2 The PORC Chairman shall be appointed in writing from among those members by the Plant General Manager. One of the members shall meet the requirements of Regulatory Guide 1.8 (Personnel Selection and Training – Revision 1-R), Radiation Protection Manager.

5.1.3 All alternate members shall be appointed in writing by the Plant General Manager to serve on a temporary basis; however, no more than two alternates shall participate as voting members in PORC activities at any one time.

5.1.4 The PORC shall meet at least once per calendar month and as convened by the PORC Chairman or his designated alternate.

5.1.5 The quorum of the PORC necessary for the performance of the PORC responsibility and authority provisions shall consist of the Chairman or his designated alternate and three other members including alternates.

5.1.6 The PORC shall be responsible for:

5.1.6.1 Review of all safety-related station administrative procedures and changes thereto.

5.1.6.2 Review of safety evaluations for (1) procedures, (2) changes to procedures, structures, components, or systems, and (3) tests or experiments completed under the provisions of 10CFR50.59 or 10CFR72.48, to verify that such actions did not require prior Nuclear Regulatory Commission (NRC) approval.

5.1.6.3 Review of proposed (1) procedures, (2) changes to procedures, structures, components, or systems, and (3) tests or experiments completed under the provisions of 10CFR50.59 or 10CFR72.48, which may require prior NRC approval.

5.1.6.4 Review of all required programs by Technical Specification 6.8 and the Technical Requirements Manual 6.8 and changes thereto.

5.1.6.5 Review of all proposed changes to the Technical Specifications or the Operating License.

5.1.6.6 Review of all REPORTABLE EVENTS.

5.1.6.7 Review of reports of significant operating abnormalities or deviations from normal and expected performance of plant equipment or systems that affect nuclear safety.

5.1.6.8 Review of reports of unanticipated deficiencies in the design or operation of structures, systems, or components that affect nuclear safety.

5.1.6.9 Review of Security Plans: Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, Cyber Security Plan, and implementing procedures and changes thereto.

5.1.6.10 Review of the Emergency Plan and implementing procedures and changes thereto.

5.1.6.11 Review of the PROCESS CONTROL PROGRAM and implementing procedures and changes thereto.

5.1.6.12 Review of the OFFSITE DOSE CALCULATION MANUAL and implementing procedures and changes thereto.

5.1.6.13 Performance of special reviews, investigations, or analyses and reports thereon as requested by the Plant General Manager or the Senior Management Team (SMT).

5.1.6.14 Review of any accidental, unplanned, or uncontrolled release of liquid or gaseous radioactive effluents to the offsite environment and groundwater contamination events resulting in offsite notifications. The review shall include the preparation of reports covering evaluation, recommendations, and disposition of the corrective action(s) to prevent recurrence and the forwarding of these reports to the Plant General Manager and to the SMT.

5.1.6.15 Reports of violations of codes, regulations, orders, Technical Specifications, or Operating License requirements having nuclear safety significance or reports of abnormal degradation of systems designed to contain radioactive material.

5.1.6.16 Review of the Fire Protection Program, quality-related implementing procedures and changes thereto.

5.1.6.17 Review of activities related to the Independent Spent Fuel Storage Installation and the Dry Cask Storage System pursuant to the provisions of 10CFR72.

5.1.7 The PORC shall recommend in writing to the Plant General Manager approval or disapproval of items considered under section 5.1.6.1 through 5.1.6.5 prior to their implementation, and items considered under sections 5.1.6.9 through 5.1.6.12 and 5.1.6.17.

5.1.8 The PORC shall render determinations in writing with regard to whether or not each item considered under sections 5.1.6.1 through 5.1.6.5 and 5.1.6.15 may require prior NRC approval under the provisions of 10CFR50.59 or 10CFR72.48.

5.1.9 The PORC shall provide written notification within 24 hours to the President and Chief Executive Officer and the Senior Management Team of disagreement between the PORC and the Plant General Manager; however, the Plant General Manager shall have the responsibility for resolution of such disagreements pursuant to Technical Specification 6.1.1.

