SUMMARY STATUS REPORT OF

TVA'S COMPLIANCE TO 10CFR50.49

ENVIRONMENTAL QUALIFICATION OF ELECTRICAL

EQUIPMENT IMPORTANT TO SAFETY FOR

NUCLEAR POWER PLANTS

SEQUOYAH NUCLEAR PLANT - UNITS 1 AND 2

DECEMBER 1985

EQP326.84

8512270175 851223
PDR ADOCK 05000327
P PDR

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

Subsequent to the March 26, 1985, submittal of the Sequoyah Nuclear Plant Summary Status Report that established TVA's compliance to 10CFR50.49, TVA determined that the quality of its 10CFR50.49 program required upgrading. As a result, substantial improvements have been made in the TVA 10CFR50.49 program. The updated environmental qualification documentation and all elements of the upgraded program described in this report fully comply with the requirements of 10CFR50.49. This summary status report contains the following:

1. Methodology used for identifying and qualifying all electrical equipment in the 10CFR50.49 program.

2. Description of TVA's program which assures that this qualification is maintained for the life of the plant.

3. Position on MSLB Superheat Issue.

4. Status summary of TER items.

5. Master list of 10CFR50.49 equipment and the identification of equipment either added or deleted from the March 1985 submittal.

6. Status of the 10CFR50.49 qualification effort including identification of outstanding technical issues and field changes.

II. INTRODUCTION

On April 26, 1983, the Tennessee Valley Authority (TVA) received the Safety Evaluation Report (SER) regarding the Environmental Qualification of Safety-Related Electrical Equipment at Sequoyah Nuclear Plant Units 1 and 2 (SQN). The SER contained a Technical Evaluation Report (TER), written by Franklin Research Center under contract to the NRC, which noted a number of environmental qualification deficiencies for safety-related electrical equipment at SQN. The resolution for each of the environmental qualification deficiencies in the TER and the summary status for the EQ program which demonstrated TVA's compliance to 10CFR50.49 was submitted to the NRC on March 26, 1985.

Following the shutdown of the Sequoyah Nuclear Plant, TVA organized an Environmental Qualification Project which was charged with the responsibility to establish a quality environmental qualification documentation program to verify that the 10CFR50.49 plant equipment is fully qualified to all requirements of 10CFR50.49. Inherent in this process was the compilation of auditable, tangible evidence which demonstrates that the equipment is environmentally qualified for its application. To accomplish this objective, TVA elected to employ an EQ binder concept which documents, in one place, all data needed to support environmental qualification. Ninety-two binders are being assembled that fully describe environmental qualification for all SQN 10CFR50.49 equipment.

The purpose of this report is to provide a comprehensive summary of TVA's 10CFR50.49 program. Included in this summary is a complete description of the binder process that documents environmental qualification and a review of the methodology employed in establishing the 10CFR50.49 equipment list. Also included is a discussion of the program for maintaining environmental qualification for the life of the plant, a summary of TER items, and a complete listing of electrical equipment within the scope of the 10CFR50.49 program. A summary of the SQN 10CFR50.49 qualification status is presented which includes a description of outstanding technical issues, a list of EQ packages (binders) and identification of field changes that must be accomlished to fully qualify all SQN EQ Equipment prior to start-up.

III. EQ PROGRAM DESCRIPTION

1. EQ Documentation Packages (Binder Concept)

Under TVA's program for EQ, all equipment in the scope of 10CFR50.49 is evaluated for compliance with 10CFR50.49 and that evaluation is documented in an EQ Binder.

The EQ binder is a design output document and is the auditable record demonstrating compliance with 10CFR50.49 for all 10CFR50.49 scope equipment. As such, EQ binders constitute quality information and are part of the plant records which are the licensing basis for plant operation. EQ binders are permanent lifetime QA records. EQ binders are maintained current for each equipment type to demonstrate that the equipment is environmentally qualified for its application and that design basis safety functions can be accomplished. An equipment type refers to electrical equipment categorized by manufacturer and model(s) which is representative of all identical equipment in a plant area(s) potentially exposed to the same bounding environmental conditions during and after a design basis accident (e.g., Rosemount electronic pressure transmitters, Model 1153 Series D). All auditable documentation which supports environmental qualification for the equipment type shall be compiled and placed in the EQ binder or referenced therein. EQ binders reflect field-verified plant configuration for all 10CFR50.49 scope equipment.

Each EQ binder consists of:

1. Title page referring to the vendor and equipment types
2. Revision log
3. Table of contents
4. Open item and qualification deficiency listing
5. Tab A - Identification of equipment comprising the equipment type
6. Tab B - Checksheets for evaluation of environmental qualification including summary and conclusion
7. Tab C - Analyses and justification
8. Tab D - Qualification documents
9. Tab E - Miscellaneous documents and correspondence
10. Tab F - Field verification data
11. Tab G - Qualification maintenance data sheets
12. Tab H - Vendor instruction manual
13. Tab I - Vendor drawing for equipment
14. Tab J - Evaluation of IE circulars, bulletins, and vendor bulletins

Design input documents used in preparation of EQ binders include (but are not limited to) the following:

1. Design Equipment List

2. 10CFR50.49 List

3. Category and Operating Times Calculation

4. Environmental Data Drawings

5. Field Verification Data

6. Design Calculations

7. Vendor Test Reports, Correspondence, Drawings, Vendor Manuals, and Miscellaneous Vendor Contract Data

The following paragraphs summarize the contents of each tabulated section of the EQ binder:

(1) Tab A - Identification of Equipment Comprising Equipment Type

This section identifies the equipment within the scope of 10CFR50.49 comprising the equipment type. Equipment is identified by plant ID number, manufacturer, model number, location (or room number), elevation, procurement contract number, safety function, mitigating accident, equipment category, and required operating time.

(2) Tab B - EQ Checksheets for Evaluation of Environmental Qualification Including Summary and Conclusion

The "heart" of the EQ binder is Tab B, the EQ checksheet forms. These forms provide a format for addressing all EQ considerations and documenting the qualification status of 10CFR50.49 equipment.

However, the EQ checksheet forms (Tab B of the EQ binder) are intended only as a tool to assist evaluators in performing qualification evaluations to document the qualification status of electrical equipment. This form is not intended to preclude the exercise of good engineering judgement. The EQ checksheet form is designed to cover explicitly the salient points of EQ, but is not intended to be a totally comprehensive EQ checklist. Evaluators and reviewers are familiar with the criteria against which the evaluation is made. Based on a thorough understanding of the criteria, evaluators may feel justified to make defensible assumptions and engineering judgments when any EQ parameter satisfies the "intent" but not the "letter" of the criteria. All assumptions, engineering judgments, and extrapolations of data must have a sound engineering basis and be documented as part of the qualification package (i.e., the EQ binder). In certain situations, evaluators may find it necessary to augment the EQ checksheet form. In short, EQ is

(2) Tab B - EQ Checksheets for Evaluation of Environmental Qualification Including Summary and Conclusion (Continued)

not a "cookbook" process. The individual sections in Tab B of the EQ binder (checksheet form, sections A through P) may be categorized into three basic parts. First, sections A through N present factual data pertinent to qualification. Provisions are included in sections A through N for short comments and remarks necessary for clarification, but the primary content is technical data and facts. Second, section O is a checklist of questions and considerations which the evaluator considers. The checklist is representative of the types of considerations that evaluators could potentially overlook, even with all of the factual data properly documented. Because the checklist cannot be totally comprehensive, evaluators must review the qualification criteria to ensure no significant consideration is overlooked. Third, section P is a summary writeup which is to include any supplemental comments, justifications, short extrapolations of data, and discussion necessary to document that all significant EQ considerations have been addressed. The writeup is formatted so reviewers can easily ascertain the EQ checksheet sections being supplemented (e.g., each paragraph or comment might be numbered and a note referring the reader to the numbered comment would be included in the EQ checksheet section which the comment supplements). More extensive analysis and justifications (e.g., similarity analysis, aging and materials analysis, calculation of qualified life) shall be incorporated in Tab C of the EQ binder.

The overall philosophy of the three basic parts of the checksheet form is that all significant EQ questions and considerations must be addressed. If a significant EQ-related consideration is not a concern, the evaluator will still document the basis for this conclusion.

(3) Tab C - Analyses and Justification

This section contains data, calculations, and justifications that establish a qualified life for the equipment and present rationale to support elements which serve to establish qualification. All data in this section is cross-referenced to the applicable section of the EQ checksheets in Tab B.

(4) Tab D - Qualification Documents

This section contains vendor qualification documents used to establish qualification such as test reports, analyses, and test plans.

(5) Tab E - Miscellaneous Documents and Correspondence

This section contains all pertinent reference documents, miscellaneous technical data, and correspondence relating to the qualification of the equipment type.

(6) Tab F - Field Verification Data

This section includes all field verification information (such as manufacturer, model number, location, mounting, and nameplate data) pertaining to the installed equipment.

(7) Tab G - Qualification Maintenance Data Sheets

This section contains the qualification maintenance data sheet(s) (QMDS) for the equipment items identified in Tab A. The QMDS serves a dual function in the specific environmental qualification-related maintenance requirements are identified and, if appropriate, surveillance and preventative maintenance activities are recommended based on engineering judgment and a review of documentation pertaining to the equipment. The QMDS addresses:

1. Essential Requirements -

   This section of the QMDS establishes the requirements and schedule to be used for environmental qualification-related maintenance and equipment or component replacement. These requirements are essential to maintaining the environmental qualification of the equipment on a continuing basis. Requirements generally deal with critical test program details, special storage considerations, essential vendor instructions, identification of essential equipment interfaces, maintenance intervals, equipment or component replacement intervals (i.e., qualified life), and identification of certain hardware and material considerations. Documented information based upon plant operating and maintenance experience is also incorporated into this section when judged to be appropriate.

2. Recommended Surveillance Parameters and Preventative Maintenance Activities -

   a. Surveillance parameters which are judged to aid in detecting degrading materials or equipment performance. These surveillance parameters have been identified by review of the qualification documentation, evaluation of degrading mechanisms, and by the use of engineering judgment.

   b. Preventative maintenance activities and good practices for maintaining the equipment is based upon review of the vendor documentation and industry experience.

Documented information based on plant operating experience is also incorporated in this section when judged to be appropriate. The recommended surveillance parameters and preventative maintenance activities in and of themselves are not essential environmental qualification related activities; however, it is recognized that these activities are important in establishing

(7) Tab G - Qualification Maintenance Data Sheets (Continued)

equipment operatibility and ensuring proper equipment performance and must be considered within the context of an overall maintenance program.

(8) Tab H - Vendor Instruction Manual

This section contains the latest relevant vendor instruction manual (or cover sheet and appropriate sections) which would assist in the installation and maintenance of the subject equipment. Parts list and bill of materials, where available and needed, are included in this section.

(9) Tab I - Vendor Drawing for Equipment

This section contains relevant drawings (such as equipment outline drawings and installation drawings) of the equipment which would assist in providing technical information and data concerning the equipment.

(10) Tab J - Evaluation of NRC IE Circulars, Bulletins, and Vendor Bulletins

This section includes any relevant IE circulars, bulletins, notices, and vendor bulletins which are applicable to the equipment type. The resolution and disposition of the responses are also included.