5.1.10 The PORC shall maintain written minutes of each PORC meeting that, at a minimum, document the results of all PORC activities performed under the responsibility provisions of this chapter. Copies shall be provided to the President and Chief Executive Officer and the appropriate organizational unit.

5.2 Appropriate organizational units shall function to provide independent review of designated activities as required by ANSI N18.7-1976/ANS-3.2, Sections 4.3, 4.3.1, 4.3.3, and 4.3.4.

5.2.1 Staff personnel required to perform these independent reviews shall collectively have the experience and competence to review operational activities in the following areas:

5.2.1.1 Nuclear power plant operations;

5.2.1.2 Nuclear engineering;

5.2.1.3 Chemistry and radiochemistry;

5.2.1.4 Metallurgy;

5.2.1.5 Instrumentation and control;

5.2.1.6 Radiological safety;

5.2.1.7 Mechanical and electrical engineering;

5.2.1.8 Civil engineering;

5.2.1.9 Training;

5.2.1.10 Nuclear assurance;

5.2.1.11 Nuclear licensing;

5.2.1.12 Plant security, and;

5.2.1.13 Environmental impact

5.2.1.14 Nondestructive testing

5.2.1.15 Dry cask storage operations

Note: If sufficient expertise is not available from within the STPNOC for the areas noted above, appropriate expertise shall be brought to bear in the independent reviews through the use of outside consultants.

5.2.2 The Senior Management Team shall functionally report to and advise the President and Chief Executive Officer on those areas of responsibility specified in sections 5.2.3 and 5.2.4.

5.2.3 Appropriate organizational units shall be responsible for the review of:

5.2.3.1 The safety evaluations for: (1) changes to procedures, equipment, or systems; and (2) tests or experiments completed under the provision of 10CFR50.59 or 10CFR72.48, to verify that such actions did not require prior NRC approval;

5.2.3.2 Proposed changes to procedures, equipment, or systems which require prior NRC approval under the provisions of 10CFR50.59 or 10CFR72.48;

5.2.3.3 Proposed tests or experiments which require prior NRC approval under the provisions of 10CFR50.59 or 10CFR72.48;

5.2.3.4 Proposed changes to Technical Specifications or the Operating License;

5.2.3.5 Violations of Codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance;

5.2.3.6 Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety;

5.2.3.7 All REPORTABLE EVENTS;

5.2.3.8 All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety; and

5.2.3.9 Reports and meeting minutes of the PORC.

5.2.3.10 Review of activities related to the Independent Spent Fuel Storage Installation and the Dry Cask Storage System pursuant to the provisions of 10CFR72.

5.2.4 Reports of audits of unit activities shall be reviewed by the Senior Management Team.

5.2.5 Records of organizational unit independent review activities shall be prepared, approved, and distributed as indicated below:

5.2.5.1 Reports of organizational unit independent reviews encompassed by sections 5.2.3 and 5.2.4 shall be prepared, approved, and forwarded to the President and Chief Executive Officer and the Senior Management Team.

5.3 Technical Review and Control

5.3.1 Activities that affect nuclear safety shall be conducted as follows:

5.3.1.1 Procedures required by Technical Specification 6.8 and Technical Requirements Manual 6.8, and other procedures that affect nuclear safety, and changes thereto, shall be prepared, reviewed, and approved. Each such procedure, or change thereto, shall be reviewed by an individual/group other than the individual/group who prepared the procedure, or change thereto, but who may be from the same organization as the individual/group who prepared the procedure, or change thereto. Procedures other than station administrative procedures shall be approved by the Plant General Manager or the head of the responsible department prior to implementation. The Plant General Manager shall approve station administrative procedures, security plans implementing procedures, and emergency plan implementing procedures. Temporary changes to procedures, which clearly do not change the intent of the approved procedures, shall be approved prior to implementation by two members of the plant staff, at least one of whom holds a Senior Reactor Operator's License. Changes to procedures that may involve a change to the intent of the original procedure shall be approved by the individual authorized to approve the procedure prior to implementation of the change.

5.3.1.2 Proposed changes or modifications to systems or equipment that affects nuclear safety shall be reviewed as designated by the Plant General Manager. Each such modification shall be reviewed by an individual/group other than the individual/group who designed the modification, but who may be from the same organization as the individual/group who designed the modification.

5.3.1.3 Proposed tests and experiments that affect nuclear safety and that are not addressed in the Final Safety Analysis Report shall be prepared, reviewed, and approved prior to implementation. Each such test or experiment shall be reviewed by an individual/group other than the individual/group who prepared the test or experiment but who may be from the same organization as the individual/group who prepared the test or experiment.

5.3.1.4 The Plant General Manager or the Plant General Manager's designee shall approve, prior to implementation, each proposed test and experiment that affects nuclear safety and is not described in the Final Safety Analysis Report, and each modification to systems or equipment that affects nuclear safety.

5.3.1.5 Individuals responsible for reviews performed in accordance with sections 5.3.1.1, 5.3.1.2, and 5.3.1.3 shall be members of the plant management staff previously designated by the Plant General Manager. Each review shall include a determination of whether or not additional, cross-disciplinary review is necessary. If deemed necessary, such review shall be performed by qualified personnel of the appropriate discipline.

5.3.1.6 Each review will include a determination of whether or not prior NRC approval is involved pursuant to 10CFR50.59 or 10CFR72.48. NRC approval of items will be obtained prior to Plant General Manager approval for implementation.

5.3.2 Records of the above activities shall be provided to the Plant General Manager, PORC, and/or the appropriate organizational unit as necessary for required reviews.

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 the requirements of this chapter and Reference 4.4.

7.0 ATTACHMENTS

7.1 None

1.0 PURPOSE

1.1 The purpose of this chapter is to supplement the basic policies established and documented as stated in the previously approved 10CFR50, Appendix B Operations Quality Assurance Plan (OQAP) to include specific requirements applicable to the design, construction, and operation of the Independent Spent Fuel Storage Installation (ISFSI) and Dry Cask Storage System (DCSS) at the South Texas Project (STP).

1.2 The objective of this chapter is to maintain administrative control over activities relative to the important to safety structures, systems, equipment, and components regulated by 10 CFR Part 72.

2.0 SCOPE

2.1 The policies and procedures identified within this chapter will form the basis for plant-life operation of the STP DCSS and ISFSI. The responsibility and authority for the establishment and execution of the Quality Plan for the operation of the STP DCSS and ISFSI will be retained by STP Nuclear Operating Company (STPNOC) and described in the OQAP.

2.2 This program is designed to meet the requirements of 10 CFR Part 72, Subpart G for a quality assurance program.

3.0 DEFINITIONS

3.1 Important to Safety (ITS) Structures, Systems, and Components (SSCs) - those features of the DCSS/ISFSI whose functions are:

3.1.1 to maintain the conditions required to store spent fuel safely;

3.1.2 to prevent damage to the spent fuel container during handling and storage; and

3.1.3 to provide reasonable assurance that spent fuel can be received, handled, packaged, stored, and retrieved without undue risk to the health and safety of the public.

3.2 Dry Cask Storage Quality Categories - Regulatory Guide 7.10 presents a method of classification of various components in transportation packaging (10CFR71) and dry cask storage systems (10CFR72). Each component is first identified as either Important to Safety (ITS) or Not Important to Safety" (NITS). Then, components that are considered ITS are further categorized into one of three classification categories (A, B, or C), depending on that component's importance to safety.

3.3 Category A, Category B, and Category C - as described below:

Classification Category	Importance to Safety	Description
A	Critical to Safe Operation	Category A items include structures, components, and systems whose failure could directly result in a condition adversely affecting public health and safety. The failure of a single item could cause loss of primary containment leading to release of radioactive material, loss of shielding, or unsafe geometry compromising criticality control.
B	Major Impact on Safety	Category B items include structures, components, and systems whose failure or malfunction could indirectly result in a condition adversely affecting public health and safety. The failure of a Category B item, in conjunction with the failure of an additional item, could result in an unsafe condition.
C	Minor Impact on Safety	Category C items include structures, components, and systems whose failure or malfunction would not significantly reduce the packaging effectiveness and would not be likely to create a situation adversely affecting public health and safety.