III.2 Methodology for Establishing the 10CFR50.49 List

III.2.a Design Basis Events - 10CFR50.49 (b)(1)

The scope of 10CFR50.49 (b)(1) encompasses all safety-related systems and equipment required for DBEs which result in harsh environments, including high energy line breaks (HELBs), both inside and outside of containment and loss of coolant accident (LOCAs).

TVA has also evaluated other accidents in Chapter 15 of the SQN FSAR which do not fit the 10CFR50.49 DBA definition as interpreted above but which have the potential to produce environments more severe than those encountered during normal operation or anticipated operational occurrences. These accidents are the waste gas decay tank (WGDT) rupture, the fuel handling accident (FHA), and the steam generator tube rupture (SGTR). These three events dc not produce unusual temperature or pressure environments, and the radiation environments associated with them are not significant. Radiation doses to equipment necessary for mitirgation of these events is less than 10^4 rads.

In summary, the 10CFR50.49 DBEs at SQN that produce harsh environments are only those events which are LOCAs, HELBs inside containment, and HELBs outside containment.

III.2.b Environmental Data Drawings

TVA environmental data drawings are design output documents which identify and define the conditions of all harsh zones which contain 10CFR50.49 scope equipment. These harsh zones result from the design basis events described in paragraph III.2.a above. All environmental parameters necessary for design, procurement, and qualification of equipment in accordance with 10CFR50.49 are specified on these drawings. These parameters include normal, abnormal, and accident values for temperature, pressure, relative humidity, radiation (expressed as a 40-year integrated dose and an accident dose), flooding level (due to LOCA and HELB including contribution from spray), and spray chemistry. LOCA and HELB pressure, temperature, and relative humidity profiles are provided. The environmental parameters shown on the drawings are derived from a number of supporting calculations that are referenced on the drawings and available for audit.

III.2.c Sequoyah Nuclear Plant Equipment List (SQEL)

The SQEL is a compilation for areas designated as harsh on the environmental data drawings, of all safety-related equipment - 10CFR50.49(b)(1), any required non-safety-related equipment - 10CFR50.49(b)(2), and any equipment added to comply with commitments to NUREG-0737 and/or NUREG-0578 for post-accident monitoring (PAM) - 10CFR50.49(b)(3). The following outlines the method utilized to develop the SQEL:

1. TVA safety-related equipment (designated as Class 1E) is powered from train A, B, or (S) special power (devices powered from either train A or B) and includes protection set instrument loops that feed the reactor protection system comprised of channels I, II, III, and IV, and special post-accident monitor (PAM) equipment required by FSAR and NUREG-0737. This information was developed from cable schedules, instrument tabulations, and equipment tabulations.

2. Harsh environment areas were identified from the Environmental Data Drawings described in Section III.2.b above.

3. The Class 1E equipment which was located in a harsh environment was tabulated. The equipment location was determined using conduit and grounding drawings, local panel drawings, and limited field verification.

III.2.c Sequoyah Nuclear Plant Equipment List (SQEL) (Continued)

Cables were identified for inclusion into the SQEL by the following methodology:

The first group is cables which are classified as 1E and connect to Category A or B (See Table VIII.1 for Category Definitions) safety-related equipment located in a harsh environment.

- o All connection diagrams were reviewed to obtain cable numbers.
- o Permanent site QA records were used to obtain cable reel numbers and cable type by mark number.
- o This information was then converted to a contract number from the SQN cable reel program.
- o All of the above information was then tabulated on the SQEL.

The second group is cables that connect to equipment located in a mild environment but routed through a harsh environment.

- o All Class 1E entries to the SQN cable schedule file were reviewed.
- o Each cable run was analyzed to determine if both ends were terminated in a mild environment as identified by the environmental drawings.
- o The cable run was then traced on the conduit and grounding and cable tray node point diagrams to determine if the cable penetrated a harsh environment.
- o For those cables penetrating a harsh environment the cable reel and contract numbers were obtained from the permanent site QA records.

All of the above information was then tabulated on the SQEL.

The compiled SQEL is issued as a quality assurance document. As stated, the SQEL is a list of safety-related (1E) electrical equipment located in harsh environments. The list was developed without regard to the function(s) of the 1E equipment. Category and operating time evaluations are provided separately for each 1E device identified on the SQEL.

III.2.c Sequoyah Nuclear Plant Equipment List (SQEL) (Continued)

These category and operating times evaluations are completed for each accident for which a device must function and include the safety function(s) for each accident, the NUREG-0588, Appendix E category for each accident, the required operating time for each category, and additional explanations as needed for the assigned categories and operating times if the safety function information does not make the rationale clear. The category and operating time evaluations are TVA design input documents and will be maintained along with the "10CFR50.49 List" to reflect the as-constructed plant. Category and operating times for cables and other passive devices like junction boxes and penetrations are not assigned directly but are dictated by the category and operating times of the devices served.

III.2.d Non-Safety-Related Electrical Equipment - 10CFR50.49(b)(2)

Non-safety-related electrical equipment exposed to harsh accident environments must not fail in a manner that can prevent safety-related electrical equipment from performing its safety function. In response to IE Notice 79-22, non-safety-related devices were evaluated for their potential to adversely affect safety-related devices due to environmentally induced failures. Non-1E cables associated with 1E cables were also evaluated in an associated circuit analysis.

The result of both studies shows that six non-1E devices (three per unit in the RHR system) were identified that have the potential to adversely affect RHR. A failure modes evaluation of these devices concluded that the devices would not adversely affect RHR if their cables were environmentally qualified. These cables are environmentally qualified and have been added to the appropriate binders and the "10CFR50.49 List" to assure their continued qualification. The evaluation also identified cases where disruptive signals could be generated, but in each case the operator has sufficient indication of the event and sufficient time to take corrective action.

III.2.e Post Accident Monitoring Equipment - 10CFR50.49(b)(3)

TVA will complete environmental qualification of the applicable FSAR Class 1E designed instrumentation and the FSAR PAM Instrumentation before plant startup. For those instruments already added to the plant because of our commitment to post-TMI NUREGs (-0578 and -0737), environmental qualification will be accomplished in accordance with our NUREG responses or any extension granted with respect to the NUREG responses.

Presently for that instrumentation not considered operable or not installed but which will be complete by September 1987 because of Regulatory Guide 1.97 or post-TMI NUREG, environmental qualification will be complete at the time of installation and operability.

III.2.e Post Accident Monitoring Equipment - 10CFR50.49(b)(3) (Continued)

For that instrumentation that exists at the plants but was not designed as class 1E nor included in the original PAM instrumentation set but will be category 1 Regulatory Guide 1.97 instrumentation, environmental qualification will be completed in accordance with the implementation schedule for Regulatory Guide 1.97 provided in TVA's response to Generic Letter 82-33 for the respective plant (e.g., September 2, 1987, for Sequoyah).

III.2.f Emergency Operating Instruction (EOI) Interface

TVA has investigated whether proper consideration of the equipment used in execution of Emergency Operating Instruction (EOI) requirements has been given in development of the 50.49 equipment scope. Of particular concern, the following was considered:

1. Does the plant operator have at his disposal reliable instruments to identify and mitigate the consequences of DBEs?

2. Have those instruments been marked so as to indicate their importance to the plant operator?

The NRC recognizes that all display instrumentation referenced in the emergency procedures will not necessarily be part of a utility's EQ program (reference Generic Letter No. 82-09). The SQN EQ program and main control room instrument identification practices are consistent with this philosophy.

TVA's installed PAM indicators are specifically identified to the main control room operator. The indicators are marked either P1 or P2 which indicates the function these indicators fulfill as PAM channel 1 or PAM channel 2. This method of marking the indicators on the main control room boards serves as the method of conveying the indicator's importance in lieu of requiring the indicators to be singled out in the plant procedures as being EQ safety-related.

These installed PAM indicators are served by instruments (e.g., transmitters, etc.) which are qualified to the 10CFR50.49 requirements. When other activities are implemented (i.e., NUREG-0700 and R.G. 1.97), instruments presently installed but not requiring specific identification and qualification may require upgrading.

TVA concludes that the post-accident monitoring (PAM) equipment which will be installed and qualified at plant restart provides the operator with the necessary information to identify and mitigate DBEs and are appropriately marked to indicate their importance.

III.3 Maintenance of Environmental Qualification

This section describes those elements of TVA's 10CFR50.49 program that assures that environmental qualification (EQ) will be maintained for the life of the plant. TVA's maintenance, surveillance, and postmaintenance testing programs have been developed encompassing operating experience, manufacturers' recommendations, the Nuclear Operational Quality Assurance Manual (N-OQAM), and the requirements of ANS-3.2/ANSI N18.7-1976. To maintain the required level of control has necessitated a number of written engineering (OE) and site (SQN) procedures. These procedures are not included in this report but are available for audit and are referenced here for continuity of discussion and to illustrate program detail. A list of these documents is tabulated in Table III.2.

III.3.a Essential Maintenance, Preventive Maintenance, and Surveillance

TVA's program for maintaining environmental qualification (EQ) includes written procedures to address essential maintenance, preventive maintenance, and surveillance of 10CFR50.49 scope equipment. The EQ Project Manual EQP-01 and OE program procedure for EQ (SQEP-AI-08A) includes requirements for defining special and preventive maintenance and surveillance in the EQ binder. These details (maintenance and surveillance) are specified as a result of the EQ evaluation documented in the binder in order to ensure that equipment characteristics pertinent to EQ, critical EQ related maintenance and surveillance details, equipment test configuration details pertinent to EQ (e.g., equipment qualified in vertical orientation only and with a sealed conduit), and other such data necessary to maintain a qualified status are clearly identified for site implementation. The plant has in place a maintenance program that meets the requirements for maintenance of Class 1E equipment in its normal environment including storage, installation and maintenance. Implementation of the maintenance and surveillance requirements by the site are also controlled in SQN EQ program procedure SQA173 and its related procedures SQM2, SQM57, and SQM62.

III.3.b Procurement/Storage

TVA's program for EQ includes written procedures for controlling procurement activities involving 10CFR50.49 scope equipment. The special EQ aspects of OE's procurement activities are controlled by SQEP-AI-08A pursuant to the responsibilities defined in SQN EQ program procedure SQA173. Additionally, lower tier OE documents such as standard specification SS-E18.10.01 are referenced for defining in detail EQ requirements for OE procurement activities. SQA173 defines the responsibilities and requirements for the site's procurement and storage activities for 10CFR50.49 scope equipment. SQA45 and SQA161 detail these requirements for procurement and AI-11 details the requirements for receiving procured materials. Any special EQ storage requirements are identified on the QMDSs in

III.3.b Procurement/Storage (Continued)

accordance with EQ Project Manual EQP-01 and SQEP-AI-08A and implemented at the site in AI-36 in accordance with the requirements of SQA-173.

III.3.c Design Change Control and Binder Maintenance

For any proposed physical design change, a scope-of-work document which explicitly estimates the impact of the change on the EQ program documents is prepared. Before formal issue of design change documents under an Engineering Change Notice (ECN), a formal checklist is completed and documented to verify any impact of the change on the EQ program documents. In conjunction with the ECN, changes are made to the EQ program documents including the 10CFR50.49 List, EQ binders, and the environmental data drawings which are all issued in an "asdesigned" status. When the design change is physically implemented, the "asconfigured" changes are verified and this verification incorporated into the EQ program documents. TVA's design change control related to maintaining qualification and 10CFR50.49 List and EQ binders maintenance is handled in accordance with the procedures referenced in Table III.2.