3.4 Basic, or Fundamental, Safety Criteria - the following are considered to be the basic nuclear safety criteria for design of the DCSS/ISFSI. (NUREG-1567):

3.4.1 Maintain sub-criticality,

3.4.2 Prevent release of radioactive material above acceptable amounts,

3.4.3 Ensure radiation rates and doses do not exceed acceptable levels,

3.4.4 Maintain retrievability of the stored radioactive materials.

3.5 Certificate of Compliance (C of C) - the certificate issued by the Commission that approves the design of a spent fuel storage cask in accordance with the provisions of 10CFR72, Subpart L.

4.0 REFERENCES

4.1 10CFR72, Licensing Requirements For The Independent Storage of Spent Nuclear Fuel And High-Level Radioactive Waste, and Reactor Related Greater Than Class C Waste - Subpart G, Quality Assurance.

4.2 ASME B&PV Code, Sections III, V, and IX (as required by DCSS Certificate of Compliance/FSAR)

4.3 Regulatory Guide 7.10, Establishing Quality Assurance Programs for Packaging used in Transport of Radioactive Material

4.4 10CFR50.55a, Codes and Standards

4.5 10CFR20, Appendix G.

4.6 10CFR72.48, Changes, Tests and Experiments

4.7 SNT-TC-1A, American Society for Nondestructive Testing; Recommended Practice

4.8 ANSI/ASNT CP-189, ANST Standard for Qualification and Certification of Nondestructive Testing Personnel

4.9 NUREG/CR-6407, Classification of Transportation Packaging and Dry Spent Fuel Storage System Components According to Importance to Safety

4.10 NOC-AE-12002873, Independent Spent Fuel Storage Installation (STI # 33563580)

4.11 NUREG 1567, Standard Review Plan for Spent Fuel Dry Storage Facilities

5.0 REQUIREMENTS

5.1 DCSS/ISFSI Organization

5.1.1 The responsibility for implementing quality program requirements for activities associated with the ISFSI and DCSS is described in the OQAP Chapter 1.0, Organization.

5.2 DCSS/ISFSI Quality Program

5.2.1 The requirements described in the OQAP Chapter 2.0, Program Description apply to all DCSS and ISFSI construction and operation activity and as specified below.

5.2.2 The determination of the ISFSI and dry cask storage and transport systems, structures, and components important to safety is in accordance with 10CFR71 Subpart H and 10CFR72 Subpart G, and includes those:

5.2.2.1 Which comprise or are necessary to maintain the conditions required to store spent fuel or high-level radioactive waste safely,

5.2.2.2 Which are necessary to prevent damage to the spent fuel or the high-level radioactive waste container during handling, storage, or transport, or

5.2.2.3 Which comprise or are necessary to provide reasonable assurance that spent fuel can be received, handled, packaged, stored, and retrieved without undue risk to the health and safety of the public.

5.2.3 Quality assurance requirements apply to design, purchase, fabrication, handling, shipping, storing, cleaning, assembly, inspection, testing, operation, maintenance, repair, modification of structures, systems, and components, and decommissioning activities that are important to safety as defined by the DCSS Certificate of Compliance (C of C) and the DCSS Final Safety Analysis Report (FSAR).

5.2.4 The OQAP will provide the required control over activities affecting the quality of the identified structures, systems, and components to an extent commensurate with the importance to safety and, as necessary, to ensure conformance with the approved design of the ISFSI and DCSS.

5.2.5 STP will ensure that activities affecting quality are accomplished under suitably controlled conditions which include the use of appropriate equipment; suitable environmental conditions for accomplishing the activity, and assurance that pre-requisites for a given activity have been satisfied.

5.2.6 The need for special controls, processes, test equipment, tools and skills will be evaluated and resources will be provided to attain the required quality and the need for verification of quality by inspection and test.

5.2.7 The degree of application of requirements and procedures will be based on the following considerations concerning the complexity and proposed use of the structures, systems, or components.

5.2.7.1 The impact of malfunction or failure of the item on safety;

5.2.7.2 The design and fabrication complexity or uniqueness of the item;

5.2.7.3 The need for special controls and surveillance over processes and equipment;

5.2.7.4 The degree to which functional compliance can be demonstrated by inspection or test; and

5.2.7.5 The quality history and degree of standardization of the item.

5.2.8 Category A items are those items that are critical to safe operation and include structures, components, and systems whose failure could directly result in a condition adversely affecting public health and safety. The failure of a single item could cause loss of primary containment leading to release of radioactive material, loss of shielding, or unsafe geometry compromising criticality control.

5.2.9 Category B items have a major impact on safety and include structures, components, and systems whose failure or malfunction could indirectly result in a condition adversely affecting public health and safety. The failure of a Category B item, in conjunction with the failure of an additional item, could result in an unsafe condition.

5.2.10 Category C items have a minor impact on safety and include structures, components, and systems whose failure or malfunction would not significantly reduce the packaging effectiveness and would not be likely to create a situation adversely affecting public health and safety.

5.3 Design Control

5.3.1 Design Control activities are performed in accordance with OQAP Chapter 6.0, Design and Modification Control and as specified below.

5.3.2 STP will control DCSS and ISFSI design bases documents received from vendors and developed internally.

5.3.3 Design changes, tests and experiments must be reviewed pursuant to the requirements 10CFR72.48. The C of C holder may initiate 10CFR72.48 activities independent of station activities.

5.3.4 Design basis documents applicable to the ISFSI and DCSS will be included in the STP document control system, Master Equipment Database (MED), and Master Parts List (MPL) as applicable.

5.4 Procurement Document Control

5.4.1 Procurement Control activities are performed in accordance with OQAP Chapter 7.0, Procurement and as specified below.

5.4.2 Procurement Document Control applies to documents employed to procure important to safety materials, parts, components, and services required to modify, maintain, repair, test, inspect, or operate as a result of, or in support of, the 10CFR72 licensed facilities at the STP relating to the ISFSI and DCSS. STPNOC controls procurement documents by written procedures that establish requirements and assign responsibility for measures to ensure that applicable regulatory requirements, design bases, and other requirements necessary to ensure quality are included in or invoked by reference in documents employed for the procurement of important to safety materials, parts, components, and services.

5.4.3 Procurement of SSCs applicable to the ISFSI and DCSS will meet requirements of 10CFR72 Subpart G. The graded approach to quality will be used in the quality classification of SSCs for use on the dry cask storage systems.

5.4.4 Originating and reviewing organizations shall require that the following be included or invoked by reference in procurement documents for important to safety items or services, as appropriate:

5.4.4.1 The supplier shall provide a description of a 10CFR72, Subpart G quality assurance program, or;

5.4.4.2 A 10CFR50, Appendix B or a 10CFR71, Subpart H quality assurance program that meets 10CFR72, Subpart G requirements and the recordkeeping requirements of 10CFR72.174.

5.4.4.3 10CFR21 is applicable to Category A.

5.4.5 Vendors supplying important to safety materials, parts, components, and services required to modify, maintain, repair, test, inspect, or operate as a result of, or in support of, the 10CFR72 licensed facilities at the STP will be evaluated for inclusion on the Approved Vendor List as required by OQAP Chapter 7.0, Procurement.

5.4.6 Vendors supplying important to safety materials, parts, components, and services required to modify, maintain, repair, test, inspect, or operate as a result of, or in support of, the 10CFR72 licensed facilities at the STP will be evaluated by Quality on an annual basis.

5.4.7 Vendors supplying important to safety materials, parts, components, and services required to modify, maintain, repair, test, inspect, or operate as a result of, or in support of, the 10CFR72 licensed facilities at the STP will be audited on a triennial basis.