In several areas (such as QMDS revisions, like-for-like replacements, material substitutions, and NRC and vendor bulletin evaluations) where the basis for qualification is not altered and, no design change is involved, TVA prepares EQ binder changes separate from the design change process. The procedures for handling this type of change to EQ documents are also referenced in Table III.2.

III.3.d UPGRADE PROGRAM

TVA's philosophy for EQ includes, where practical, the practice of qualifying equipment to the highest industry standards. In accordance with 10CFR50.49(1), implementation of that philosophy includes provisions in TVA's written procedures to address upgrade of equipment whose qualification criteria is less stringent than 10CFR50.49.

III.3.d UPGRADE PROGRAM (Continued)

Aspects of TVA's EQ program which address upgrade policy in accordance with SQA173 are detailed in SQA161 AND SQM62 and include:

- o Identification of all devices qualified to NUREG-0588, category II, requirements (i.e., candidates for upgrade).
- o Failure and trends evaluations to help determine need to replace (i.e., upgrade).
- o Upgrade of replacement devices for Category II unless sound reasons to the contrary (see R.G. 1.89) are documented.

III.3.e IE Notices, Bulletins, Circulars

TVA has identified all NRC generic letters, circulars, information notices, and bulletins which have the potential to impact the equipment qualification program. The bulletins, circulars, etc., were identified by performing a search of the NUS Corporation's Licensing Information Service (LIS) data base and TVA's own licensing library files. The affected documents were then categorized into equipment types (i.e., valves, motors, switches, relays, cable) and each have been addressed in the binder for the affected equipment type as described in Section III.1. The binder includes and references the NRC documents and any required responses or resolutions as appropriate. TVA's methods for changing EQ documentation to reflect current IE Notices, circulars, bullentins, etc., over the life-of-the plant are described by the procedures listed in Table III-2.

TABLE III.2

TVA Procedures for Maintenance of Environmental Qualification

Procedure/ Document Identification	Subject
EQP-01	"EQ Project Manual"
AI-4	"Plant Instructions - Document Control"
AI-11	"Receipt Inspection, Nonconforming Items, QA Level/Description Changes and Substitutions"
AI-12	"Adverse Conditions and Corrective Actions"
AI-19	"Plant Modifications: After Licensing"
AI-23	"Vendor Manual Control"
AI-36	"Storage, Handling, and Shipping of QA Material"
AI-39	"Critical Structures, Systems and Components - CSSC"
*OEP-2	"Scope of Work"
*OEP-6	"Design Input"
*OEP-8	"Design Output"
*OEP-11	"Change Control"
*OEP-14	"Licensing"
SI-1	"Surveillance Program"
SQA26	"Review, Reporting, and Feedback of Operating Experience Items"
SQA45	"Quality Control of Materials, Parts, and Services" AI-11, "Receipt Inspection, Nonconforming Items, QA Level/Description Change and Substitution"

*Procedures applicable to Design Change Controls.

TABLE III.2 (Continued)

TVA Procedures for Maintenance of Environmental Qualification

Procedure/ Document Identification	Subject
SQA125	"Controlled Documents"
SQA134	"Critical Structure, Systems, and Components (CSSC) List"
SQA161	"Procurement of 10CFR50-49 Electrical Equipment"
*SQA173	"10CFR50.49 Environmental Qualification Program"
*SQA174	"10CFR50.49 List and Environmental Qualification Binder Control"
SQA175	"Equipment Information System - EQIS"
*SQEP-AI-02	"Scope-of-Work Documentation"
*SQEP-AI-08	"Drawing and Reproduction"
SQEP-AI-08A	"10CFR50.49 Environmental Qualification Documentation"
*SQEP-AI-11	"Engineering Change Notices
*SQEP-AI-11A	"Field Change Requests"
*SQEP-AI-11B	"Document Control fo EQ Binders and 10CFR50.49 List"
SQM1	"Sequoyah Nuclear Plant Maintenance Program"
SQM2	"Maintenance Management System"
SQM57	"Preventive Maintenance Program"
SQM58	"Maintenance History Records"

* Procedures applicable to design change controls.

TABLE III.2 (Continued)

TVA Procedures for Maintenance of Environmental Qualification

Procedure/ Document Identification	Subject
SQM62	"10CFR50.49 Program: Qualification Maintenance Data Sheets (QMDS) Implementation, Environmental Qualification Division Report, and Category II Upgrade Control"
SS-E18.10.01	"Environmental Qualification Requirements for Safety-Related Electrical Equipment"

IV. SUMMARY OF FRANKLIN INSTITUTE TER ITEMS AND STATUS

On April 26, 1983, the Tennessee Valley Authority (TVA) received the Safety Evaluation Report (SER) regarding the Environmental Qualification of Safety-Related Electrical Equipment at Sequoyah Nuclear Plant Units 1 and 2 (SQN). The SER contained a Technical Evaluation Report (TER), written by Franklin Research Center under contract to the NRC, which noted a number of environmental qualification deficiencies for safety-related electrical equipment at SQN.

The proposed resolutions, as discussed with the NRC, for each of the environmental qualification deficiencies in the TER and the status for the EQ program were contained in the tables of the March 26, 1985, issue of the Environmental Qualification of Electric Equipment Important to Safety for Nuclear Power Plants - Status Summary Report.

In order to bring the status of the equipment involved in the TER up to date with the current SQN EQ program, a summary report with the qualification binder numbers or current status is compiled. This compilation is presented in Table IV.1 and supersedes previous submittals. The TER numbers referenced in Table IV.1 are the same numbers Franklin Research Center used to group the TVA identification numbers which are also shown in Table IV.1. The binder number which demonstrates qualification for specific devices are identified in this table. Additional binder number information is presented in Section V.3.

The description of equipment status categories referenced in the TER summary table are as follows:

a. Mild Environment

Equipment no longer considered to be within the scope of 10CFR50.49. The equipment has been reevaluated and been determined to be in a mild environment for the accident it is required to mitigate.

b. NUREG-0588, Category C

Equipment no longer considered to be within the scope of 10CFR50.49. This equipment will experience environmental conditions of design basis accidents through which it need not function for mitigation of said accidents, and whose failure (in any mode) is deemed not detrimental to plant safety or accident mitigation, and need not be qualified for any accident environment, but will be qualified for its non-accident service environment.

c. Equipment not in the Scope of 10CFR50.49

This equipment has been determined not to be within the scope of 10CFR50.49 as a result of the equipment no longer performing a safety-related function, equipment being replaced with nonelectrical devices, equipment being removed from safety circuit, etc.

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
1	FCV-67-123, 125, 127, 128 146; 0-FCV-67-147; 0-FCV-67-151, 152; FCV-67-233; 0-FCV-67-205, 208; FCV-67-81, 82, 126, 124, 83, 88, 91, 96, 99, 104, 107, 112	SQNEQ-MOV-003: FCV-67-83, 88, 91, 96, 99, 104, 107, 112 SQNEQ-MOV-004: FCV-67-126, 124 Category "C": FCV-67-127, 128, 0-FCV-67-147, 205, 208; FCV-67-81, 82; 0-FCV-67-151; FCV-67-233 should be 223 and is Category "C" Mild: FCV-67-123, 125, 146; 0-FCV-67-152
2	FCV-70-2, 3, 4; 1-FCV-70-8, 9, 10; 0-FCV-70-11, 12; 2-FCV-70-15; 0-FCV-70-40, 41, 193, 194; 2-FCV-70-195, 196; 0-FCV-70-197, 198; 1-FCV-70-13; 0-FCV-70-22; 1-FCV-70-23, 25, 26, 27; 0-FCV-70-34, 39; 1-FCV-70-64, 74; 2-FCV-70-14, 16, 18, 28, 29; FCV-70-75, 168; 2-FCV-70-76, 78; 0-FCV-70-111, FCV-70-153, 156; 2-FCV-70-92; FCV-70-139, 140, 143; 0-FCV-70-1	SQNEQ-MOV-004: 2-FCV-70-92; FCV-70-140, 143 Category "C": FCV-70-2, 3, 4, 75, 168, 153, 139; 1-FCV-70-8, 9, 10, 13, 23, 25, 26, 27, 64, 74; 2-FCV-70-15, 195, 196, 14, 16, 18, 28, 29, 76, 78; 0-FCV-70-22, 34, 39, 111, 12 Mild: 0-FCV-70-11, 40, 41, 193, 194, 197, 198, 1; FCV-70-156, 153
3	FSV-1-4A, 4B, 4D, 4E, 4F, 4G, 4H, 4J, 29A, 29B, 29D, 29E, 29F, 29G, 29H, 29J	SQNEQ-SOL-004
4	FSV-1-11A, 11B, 11D, 11E, 11F, 11G, 11H, 11J, 22A, 22B, 22D, 22E, 22F, 22G, 22H, 22J	SQNEQ-SOL-004
5	PM-3-122, 132	Mild
6	FCV-70-183, 90; 0-FCV-70-206; FCV-70-207; 0-FCV-70-208; FCV-70-133, 134	SQNEQ-MOV-004: FCV-70-90; 0-FCV-70-206; FCV-70-133, 134 Category "C": FCV-70-183 Mild: FCV-70-207; 0-FCV-70-208
7	FCV-72-13, 34	SQNEQ-MOV-004
8	FCV-72-2, 39, 20, 23, 21, 22, 40, 41	SQNEQ-MOV-004
9	FCV-3-116A, 116B, 126A, 126B; FCV-3-136A, 136B, 179A, 179B	SQNEQ-MOV-004: 1-FCV-3-136A; FCV-3-136B, 179A, 179B SQNEQ-MOV-003: 2-FCV-003-136A Mild: FCV-3-116A, 116B, 126A, 126B

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
10	FCV-1-15, 16, 17, 18	SQNEQ-MOV-002
11	FCV-3-47, 87	SQNEQ-MOV-002
12	FCV-26-240, 241, 242, 243, 244, 245	SQNEQ-MOV-004
13	FCV-67-87, 95, 103, 111, 295, 296, 297, 298	SQNEQ-MOV-001
14	FCV-67-424	Category "C"
15	FCV-67-130, 131, 133, 134, 138, 139, 141, 142	SQNEQ-MOV-004
16	FCV-3-33, 100	SQNEQ-MOV-002
17	FCV-70-87, 89	SQNEQ-MOV-001
18	LCV-62-135, 136; FCV-74-3, 21; FCV-63-4, 175, 47, 48, 72, 73, 152, 153, 156, 157, 93, 94, 22, 25, 26, 39, 40; FCV-62-63, 98, 99, 90, 91; FCV-63-1, 3, 5, 6, 7, 8, 11; FCV-74-12, 24	SQNEQ-MOV-003: 2-FCV-63-175; SQNEQ-MOV-004: FCV-74-12, 24; 1-FCV-63-175; FCV-74-3, 21; FCV-63-4, 152, 153, 156, 157, 22, 25, 26, 39, 40; FCV-62-90, 91; FCV-63-3 SQNEQ-MOV-005: LCV-62-135, 136; FCV-63-47, 48, 72, 73, 93, 94; FCV-62-63; FCV-63-1, 5, 6, 7, 8, 11 Category "C": FCV-62-98, 99
19	LCV-62-152, 153, 132, 133; FCV-74-33, 35	SQNEQ-MOV-005: LCV-62-132, 133; FCV-74-33, 35 Not in 10 CFR50.49 Scope: LCV-62-152, 153
20	FCV-87-21, 24	Mild
21	FCV-87-22, 23	Mild
22	FCV-62-138	Category "C"
23	FCV-62-61; FCV-63-67, 80, 98, 118, 172	SQNEQ-MOV-001: FCV-62-61; FCV-63-172 Category"C": FCV-63-67, 80, 98, 118
24	FCV-74-1, 2	SQNEQ-MOV-001
25	FCV-68-332, 333	SQNEQ-MOV-001