5.5 Instructions, Procedures, and Drawings

5.5.1 Document control activities are performed in accordance with OQAP Chapter 8.0, Control and Issuance of Documents and as specified below.

5.5.2 Where the OQAP addresses control of Safety Related documents, Important to Safety Category A & B documents are to be included.

5.5.3 These requirements are applicable to documents, which control activities Important to Safety for design, licensing, construction, operation, testing, maintenance, and modification of the ISFSI and DCSS. These documents include, but are not limited to, instructions, procedures, specifications, drawings, vendor manuals, status registers (such as drawing lists, equipment list), procurement documents, design documents, design change requests, as-built documents, non-conformance and deficiency reports, and Certificate Holder’s Final Safety Analysis Report.

5.6 Control of Purchased Materials, Equipment, and Services

5.6.1 Purchased Materials, Equipment and Service control activities are performed in accordance with OQAP Chapter 7.0, Procurement. Capability to comply with the requirements of 10CFR72, Subpart G will be maintained.

5.7 Identification and Control of Materials, Parts and Components

5.7.1 Material, Part and Component control activities are performed in accordance with OQAP Chapter 9.0, Control of Material. Capability to comply with the requirements of 10CFR72, Subpart G will be maintained.

5.8 Control of Special Processes

5.8.1 Special Processes are controlled in accordance with OQAP Chapter 5.0, Maintenance, Installation of Modifications, and Related Activities, Section 5.5. Capability to comply with the requirements of 10CFR72, Subpart G will be maintained.

5.8.2 Nondestructive examinations associated with DCSS activities will be evaluated by Engineering Department personnel independent of the activity. When ASME Section V is referenced personnel will be qualified in accordance with SNT-TC-1A and ANSI/ASNT CP-189.

5.9 Inspection

5.9.1 Inspection is controlled in accordance with OQAP Chapter 10.0, Inspection. Capability to comply with the requirements of 10CFR72, Subpart G will be maintained.

5.9.2 Inspections related to DCSS/ISFSI activities shall be in accordance with the DCSS C of C and 10CFR72, Subpart G requirements.

5.9.3 NDE performed on DCSS shall be in compliance with referenced ASME Boiler & Pressure Vessel Code, Sections III and Section V, Articles 6, 9 and 10 or as specified in the applicable C of C and FSAR.

5.10 Inspection, Test and Operating Status

5.10.1 Inspection, Test and Operating Status is controlled in accordance with OQAP Chapters 3.0, Conduct of Operations, 5.0, Maintenance, Installation of Modifications, and Related Activities, 10.0, Inspection, and 11.0, Test Control. Capability to comply with the requirements of 10CFR72, Subpart G will be maintained.

5.10.2 Measures shall be established to ensure that necessary inspections of items meet the requirements and acceptance limits contained in the DCSS (C of C/FSAR) and have not been inadvertently bypassed or that SSC are not inadvertently operated outside of specified requirements.

5.10.3 Personnel performing examinations and tests shall be qualified as required by OQAP, Chapter 4.0 Qualification, Training and Certification of personnel.

5.10.4 The 10CFR72 C of C, for the storage systems in use at the STP DCSS/ISFSI establishes technical specifications that ensure the systems are loaded, transferred, and maintained functional for safe storage.

5.10.5 Sequence Change Control - Procedures will include the control of the sequence of required tests, inspections, and other operations when important to safety. To change these controls, the individual procedure must be changed, which requires the same review and approval cycle as that which authorized the original procedure.

5.11 Test Control

5.11.1 Tests are controlled in accordance with OQAP Chapter 11.0, Test Control. Capability to comply with the requirements of 10CFR72, Subpart G will be maintained.

5.11.2 Provisions will be established for the performance of DCSS and ISFSI surveillance testing to ensure that the necessary quality of systems and components is maintained, that facility operations are within the safety limits, and that limiting conditions of operation can be met.

5.11.3 The testing frequency will be at least as frequent as prescribed in the Technical Specifications for the 10CFR72 C of C for DCSS/ISFSI used at the STPEGS.

5.12 Control of Measuring and Test Equipment

5.12.1 M&TE is controlled in accordance with OQAP Chapter 12.0, Instrument and Calibration Control. Capability to comply with the requirements of 10CFR72, Subpart G will be maintained.

5.13 Handling, Storage, and Shipping

5.13.1 Handling, Storage, and Shipping is controlled in accordance with OQAP Chapter 9.0, Control of Material. Capability to comply with the requirements of 10CFR72, Subpart G will be maintained.

5.13.2 Measures will be established to control the handling of licensed radioactive materials in accordance with 10CFR72.

5.13.3 This program includes the storage of spent fuel and reactor-related Greater than Class C waste. When this material is stored in the facility licensed under 10CFR50, the OQAP applies. When this material is stored in the portion of the facility licensed under 10CFR72 (the DCSS/ISFSI), 10CFR72, Subpart G quality assurance requirements apply.

5.14 Records

5.14.1 Record control is in accordance with OQAP Chapter 14.0, Records Control. Capability to comply with the requirements of 10CFR72, Subpart G will be maintained.

5.14.2 Records include, but are not limited to, those pertaining to the design, fabrication, erection, testing, maintenance, and use of structures, systems, and components important to safety and are required to be maintained by or under the control of the licensee or certificate holder until the NRC terminates the license or C of C as required by 10CFR72.174.

5.14.3 The term lifetime record is applicable to both the 10CFR50 and 10CFR72 licensed facilities at the STPEGS. In the case where lifetime records are applicable to both license types, the record will be maintained until the termination of the last license.

5.14.4 Records of the following activities performed in support of or as required for the ISFSI and/or DCSS shall be retained for the duration of the 10CFR72 licensed facility.

5.14.4.1 Record and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.

5.14.4.2 Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.

5.14.4.3 Records of facility radiation and contamination surveys.

5.14.4.4 Records of radiation exposure for all individuals for whom monitoring was required.

5.14.4.5 Records of gaseous and liquid radioactive material released to the environment.

5.14.4.6 Records of training and qualification for members of the plant staff.

5.14.4.7 Records of in-service inspections performed pursuant to the Technical Specifications.

5.14.4.8 Records of Quality Assurance activities required by the OQAP.

5.14.4.9 Records of reviews performed for changes made to procedures or equipment or reviews for tests and experiments pursuant to 10CFR72.48.

5.14.4.10 Records of reviews performed pursuant to 10CFR72.212.

5.14.4.11 Records of meetings of the PORC.

5.14.4.12 Records of results of analyses required by the radiological environmental monitoring program.

5.14.4.13 Records of reviews performed for changes made to the Offsite Dose Assessment Manual and the Process Control Program.

5.14.4.14 Licensed radioactive waste disposal records.

5.15 Nonconforming Items

5.15.1 Control of conditions adverse to quality is covered in OQAP Chapter 13.0, Control of Conditions Adverse to Quality. Capability to comply with the requirements of 10CFR72, Subpart G will be maintained.

5.15.2 The Certificate Holder shall address any fabrication nonconformances identified that require NRC approval.

5.16 Corrective Action

5.16.1 Corrective Action is covered throughout the OQAP, in Chapter 13.0, Control of Conditions Adverse to Quality and others. Capability to comply with the requirements of 10CFR72, Subpart G will be maintained.

5.17 Audits

5.17.1 Audits are covered in OQAP Chapter 15.0, Quality Oversight Activities and as specified below.

5.17.2 Audits of DCSS/ISFSI important to safety functions will be performed on a nominal biennial frequency to ensure the requirements of the 10CFR72 licensed operation provisions contained within the Certificate of Compliance for the storage system(s) in use and applicable license conditions are maintained.

6.0 DOCUMENTATION

6.1 Procedures which are generated as required by this procedure shall identify the records which are required to implement and document those activities. The records shall be controlled in accordance with this Chapter 20.0, Dry Cask Storage System and Independent Spent Fuel Storage Installation, Section 5.14 and Chapter 14.0, Records Control.

7.0 ATTACHMENTS

7.1 None