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
26	Emergency Gas Treatment Fan Motor 0-MTR-65-23A, 42B	SQNEQ-MOT-002
27	Containment Air Return Fan Motors MTR-30-38-A, 39-B	SQNEQ-MOT-003
28	Containment Spray Pump RM CLR Fan Motor MTR-30-177, 178	SQNEQ-MOT-002
29	Penetration Room Cooler Motor MTR-30-186, 187, 194, 195, 196, 197	SQNEQ-MOT-002
30	RHR Pump Cooler Fan Motor MTR-30-175, 176	SQNEQ-MOT-002
31	SIS Pump Cooler Fan Motor MTR-30-179, 180	SQNEQ-MOT-002
32	Centrifugal Charging Pump Cooler Fan Motor MTR-30-182, 183	SQNEQ-MOT-002
33	CCS Pump and AFP Pump AHU Motor 1-MTR-30-190A, 191B	Mild
34	Auxiliary Building Gas Treatment System Fan Motor 1-MTR-30-146A 2-MTR-30-157B	SQNEQ-MOT-002
35	480V Board Room AHU Motor 1-MTR-31-323A 2-MTR-31-367B-B	Mild
36	Emergency Gas Treatment AHU Motor 2-MTR-30-200	SQNEQ-MOT-002
37	Spent Fuel Pit Pump AHU Motor 0-MTR-30-192, 193	Mild
38	MTR-62-230A, 232B	Category "C"
39	MTR-74-10A, 20B	SQNEQ-MOT-001
40	MTR-78-35C, 12A, 9B	Mild
41	Auxiliary Feed Pump Motor (1A-A, 1B-B, 2A-A, 2B-B) MTR-3-118, 128	SQNEQ-MOT-004

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
42	El 714 A/C Pump Motor (A-A, B-B) - System 313 0-MTR-313-338B-B, 303A-A	Mild
43	Auxiliary Air Compressor Motor (A-A, B-B) - System 32 1-MTR-32-60A, 2-MTR-32-86B	Mild
44	Component Cooling Water Pump Motor - System 70 1-MTR-70-38, 46; 0-MTR-70-51; 2-MTR-70-59, 33	Mild
45	Containment Spray Pump Motor (1AA, 1BB) MTR-72-10, 27	SQNEQ-MOT-001
46	MTR-62-108A, 104	SQNEQ-MOT-001
47	Local Control Hand Switches Auxiliary Building	
	HS-43-2, 11, 22, 34, 75; 0-HS-65-23B, 42B; HS-30-177, 178, 179, 180, 182, 183; HS-62-104B, 108B; HS-63-4B, 15B, 47B, 48B; HS-72-10B, 27B; HS-3-136A/B, 136B/B; HS-30-214; HS-3-179A/B, 179B/B; 0-HS-70-111B; HS-30-175, 176; HS-74-33B, 10B, 20B, 21B; HS-30-197; HS-62-132B, 133B; HS-67-124B, 126B, 138B; HS-26-243; HS-30-186, 201; HS-62-135B, 136B; HS-63-72B, 73B; HS-30-187; HS-65-90, 97; HS-70-133B; HS-70-134B, HS-72-2B; HS-30-194, 195; 1-HS-30-146B; 1-HS-32-80A, 80B, 102A, 102B, 110A, 110B; HS-65-80, 82; HS-70-133B, 134B; 0-HS-30-192, 193; 0-HS-31C-303B, 338B; 0-HS-67-152B; 0-HS-70-1B, 11B, 40B, 41B, 193B, 194B, 197B, 198B, 208B; HS-67-123B; HS-67-146B; HS-70-207B; 0-HS-30-190, 191; 2-HS-70-33B, 1-HS-70-38B; 1-HS-70-46B, 2-HS-70-59B; HS-3-116A/B,	SQNEQ-HS-001

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
	116B/B, 118B, 126A/B, 126B/B, 128B; HS-70-51B; HS-70-156B; HS-74-33B, 35B; HS-43-2A, 3, 11, 12, 22, 23, 34, 35, 75, 77; HS-70-153B; HS-72-20B, 22B; HS-26-242, 245, 241, 244; HS-72-23B; HS-26-240; HS-62-63B, 90B, 91B; HS-63-1B, 3B, 5B, 6B, 7B, 8B, 11B, 22B, 25B, 26B; HS-63-39B, 40B, 93B, 94B, 152B,153B, 156B, 157B; HS-70-90B, 92B, 140B, 143B; HS-72-13B, 21B, 34B; HS-74-24B, 12B	
	1-HS-30-32, 33, 34, 35, 121, 124, 125, 128, 131, 132, 296, 297, 298, 299; 1-HS-30-60, 69; HS-46-54B, 54D, 55B, 56B; 1-HS-70-75B, 168A; 1-HS-3-3; 1-HS-30-6; 1-HS-70-133C; 1-HS-30-28; 0-HS-31C-323, 332, 358, 367, 383B, 384B, 391B, 392B; 1-HS-30-36, 41, 49, 55, 98, 112, 113, 114, 29; 0-HS-32-82, 85; 0-HS-62-243, 246; 1-HS-62-230B, 232B, 239, 245; 1-HS-30-76, 79, 91, 96, 115, 116, 117, 118, 119, 120; 1-HS-70-22B; 1-HS-30-13, 18; 0-HS-70-22B; HS-62-98, 99; HS-72-24B	Not in 10CFR50.49 Scope
	HS-70-183B, 139B; 0-HS-78-20, 19; HS-1-4B, 4D, 29B, 29D; HS-1-11B, 11D, 22B, 22D; 1-HS-67-81B, 82B; 0-HS-67-151B, 478B; 0-HS-70-12B; 1-HS-67-127B, 128B; 1-HS-67-147B, 233B, 424B; 1-HS-70-2B, 3B, 4B, 8B, 9B, 10B, 130B, 131B; 0-HS-70-34B, 39B; 1-HS-70-23B, 25B, 26B, 27B; 1-HS-70-64B, 74B, 13B; HS-63-36, 37	Category "C"
48	Local Control (Various) Containment	Not in 10CFR50.49 Scope: Switches will be Disconnected per SCR SQNEQP8510

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Scope Status
49	Transfer Switch Auxiliary Building XS-46-57, XSW-46-1AC, XSW-46-1DC	Mild
50	FIS-70-81, PDIS-313-305, 340	Category "C"
51	PDIS-30-148, 149	Mild
52	PDIS-1-17, 18	Not in 10CFR50.49 Scope
53	FIS-74-12, 24	Mild
54	PS-32-62, 82, 85, 88; PS-3-140A, 150A, 139A, 139B, 139D, 144A, 144B, 144D, 140B, 150B	Not in 10CFR50.49 Scope: PS-3-140A, 140B, 150A, 150B Mild: PS-32-62, 82, 85, 88 PS-3-139A, 139B, 139D, 144A, 144B, 144D
55	FS-30-184, 185, 190, 191, 192, 193	Mild
56	FS-30-201	Mild
57	FS-30-186, 187	Mild
58	PS-30-46A, 46B; 2-PS-30-47A, 47B, 48A, 48B	SQNEQ-IPS-002
59	FS-30-146, 157, 194, 195, 196, 197, 202; 2-FS-30-200, 207	SQNEQ-IFS-001: FE-30-194, 195, 196, 197; 2-FS-30-200, 207 Mild: FS-30-202 Not in 10CFR50.49 Scope: FS-30-146, 157
60	PS-3-148, 156, 164, 171, 138A, 138B, PS-70-209, 210	Not in 10CFR50.49 Scope: PS-70-209, 210 Mild: PS-3-148, 156, 164, 171, 138A, 138B
61	FT-3-142	Mild
62	PDT-65-80, 82, 90, 97	SQNEQ-XMTR-003
63	FT-70-81A, 81B, 81D, 81E	Category "C"
64	FT-72-13, 34	SQNEQ-XMTR-003
65	FT-1-3A, 3B, 10A, 10B, 21A, 21B, 28A, 28B	U1-SQNEQ-IPT-002 U2-SQNEQ-XMTR-001
66	FC-30-148, 149	Mild

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
67	FM-30-148A, 149A	Mild
68	Essential Control Air Dryers A and B	Mild
69	B/U-1A-A, 1B-B, 1C, 1D	Mild
70	Panel 326, 381	Mild
71	Auxiliary Control Air Control Panel	Mild
72	Backup Pressurizer Heater Elements (Various)	Category "C"
73	FM-30-148, 149	Mild
74	LM-3-148A, 156A, 164A, 171A	SQNEQ-ILM-001
75	PDM-65-80, 82	Mild
76	Reactor Coolant Pump Undervoltage Relay Boards (1A, 1B, 2A, 2B) RPNL-202-1A, 1B	Category "C"
77	Cable Connection and Termination	SQNEQ-SPLC-001
78	SROAJ Cable (Electrical Distribution)	SQNEQ-CABL-004
79	SROAJ and SROAJ-H (Electrical Distribution)	SQNEQ-CABL-036
80	Electrical Distribution (SROAJ and SROAJ-H)	SQNEQ-CABL-009
81	Electrical Distribution (WVA and WVC)	SQNEQ-CABL-006
82	Electrical Distribution (WVA)	SQNEQ-CABL-037
83	Electrical Distribution	SQNEQ-CABL-025
84	Electrical Distribution (WVC(XLPE))	SQNEQ-CABL-012

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
85	Instrument Cable	SQNEQ-CABL-26
86	Control and Instrumentation (CPJ)	SQNEQ-CABL-016, -032, -019
87	Electrical Distribution (CPJJ)	SQNEQ-CABL-016, -032, -019
88	Medium Voltage Power Cable (CPSJ)	SQNEQ-CABL-014, -33
89	EPSJ	SQNEQ-CABL-27
90	Various (PXJ)	SQNEQ-CABL-003, -023, -021, -22
91	Electrical Distribution (XLPE)	SQNEQ-CABL-006, -010, -011, -012, -017, -025, -028, -037
92	Electrical Distribution (Special Cable)	SQNEQ-CABL-7, -13, -38
93	Pressure Boundary and Electrical Continuity	SQNEQ-PENE-003, -004
94	Various (PXMJ)	SQNEQ-CABL-003, -002, -022, -021, -023, -008, -043
95	Electrical Distribution (PJJ)	SQNEQ-CABL-001, -015, -020, -034
96	Protect Electrical Termination	SQNEQ-JBOX-001
97	Electrical Termination	SQNEQ-TB-001, -002, -003
98	Backup Pressurizer Heater Power Supply	Mild
99	FSV-30-8, 10, 50, 52, 15, 17, 40, 56, 20, 58	SQNEQ-SOL-006
100	FSV-30-2, 5; 2-FSV-65-7; 1-FSV-65-8; 0-FSV-65-28A, 28B, 47A, 47B; 2-FSV-65-50; 1-FSV-65-51	SQNEQ-SOL-006

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
101	1-FSV-30-86; FSV-30-137, 138, 140, 141, 160, 161, 166, 167, 271, 272, 275, 276	Mild
102	FSV-61-192, 194, 122, 97	SQNEQ-SOL-007
103	0-FSV-30-129, 130, 106; 1-FSV-30-107; 0-FSV-30-122, 123; FSV-30-102	Mild: 0-FSV-30-129, 130, 122, 123; 1-FSV-30-107; FSV-30-106 Not in 10CFR50.49 Scope: FSV-30-102
104	PSV-1-6A, 6B, 31A, 31B	SQNEQ-SOL-007
105	FSV-81-12	SQNEQ-SOL-007
106	0-FSV-12-79	Mild
107	FSV-90-107, 111, 113, 117	SQNEQ-SOL-007
108	LSV-3-148, 156, 164, 171, 172, 173	Mild
109	LSV-3-148A, 156A, 164A, 171A; FSV-77-128	SQNEQ-SOL-007: FCV-77-128 Mild: LSV-3-148A, 156A, 164A, 171A
110	2-FSV-67-338; FSV-67-344, 346, 348, 350, 352, 342; FSV-70-85	SQNEQ-SOL-005: 2-FSV-67-338; FSV-67-350, 352 SQNEQ-SOL-007: FSV-70-85 Mild: FSV-67-344, 346, 348, 342
111	FSV-67-168, 170, 176, 182, 184, 186, 188, 190; 1-FSV-67-213, 215; FSV-67-354, 356	SQNEQ-SOL-005: FSV-67-354, 356 Category "C": FSV-67-168, 170, 188, 190 Mild: FSV-67-176, 182, 184, 186; 1-FSV-67-213, 215
112	2-FSV-67-184	Mild
113	FSV-30-279, 280; FSV-61-191A, 193A, 96; 2-FSV-61-110	Mild
114	FSV-77-20; FSV-62-143, 144, 120; FSV-63-38	SQNEQ-SOL-006: FSV-77-20; FSV-63-38 Category "C": FSV-62-143, -144 Not in 10CFR50.49 Scope: FSV-62-120

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
115	FSV-87-9, 10; FSV-62-77; FSV-68-305; FSV-63-23, 64, 84, 41, 42	SQNEQ-SOL-006: FSV-62-77; FSV-68-305; FSV-63-23, 64, 84, 41, 42 Mild: FSV-87-9, 10
116	FSV-62-140A, 140B	Category "C"
117	FSV-87-11	Mild
118	PSV-68-334A, 334B, 340AA, 340AB	SQNEQ-SOL-002: PCV-68-334, 340A TVA Identification Number Change
119	FSV-62-70, 74	SQNEQ-SOL-006
120	2-FSV-67-336, 338, 217, 219	SQNEQ-SOL-005: 2-FSV-67-336, 338 Mild: 2-FSV-67-217, 219
121	FSV-1-181, 182, 183, 184; FSV-77-127; FSV-90-108, 109, 110, 114, 115, 116	SQNEQ-SOL-007
122	1-FSV-65-10; FSV-30-3, 6, 60, 69; 1-FSV-30-146A, 146B	SQNEQ-SOL-007: 1-FSV-65-10 SQNEQ-SOL-005: 1-FSV-30-146A, 146B Not in 10CFR50.49 Scope: FSV-30-3, 6, 60, 69
123	FSV-1-7, 14, 25, 32, 147, 148, 149, 150	SQNEQ-SOL-007
124	FSV-77-18, 9	SQNEQ-SOL-007
125	FSV-68-307	SQNEQ-SOL-007
126	FSV-87-7, 8; FSV-62-73, 72	SQNEQ-SOL-006
127	FSV-77-16	Not in 10CFR50.49 Scope
128	1-FSV-65-52, 53, 30, 26, 27; 2-FSV-30-157B	SQNEQ-SOL-005: 2-FSV-30-157B SQNEQ-SOL-007: 1-FSV-65-52, 53, 30, 26, 27
129	2-FSV-32-81A, 81B, 103A, 111A, 111B, 103B	SQNEQ-SOL-005
130	PSV-65-81, 83; 1-FSV-32-80A, 80B, 102A, 102B, 110A, 110B; FSV-43-77, 3, 12, 23, 35; FSV-68-308	SQNEQ-SOL-005: 1-FSV-32-80A, 80B, 102A, 102B, 110A, 110B SQNEQ-SOL-007: PSV-65-81, 83; FSV-43-77, 3, 12, 23, 35; FSV-68-308

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
131	LSV-3-174, 175	SQNEQ-SOL-007
132	1-FSV-65-52, 53, 30, 26, 27	SQNEQ-SOL-007
133	FSV-43-2, 11, 22, 34, 74, 201, 202, 308	SQNEQ-SOL-007: FSV-43-2, 11, 22, 34, 201, 202; FSV-43-308 should be FSV-68-308 Not in 10CFR50.49 Scope: FSV-43-74
134	FSV-30-134, 135	SQNEQ-SOL-002
135	Limit Switches on: FCV-90-107, 111, 113, 117; 0-FCV-12-79	SQNEQ-IZS-001: FCV-90-107, 111, 113, 117 (Limit Switch) Mild: 0-FCV-12-79 (Limit Switch)
136	Limit Switches on: FCV-87-9, 10, 11	Mild
137	Position Indication (Limit Switch)	
	1-FCV-61-97(LS), 122(LS), 192(LS), 194(LS); 1-FCV-90-108(LS); 1-FCV-63-71(LS); 2-FCV-68-308(LS)	SQNEQ-IZS-001
	FCV-77-18(LS), 2-FCV-61-97(LS), 122(LS), 192(LS), 194(LS); FCV-77-9(LS); 2-FCV-90-108(LS); FCV-90-109(LS), 110(LS), 114(LS), 115(LS), 116(LS); 2-FCV-63-71(LS); 1-FCV-68-308(LS)	SQNEQ-IZS-002
138	FCV-63-72, 73 (Limit Switch)	SQNEQ-IZS-001
139	FCV-62-72, 73, 74; FCV-77-16; FCV-87-7, 8 (Limit Switch)	Category "C": FCV-62-72, 73, 74 FCV-87-7, 8 (Limit Switch) Not in 10CFR50.49 Scope: FCV-77-16 (Limit Switch)
140	Annulus Isolation Valve (Limit Switch) FCV-313-222(LS), 224(LS), 229(LS), 231(LS)	SQNEQ-IZS-001

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
1	Reactor Building Isolation (Limit Switch) 1-FCV-32-80(LS), 102(LS) 110(LS); 2-FCV-32-81(LS), 103(LS), 111(LS)	SQNEQ-IZS-003
142	Unit 1 Shield Building Exhaust (Limit Switch) 1-FCO-65-26(LS), 27(LS)	Category "C"
143	FCV-1-147, 148, 149, 150, 14, 32, 7, 25 (Limit Switch)	SQNEQ-IZS-003 Category "C": FCV-1-14, 32, 7, 25 (Limit Switch)
144	Limit Switches on: FCV-65-47A, 47B, 28A, 28B; 1-FCV-65-8, 51; FCO-65-10, 30, 52, 53	SQNEQ-IZS-001: FCV-65-52, 53 (Limit Switch) Rest are Category "C"
145	Limit Switches on: 2-FCV-61-96, 110; FCV-61-191, 192, 193; FCV-62-128, 140, 143, 144; 2-FCV-62-69, 70, 77; FCV-63-3, 4, 8, 11, 23, 38, 41, 42, 64, 84; 1-FCV-63-175; FCV-68-305, 307; FCV-74-3, 21; FCV-77-10, 17, 19, 20; FCV-87-21, 22, 23, 24; ZS-63-1, 5, 67, 80, 98, 118	SQNEQ-IZS-001: 2-FCV-61-96, 110; 2-FCV-62-69, 70, 77; FCV-63-3, 4, 23, 64; 1-FCV-61-192; 1-FCV-63-175; FCV-68-305; FCV-77-19, 20 (Limit Switch) SQNEQ-IZS-002: 2-FCV-61-192 (Limit Switch) SQNEQ-IZS-003: FCV-63-38, 41, 42, SQNEQ-IZS-003: FCV-63-38, 41, 42, 84 (Limit Switches) Mild: FCV-61-191, 193; FCV-87-21, 22, 23, 24 (Limit Switches) Category"C": FCV-62-128, 140, 143, 144; FCV-63-8, 11; FCV-68-307; FCV-74-3, 21; FCV-77-10; ZS-63-1, 5 (Limit Switch) Not in 10CFR50.49 Scope: FCV-77-17; ZS-63-67, 80, 98, 118 (Limit Switches)
146	FCV-77-127 (Limit Switch)	SQNEQ-IZS-004
147	FCV-77-128 (Limit Switch)	SQNEQ-IZS-003
148	RE-90-130, 131, 102, 103, 106, 112, 140, 141, 133, 134	Mild: RE-90-130, 131, 106, 112, 140, 141, 133, 134 Mild: RE-90-102, 103
149	PT-3-132A	Category "C"
150	0-LS-313-305, 340	Category "C"

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
151	1-TS-30-190, 191; 0-TS-30-192, 193; TS-30-175, 176, 177, 178, 179, 180, 182, 183, 186, 187, 196, 197, 201, 202	SQNEQ-ITS-002: TS-30-186, 187, 196, 197, 201, 202 Mild: 1-TS-30-190, 191; 0-TS-30-192, 193 Category "C": TS-30-175, 176, 177, 178, 179, 180, 182, 183
152	TS-30-103A	Mild
153	0-TS-12-91A, 91B, 92A, 92B, 99A, 99B, 96B, 97A, 97B, 98A, 98B, 94A, 94B, 95A, 95B, 96A, 93A, 93B	SQNEQ-ITS-001
154	TS-30-103, 214	Mild: TS-30-103 Category "C": TS-30-214
155	TS-1-17A, 17B, 18A, 18B	SQNEQ-ITS-001
156	TS-74-43, 44, 45, 46	Category "C"
157	TE-68-1, 18, 24, 41, 43, 60, 65, 83	SQNEQ-ITE-003
158	Hydrogen Monitor (1-H2E-43-200)	SQNEQ-ILP-001
159	PT-1-2A, 27A, 5, 30	Mild
160	LT-3-148, 156, 164, 171, 172, 173, 174, 175	SQNEQ-ILT-001: LT-3-148, 156, 164, 171, 172, 173, 175; 1-LT-3-174 SQNEQ-IPT-002: 2-LT-3-174
161	TE-68-2A, 2B, 14A, 14B, 25A, 25B, 37A, 37B, 44A, 44B, 56A, 56B, 67A, 67B, 79A, 79B	SQNEQ-ITE-002
162	FSV-30-46A, 47A, 48A	SQNEQ-SOL-001
163	Hydrogen Recombiner Power Supply	Mild
164	PT-1-2B, 27B	Mild
165	PT-1-9A, 9B, 20A, 20B, 12, 23	Mild
166	FC-30-148, 149	Mild

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
7	LT-3-43, 49, 56, 111	SQNEQ-XMTR-001 LT-3-49 should be LT-3-39
168	PT-68-322, 323, 334, 340	SQNEQ-XMTR-004
169(U1)	1LT-63-179	SQNEQ-XMTR-001
169(U2)	2-LT-3-38, 39, 42, 51, 52, 97, 106, 107; 2-LT-63-176, 177, 178, 179; 2-LT-68-320, 335, 339	SQNEQ-XMTR-001
170(U1)	1-LT-63-176, 177, 178	SQNEQ-XMTR-001
170(U2)	Local Control	SQNEQ-HS-001
	2-HS-70-14B, 16B, 18B, 28B, 29B, 76B, 78B; 2-HS-30-184, 185; 2-HS-70-15B, 195B; 2-HS-30-157B; 2-HS-32-81A, 81B, 103A, 103B, 111A, 111B; 2-HS-30-196; 2-HS-62-138B; 2-HS-30-187; 2-HS-72-40B, 41B	
171(U1)	1-LT-3-38, 39, 42, 51, 52, 55, 93, 94, 106, 107, 110	SQNEQ-XMTR-001
171(U2)	Local Control	SQNEQ-HS-001
	2-HS-1-15B, 16B, 17B, 18B; 2-HS-3-33B, 100B; 2-HS-3-47B, 87B; 2-HS-72-40B, 41B	
172(U1)	1-PT-68-66, 69	SQNEQ-XMTR-004
172(U2)	FS-30-157, 184, 185, 200, 207	SQNEQ-IFS-001: FS-30-200, 207 Mild: FS-30-184, 185 Not in 10CFR50.49 Scope: FS-30-157
173(U1)	FSV-62-69; FSV-63-71	SQNEQ-SOL-006
173(U2)	TS-30-140A	Mild
174(U1)	Limit Switches on: 1-FCV-81-12; 1-PCV-68-334, 340A	SQNEQ-IZS-001: 1-FCV-81-12 (Limit Switch) Not in 10CFR50.49 Scope: 1-PCV-68-334, 340A (Limit Switch)
174(U2)	TS-30-140	Mild
175(U1)	1-ZS-30-46, 47, 48	SQNEQ-IZS-001

Summary of TER Items and Status

Table IV.1

TER No.	TVA Identification Nos.[1]	Binder No. or Current Status
[redacted](U2)	Electrical Distribution (WVA)	SQNEQ-CABL-012
176(U1)	1-LT-68-320, 335, 339	SQNEQ-XMTR-001
176(U2)	Electrical Distribution (WVA)	SQNEQ-CABL-017
177(U2)	Electrical Distribution (WVA)	SQNEQ-CABL-017
178(U2)	Electrical Distribution (WVA (FREP)	SQNEQ-CABL-006
179(U2)	2-ZS-30-46, 47, 48; FCV-81-12 (Limit Switch)	SQNEQ-IZS-001
180(U2)	Limit Switches on: 2-FCV-63-72, 73; 2-FCV-81-12; 2-PCV-68-334, 340A	SQNEQ-IZS-001: 2-FCV-81-12; 2-FCV-63-72, 73 (Limit Switch) Not in 10CFR50.49 Scope: 2-PCV-68-334, 340A (Limit Switch)
181(U2)	Limit Switch on: 2-FCV-32-81, 103, 111	SQNEQ-IZS-003
[redacted]2(U2)	2-ZS-67-217, 219; ZS-67-336, 338	Not in 10CFR50.49 Scope: ZS-67-217, 219 Mild: ZS-67-336, 338
183(U2)	2-FSV-43-207, 208	SQNEQ-SOL-007

[1]Identification numbers are Unit 1 and Unit 2 unless otherwise noted.

V. SUMMARY OF 10CFR50.49 QUALIFICATION STATUS

This section lists binders and identifies outstanding field changes that will be completed prior to startup. This section also describes a number of outstanding technical issues that when resolved may require additional field changes. All outstanding field changes and other open technical issues are being tracked and their completion will be verified prior to unit startup.

An update of this section will be provided as necessary when items are resolved and completed.

V.1 Identification of Outstanding Field Changes

Table V.1 lists binder numbers and the related outstanding field changes as of December 18, 1985. The TVA tracking document number (i.e., Significant Condition Report (SCR) and Engineering Change Notice (ECN)) is listed as a reference. The binder are being issued to the plant with these open items identified in the binder. When the open items are complete a verification document will be issued and incorporated, along with any related changes to the binder.

V.2 Outstanding Technical Issues

Table V.2 lists outstanding technical issues that exist as of December 18, 1985. Binder will not be released that have outstanding technical issues. As these outstanding issues are resolved, the binder will be completed and issued. Some of these technical issues may result in identification of additional field changes which will be completed prior to startup.

V.3 List of EQ Packages (Binders)

Table V.3 lists, for reference, 92 binders that exist as of December 18, 1985.

TABLE V.1

OUTSTANDING FIELD CHANGES

	Binder No.	Description/Manufacturer		Corrective Action
1.	SOL-002	Solenoid - Target Rock	A.	SCREQP8506 - Install Conduit Seals
2.	SOL-005	Solenoid - ASCO 206-380	A.	SCREQP8509R1 - Install Conduit Seals
3.	SOL-006	Solenoid - ASCO NP8316	A.	SCREQP8526R1 - Replace Valve or Seal Material
4.	SOL-007	Solenoid - ASCO 206-381	A.	SCREQP8526R1 - Replace Valve or Seal Material
5.	MOV-001	Limitorque Motor-Operated Valves Inside Containment	A.	SCREQP8514 - Replace Two Motors With Unqualified Insulation
			B.	SCREQP8507 - Replace Control Wire
			C.	SCREQP8531R1 - Disconnect Limit Switches and Motor Heaters
			D.	ECN 6521 - Change Out Motors on Two MOV's With Breaks That Are Not Qualified.
6.	MOT-002	Electric Motors - Reliance Outside Containment	A.	SCREQP8519R1 - Rotate Motor End Bells on 23 Motors and Properly Locate 'T' Drains
			B.	SCREQP8509R1 - Drill Weep Holes In Junction Boxes.
7.	DMPO-001	Damper Operator - ITT General Controls	A.	SCREQP8538 - Replace Capacitors
8.	MOV-004	Motor Operated Valves Outside Containment With Class B Motors	A.	SCREQP8531R1 - Disconnect Limit Switches and Motor Heaters
			B.	SCREQP8533R1 - Replace Center Tap Splice

TABLE V.1 (Continued)

	Binder No.	Description/Manufacturer	Corrective Action
9.	MOV-005	Motor Operated Valves Outside Containment With Brakes	A. SCREQP8531R1 - Disconnect Limit Switches and Motor Heaters B. SCREQP8533R1 - Replace Center Tap Splice
10.	CABL-003	Cable-AIW/Low Voltage Power and Control	A. SCREQP8540 - Replace Solenoid Valve Wiring
11.	CABL-006	Cable-Anaconda Multi-conductor Signal	A. SCREQP8518 - Relocate Cable Above Submergence Level
12.	CABL-009	Cable Anaconda-Low Voltage Power and Control Silicone Rubber Insul.	A. SCREQP8518 - Relocate Cable Above Submergence Level
13.	CABL-011	Cable - BIW Multiconductor Signal	A. SCREQP8518 - Relocate Cable Above Submergence Level
14.	CABL-012	Cable-Brand-Rex Multi-conductor Signal	A. SCREQP8518 - Relocate Cable Above Submergence Level
15.	CABL-015	Cable-Cyprus Low Voltage Power and Control Poly. Insulated	A. SCREQP8540 - Replace Solenoid Valve Wiring
16.	CABL-016	Cable-Cyprus Low Voltage XLPE Power and Control	A. SCREQP8520 - Change Out One Cable
17.	CABL-017	Cable-Eaton/Multiconductor Signal	A. SCREQP8518 - Relocate Cable Above Submergence Level
18.	CABL-019	Cable-Essex/Low Voltage XLPE and Medium Voltage Power and Control	A. SCREQP8520 - Change Out Six Cables
19.	CABL-032	Cable-PWC Low Voltage Power and Control Cable, XLPE.	A. SCREQP8520 - Change Out One Cable
20.	CABL-034	Cable-PWC Low Voltage Power and Control Poly. Insul.	A. SCREQP8540 - Replace Solenoid Valve Wiring
21.	CABL-037	Cable-Rockbestos/Multi-conductor Signal	A. SCREQP8518 - Relocate Ten Cables Above Flood Level

TABLE V.1 (Continued)

	Binder No.	Description/Manufacturer	Corrective Action
22.	SPLC-001	Splice-Raychem	A. SCREQP8518 - Relocate One Cable (With Mid-Run Splice) ABove Flood Level
			B. SCREQP8521 - Splice Out Terminal Blocks
23.	TB-001	Terminal Block - General Electric	A. SCREQP8511 - Relocate 16 JBs Above Flood Level
			B. SCREQP8513 - Drill Weep Holes
			C. SCREQP8527 - Coat Junction Boxes
			D. SCREQP8536 - Valve Vault Flood Modification
			E. SCREQP8508R1 - Drill Weep Holes
			F. SCREQP8521 - Splice Out Junction Boxes
24.	TB-002	Terminal Block Cutler-Hammer	A. SCREQP8521 - Replace Terminal Blocks in Transmitter Circuits with Splices
			B. SCREQP8513 - Drill Weep Holes
25.	JBOX-001	Junction Box	A. ECN L5773 - Move Arc Suppress Network - PORVs
			B. SCREQP8508R1 - Drill Weep Holes
			C. SCREQP8501 - Disconnect Two Handswitches
			D. SCREQP8510R2 - Disconnect Handswitches
			E. SCREQP8513 - Drill Weep Holes
			F. SCREQP8511R1 - Relocate JBs Above Flood Level

TABLE V.1 (Continued)

Binder No.	Description/Manufacturer	Corrective Action
		G. SCREQP8512R1 - Replace Internal Wiring
		H. SCREQP8536 - Valve Vault Flood Modification
		I. SCREQP8537 - Replace Cover
26. PENE-001	Penetration (Airlock) Conax/Modular	A. SCREEB8523 - Correct In-Line Fusing to Provide I (SQ) T Protection
27. PENE-004	Penetration-Westinghouse/ Cannister	A. SCREEB8523, EEB8202 - Correct In-Line Fusing to Provide I (SQ) T Protection
28. PENE-005	Penetration/Conax/ Modular	A. SCREQP8502 - Replace Penetrations
2 . HS-001	Handswitch - Cutler Hammer	A. SCREQP8501 - Disconnect Two Handswitches B. SCREQP8510R3 - Disconnect Handswitches
30. XMTR-001	Transmitter-Barton Lot 1-764	A. SCREQP8521 - Replace Terminal Blocks with Splice
		B. SCREQP8522 - Rewire Two Panels
		C. SCREQP8528 - Solder Modification
		D. SCREQP8510 - Move Transmitters
		E. SCREQP8523 - Various Mounting Revisions
31. XMTR-002	Transmitter - Foxboro	A. SCREQP8529 - Change Out Three Amplifiers
32. XMTR-003	Transmitter - Rosemount	A. SCREQP8509R1 - Install Conduit Seals
		B. SCREQP8521 - Splice Out Terminal Blocks
		C. SCREQP8522 - Rewire Two Panels

TABLE V.1 (Continued)

	Binder No.	Description/Manufacturer	Corrective Action
33.	XMTR-004	Transmitter - Barton Lot 7-763	A. SCREQP8504 - Replace Splices
			B. SCREQP8528 - Solder Modification
			C. ECNL6439 - Move Transmitters
34.	ITS-001	Temperature Switch Fenwal	A. SCREQP8424 - Setpoint Change
35.	HTR-001	Heater - Westinghouse	A. SCREQP8525 - Resplice One Splice
36.	ITL-001	Level Transmitter Foxboro	A. SCREQP8522 - Rewire Two Panels
37.	IFS-001	Nonindicating Flow Switch	A. SCREQP8524 - Setpoint Change
			B. SCREQP8539 - Changeout 14 Capacitors
38.	ILCV-001	Level Control Valve - Masonelain	A. SCREQP8534 - Reorient Conduit and Resplice
39.	IZS-001	Nonindication Zone Swtich - NAMECO 180A	A. ECN L6504 - Upgrade Two Switches
			B. SCREQP8535 - Replace Limit Switches
40.	IZS-002	Nonindicating Zone Switch - NAMECO 180B	A. SCREQP8509R1 - Install Conduit Seals
			B. SCREQP8530 - Replace Gaskets
41.	IZS-003	Nonindicating Zone Switch - NAMECO 740A	A. SCREQP8509 - Install Conduit Seals
			B. SCREQP8536 - Valve Vault Flood Modification
			C. SCREQP8535 - Replace Switches
42.	IZS-004	Nonindicating Zone Switch - NAMECO 740B	A. SCREQP8530 - Replace Gaskets
43.	IMIK-001	Moisture Control Station - Nutherm	A. SCREQP8517 - Redesign Humidity Heater Controls

TABLE V.1 (Continued)

	Binder No.	Description/Manufacturer	Corrective Action
44.	IPT-002	Pressure Transmitter - Foxboro - NE13	A. ECN L6437 - Replace Eight Rosemount Transmitters
			B. SCREQP8515, 8516 - Replace (upgrade) Transmitters
45.	IFT-001	Flow Transmitter - Gould	A. SCREQP8509 - Install Moisture Barrier
			B. SCREQP8522 - Rewire Panels

TABLE V.2

OUTSTANDING TECHNICAL ISSUES

	Issue Description	Affected Binder No.
1.	Seal Life Test - TVA is testing certain Target Rock solenoid valve seals removed from valves installed and energized for approximately five years. This testing will ascertain the material properties to access expected qualified life. In addition, the function of the seals is being closely evaluated to determine if they are essential to the safety function of the valve.	SOL-002
2.	MOV Brake Issue - For brakes on motor-operated valves in harsh environments outside containment, TVA is doing a materials evaluation/analysis, systems analysis, and supplementary testing to establish qualification of the brakes in question.	MOV-002,MOV-005
3.	Class B Motor Qualification Issue - TVA has a number of Peerless, Class B, A.C. motors on Limitorque motor-operated valves. Limitorque based qualification of these motors on tests of similar Reliance motors. TVA has evaluated their materials of construction, and concluded that they should be able to be qualified by partial test and analysis to demonstrate similarity to tested Reliance motors.	MOV-004
4.	Finalize Cable Load Study - A cable load study was initiated to evaluate the operating temperature of cables for determination of qualified life of specified circuits. This is being done for recently identified cables. Where it is found that the cables are operating above their qualified rating, the cable's qualified life will be reduced.	CABL-001, 002, 003, 004, 014, 015, 016, 019, 020, 024, 028, 031, 032, 033, 034
5.	Valve Vault Flood Issue - It was recently determined that the main steam valve vault will be subject to flooding due to postulated pipe breaks. The effects of this submergence must be considered in the equipment qualification. A part of the issue resolution involves modifications to minimize postulated flood levels.	CABL-002, 003, 015, 016, 020, 023, 034, SPLC-001

TABLE V.2 (Continued)

Issue Description	Affected Binder No.
6. Wyle Main Steam Valve Vault (MSVV) Test Report - When an exhaustive listing of all of the cables in the MSVV was developed, it was discovered that a number of the cables not previously considered did exist in that room. TVA elected to take the cables which had just completed qualification testing at Wyle for all other areas outside of containment and then subject them to the MSVV profile. The portion of the test report which will cover the MSVV testing is being submitted separately form the balance of the report. This portion is expected to TVA in late December.	CABL-003,015, 016,020,032, 034
7. Beta Radiation Issue - At the time the recent Wyle testing was structured, it was considered that <u>any</u> conduit would provide adequate shielding from beta. Tests included only the required gamma levels (accident plus normal). Later, when exact calculations were performed it was determined that the flex conduit utilized at SQN did not reduce the incident dose to the insulation to the point that the beta contribution could be ignored. This posed a problem for the cables in the Wyle test program which were actually used in containment in flex conduit. These were all supplied by one vendor, Anaconda. Consideration of beta contribution results in a limited (10 year for worst case) qualified life for some cable.	CABL-009
8. Awaiting Vendor Information - Originally it was thought that the cables in this binder (multiconductor signal cables supplied by Boston Insulated Wire) were all used outside of primary containment. More accurate listings of cable showed some of these cables were also in-containment. The vendor test reports were then reviewed against in-containment conditions and it was noted that the peak HELB temperature exceeded the peak qualification temperature. Analysis showed that 2 of the 4 cables affected were slated to be repulled as a result of cable submergence. The vendor has been contacted and is checking for additional reports that would envelop our requirements.	CABL-011

TABLE V.2 (Continued)

	Issue Description	Affected Binder No.
9.	Setpoint Issue - It has been determined that the Westinghouse setpoint methodology document needs improvement. This document was used to determine the required and demonstrated accuracy of the Westinghouse supplied instrumentation. The issue concerns trip function of the narrow range containment pressure transmitters.	XMTR-001,002, IPT-002
10.	Pigtail Issue - Westinghouse furnishes penetrations with various manufacturer's pigtails. Westinghouse does not not adequately address pigtail qualification in their penetration qualification report. Information is available to support qualification of the six types of cable used as pigtails. Additional information is being obtained to support qualification of the other items.	PENE-002
11.	At the time Information Notice 84-44 was issued TVA determined to utilize reports that were to be generated under Rockbestos' requalification program to confirm its analyses that the existing reports established qualification for our application rather than embark on its own parallel effort. Late in that requalification program TVA became aware that Rockbestos had utilized two different compounds in the manufacture of its CXLPE (known as 760-5 and 760-D). At that time we believed that we had both of these at SQN. It was too late to initiate and complete a full blown test program for the old compound (Rockbestos had tested only its new compound in the "requalification" program). However, the new tests would only be of use for us as confirmation if a good similarity arguement could be constructed. Rockbestos has provided thermal, electrical and mechanical data to the utilities which seems to have satisfied the NRC in those areas for those two compounds. The only open item, at that time, was the issue of the radiation similarity. TVA then determined to initiate a test program with CCL in Research Triangle Park, N. C. to resolve this matter. The radiation similarity tests are scheduled to be complete January 13, 1986.	CABL-37

Issue Description	Affected Binder No.
11. (Continued) On December 17, 1985 Rockbestos informed the NRC and TVA that they had used three, not two, compounds in the manufacture of its CXLPE (760-5, 780 and 760-D). The new compound (760-D) was, as noted above, tested as a part of their requalification program. Both of the older compounds (760-5 and 780) were tested in earlier programs as documented in Rockbestos report QR #1807. This addition renders the Rockbestos story on electrical, mechanical and thermal similarity of the 760-5 and 760-D useless to us since we have the 780 material. We are working with Rockbestos to develope this data for the third compound (780) since it and the new compound (760-D) are the ones used at SQN. Since we were doing our radiation similarity test program using SQN cables (now known to be 780 and 760-D) that effort is valid. Based on the above we believe that the currently available data establishes qualification of the cables as we have applied them. The additional tests noted above are confirmatory in nature and are the result of a further effort on our part ot fully address this issue.	CABL-37

TABLE V.3

SEQUOYAH EQP PACKAGE STATUS AS OF DECEMBER 18, 1985

Package Number	Description/Manufacturer Model Number
(1) SOL-001	SOLENOID-VALCOR
2) SOL-002	SOLENOID-TARGET ROCK
(3) SOL-003	SOLENOID-TARGET ROCK
(4) SOL-004	SOLENOID-GOULD ALLIED (MSIV ACTUATOR MANIFOLD ASSEMBLY
(5) SOL-005	SOLENOID-ASCO 206-380
(6) SOL-006	SOLENOID-ASCO NP8316
(7) SOL-007	SOLENOID-ASCO 206-381
(8) MOV-001	LIMITORQUE MOTOR OPERATED VALVES INSIDE CONTAINMENT
(9) MOV-002	LIMITORQUE MOTOR OPERATED VALVES IN VALVE VAULT
(10) MOV-003	LIMITORQUE MOTOR OPERATED VALVES OUTSIDE CONTAINMENT
(11) MOT-001	ELEC MOTORS-WESTINGHOUSE
(12) MOT-002	ELEC MOTORS-RELIANCE OUTSIDE CONT
(13) MOT-003	ELEC MOTORS-RELIANCE INSIDE CONT
(14) SOL-008	SOLENOID VALVES-TARGET ROCK
(15) DMPO-001	DAMPER OPERATOR-ITT GENERAL CONTROLS
(16) MOV-004	MOTOR OPERATED VALVES OUTSIDE CONTAINMENT WITH CLASS B MOTORS
(17) MOV-005	MOTOR OPERATED VALVES OUTSIDE CONTAINMENT WITH BRAKES
(18) CABL-001	CABLE-AIW PJJ)(T)/LOW VOLTAGE POWER & CONTROL [illegible] YETHLENE INSULATED
(19) CABL-002	CABLE-AIW (PXJ)/LOW VOLTAGE POWER & CONTROL
(20) CABL-003	CABLE-AIW (PXJ,PXMJ)(T) /LOW VOLTAGE POWER & CONTROL

EQP354.41

TABLE V.3 (Continued)

Package Number	Description/Manufacturer Model Number
(21) CABL-004	CABLE-AIW (SROAJ)/LOW VOLTAGE POWER & CONTROL SILICONE RUBBER INSULATED
(22) CABL-006	CABLE-ANACONDA (MS,MSV)/MULTICONDUCTOR SIGNAL
(23) CABL-007	CABLE-ANACONDA (ETFE)/MULTICONDUCTOR SIGNAL, TEFZEL INSULATION
(24) CABL-008	CABLE-ANACONDA (PXMJ)/LOW VOLTAGE POWER AND CONTROL
(25) CABL-009	CABLE-ANACONDA (SROAJ)(T)/LOW VOLTAGE POWER AND CONTROL SILICONE RUBBER INSUL
(26) CABL-010	CABLE-BELDEN (MS)(T)/MULTICONDUCTOR SIGNAL
(27) CABL-011	CABLE-BIW (MS)(T)/MULTICONDUCTOR SIGNAL
(28) CABL-012	CABLE-BRAND REX (MS)(MSV)/ MULTICONDUCTOR SIGNAL
(29) CABL-013	CABLE-CAROLINA (ETFE)/MULTICONDUCTOR SIGNAL, TEFZEL INSULATED
(30) CABL-014	CABLE-CYPRUS (CPSJ)(T)/MEDIUM VOLTAGE XLPE POWER
(31) CABL-015	CABLE-CYPRUS (PJJ)(T)(MSV)/LOW VOLTAGE POWER AND CONTROL POLYETHYLENE INSULATED
(32) CABL-016	CABLE-CYPRUS (CPJ,CPJJ)(T)(MSV)/LOW VOLTAGE XLPE POWER AND CONTROL
(33) CABL-017	CABLE-EATON (MS)(MSV)/MULTICONDUCTOR SIGNAL
(34) CABL-019	CABLE-ESSEX (CPSJ,CPJ)(T)/LOW VOLTAGE XLPE AND MEDIUM VOLTAGE POWER AND CONTROL
(35) CABL-020	CABLE-ESSEX (PJJ)(T)(MSV)/LOW VOLTAGE POWER AND CONTROL POLYETHEYLENE INSULATED
(36) CABL-021	CABLE-ESSEX (PXJ,PXMJ)(MSV)/LOW VOLTAGE POWER AND CONTROL
(37) CABL-022	CABLE-ESSEX (PXMJ)/LOW VOLTAGE POWER AND CONTROL

TABLE V.3 (Continued)

Package Number	Description/Manufacturer Model Number
(38) CABL-023	CABLE-GENERAL ELEC (PXJ, PXMJ) (MSV) /LOW VOLTAGE POWER AND CONTROL
(39) CABL-025	CABLE-ITT (MS)(T)/MULTICONDUCTOR SIGNAL
(40) CABL-026	CABLE-ITT (COAX)(T)/XLPE INSULATED
(41) CABL-027	CABLE-OKONITE (EPSJ)/MEDIUM VOLTAGE POWER
(42) CABL-028	CABLE-OKONITE (MS)(T)/MULTICONDUCTOR SIGNAL
(43) CABL-031	CABLE-PHELPS DODGE CPSJ (T) MVP
(44) CABL-032	CABLE-PWC (CPJ)(T)(MSV)/LOW VOLTAGE POWER AND CONTROL, XLPE
(45) CABL-033	CABLE-PWC (CPSJ)(T)/MEDIUM VOLTAGE POWER
(46) CABL-034	CABLE-PWC (PJJ)(T)(MSV)/LOW VOLTAGE POWER AND CONTROL POLYETHYLENE INSULATED
(47) CABL-036	CABLE-ROCKBESTOS (SROAJ)/LOW VOLTAGE POWER AND CONTROL SILICONE RUBBER INSUL
(48) CABL-037	CABLE-ROCKBESTOS (MS)(MSV)/MULTICONDUCTOR SIGNAL
(49) CABL-038	CABLE-TELEDYNE (ETFE)/MULTICONDUCTOR SIGNAL, TEFZEL INSULATED
(50) CABL-040	CABLE-TIMES (MS)(T)/MULTICONDUCTOR SIGNAL
(51) CABL-042	CABLE-BRAND REX (COAX)
(52) CABL-043	CABLE-OKONITE (PXJ)/LOW VOLTAGE POWER AND CONTROL
(53) CABL-044	CABLE-ROCKBESTOS (SIS)/RXLPE INSULATED SWITCHBOARD
(54) CABL-046	CABLE-ANACONDA (SIS)/LOW VOLTAGE SWITCHBOARD

TABLE V.3 (Continued)

Package Number	Description/Manufacturer Model Number
(55) SPLC-001	SPLICE - RAYCHEM WCSF-N
(56) TB-001	TERM BLOCK-GENERAL ELECTRIC/EB-5-25 CR151A AND B
(57) TB-002	TERM BLOCK-CUTLER-HAMMER/10987H
(58) JBOX-001	JCT BOX-JB-S
(59) CSC-001	CONDUIT SEALS-CONAX
(60) PENE-001	PENETRATION (AIRLOCK)-CONAX/MODULAR
(61) PENE-002	PENETRATION (LVP, C&I)-WESTINGHOUSE/ MODULAR
(62) PENE-003	PENETRATION (MVP)-WESTINGHOUSE/CANNISTER
(63) PENE-004	PENETRATION (LVP/C&I)-WESTINGHOUSE/ CANNISTER
(64) PENE-005	PENETRATIO(NIS)-CONAX/MODULAR
(65) HS-001	HANDSWITCH-CUTLER-HAMMER
(66) MCK-001	MOTOR CONNECTOR KIT-RAYCHEM NMCK
(67) MCK-002	CONNECTOR KIT-RAYCHEM NPKV
(68) XMTR-001	TRANSMITTER-BARTON LOT 7-764
(69) XMTR-002	TRANSMITTER-FOXBORO E11GM
(70) XMTR-003	TRANSMITTER-ROSEMOUNT/1153 DB3 PB, 1153 DB4 PB, 1153 DB5 PB
(71) XMTR-004	TRANSMITTER-BARTON LOT 7-763
(72) ITE-002	TEMP ELEMENT-ROSEMOUNT/176KF
(73) ITE-003	TEMP ELEMENT-WEED/N90015-2A-240
(74) ITS-001	TEMP SWITCH-FENWAL/17323-0, 18023-7, -0
(75) ITS-002	TEMP SWITCH-SOR/201TA-B125-JJTTX6
(76) IPS-002	PRESSURE SWITCH-SOR/12TA-BB4-NX-C1A-JJTTX6

TABLE V.3 (Continued)

Package Number	Description/Manufacturer Model Number
(77) HTR-001	HEATER-WESTINGHOUSE/MODEL A
(78) ILP-001	LOCAL INSTM-COMSIP/DELPHI/K-IIIM
(79) ILT-001	LEVEL TRANSMITTER-FOXBORO E13DM
(80) IXT-001	SPECIAL MEASURE TRANSMITTER-TEC/1414
(81) IFS-001	NONINDICATING FLOW SWITCH-FCI/FR72,1264
(82) IRE-001	PRIMARY ELEMENT, RADIATION-GENERAL ATOMIC/ RD-23
(83) ILM-001	LEVEL MODIFIER-MASONELIAN 8005A
(84) ILCV-001	LEVEL CONTROL VALVE - MASONELIAN 8012
(85) IZS-001	NONINDICATING ZONE SWITCH - NAMECO EA 180A
(86) IZS-002	NONINDICATING ZONE SWITCH - NAMECO EA 180B
(87) IZS-003	NONINDICATING ZONE SWITCH - NAMECO EA 740A
(88) IZS-004	NONINDICATING ZONE SWITCH - NAMECO EA 740B
(89) IMIK-001	MOISTURE CONTROL STATION - NUTHERM
(90) IPT-001	PRESSURE TRANSMITTER - WESTINGHOUSE/32PA1
(91) IPT-002	PRESSURE TRANSMITTER - FOXBORO NE13
(92) IFT-001	FLOW TRANSMITTER - GOULD/PD-3200-400-18-22-36-XX

VI. Position on MSLB Superheat with Mass and Energy Release Issue

The original blowdown mass and energy data for the MSLB inside containment and in the valve vault room did not consider the energy from additional superheating of steam when tubes in the steam generator become uncovered. TVA's approach to resolution of the concerns for each plant area is addressed below.

A. Inside Containment:

Solution - Evaluations were performed by TVA which showed that the analysis presented in the FSAR was conservative and that continued plant operation was appropriate. The environmental data drawings use the FSAR analysis data. Additional licensing efforts were required by the NRC for TVA's Watts Bar Nuclear Plant and Duke's Catawba Nuclear Plant to produce an updated analytical modeling of the MSLB inside containment. This model developed by Westinghouse has been used in preliminary form with the resulting temperatures being less than those presented in the FSAR and used in EQ evaluations. Final resolution of the model is pending completion of the work by Westinghouse and subsequent approval by the NRC.

Schedule - Westinghouse is scheduled to submit their topical reports before January 1, 1986. The NRC is expected to approve the revised modeling by July 1, 1986.

Impact - The revised modeling for WBN results in peak temperatures 5° to 20°F less than FSAR MSLB analysis. Therefore use of the FSAR MSLB environmental parameters for EQ is conservative. No Sequoyah specific runs with the new model are presently deemed to be necessary. Thus no impact is expected as a result of the resolution of superheating concerns for a MSLB inside containment.

B. Valve Vault:

Solution - (1) Obtain Westinghouse owners subgroup (WOG) superheat study with mass and energy releases. The study will document the supportive assumptions (e.g., isolation times, set point trips, etc.) used to obtain the mass and energy releases.

(2) Reanalyze the SQN valve vault temperature and pressure using the input from WOG and revise the environmental data drawings.

(3) Using (1) and (2) from above, reevaluate and identify corrective action, as necessary, on the following:

(a) Equipment qualification
(b) Structural analysis
(c) Previous safety/engineering evaluations

Schedule - TVA plans are to complete all action described - B(1), (2), and (3) above by April 1, 1986.

Impact - Presently, safety-related equipment is being qualified to the environments currently documented on the environmental data drawings. The superheat problem is being treated like any potential change to design basis information and requires that the equipment be reevaluated when the new superheat environmental analysis is made available.

The acceptability of the present plant configuration can be found in the failure evaluation/engineering report for the superheat in the valve vault NCR (SQNNEB8402). This report will be evaluated for potential changes when the environmental reanalysis is made available. This is identified by action item (3)(c) above.

VII. 10CFR50.49 LIST ADDITIONS/DELETIONS

Subsequent to the March 26, 1985, submittal of the SQN 10CFR50.49 equipment list a number of deletions and additions to that list have been made. For record purposes and as an aid to track changes, Table VII.1 provides a list of all deletions made to the previous submittal and defines the status category for each deletion. The description of equipment status categories referenced in this table are as follows:

a. Mild Environment

Equipment no longer considered to be within the scope of 10CFR50.49. The equipment has been reevaluated and been determined to be in a mild environment for the accident it is required to mitigate.

b. NUREG-0588, Category C

Equipment no longer considered to be within the scope of 10CFR50.49. This equipment will experience environmental conditions of design basis accidents through which it need not function for mitigation of said accidents, and whose failure (in any mode) is deemed not detrimental to plant safety or accident mitigation, and need not be qualified for any accident environment, but will be qualified for its non-accident service environment.

c. Equipment not in the Scope of 10CFR50.49

This equipment has been determined not to be within the scope of 10CFR50.49 as a result of the equipment no longer performing a safety-related function, equipment being replaced with nonelectrical devices, equipment being removed from safety circuit, etc.

Table V11.2 lists equipment that has been added. The following types of equipment were treated generically in the March 26, 1985, submittal and have been identified in Section VIII and therefore, are not listed in Table VII.2 as equipment that has been added to the program:

Terminal Blocks	Cable splices
Handswitches	Penetrations (all types)
*Cable (all types)	Conduit Seal Assemblies
Junction boxes	

All of this equipment is now defined in the 10CFR50.49 master list located in Section VIII of this report. This updated 10CFR50.49 master list supersedes the March 26, 1985 TVA submittal.

*Cable is listed referencing mark number and contract numbers as unique identifiers.

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-PT -001-002A		X	
2-PT -001-002A		X	
1-PT -001-002B			
2-PT -001-002B		X	
1-PCV -001-005(LS)	X		
1-PCV -001-005(LS)	X		
1-PT -001-005		X	
2-PT -001-005		X	
1-PT -001-009A		X	
2-PT -001-009A		X	
1-PT -001-009B		X	
2-PT -001-009B		X	
FCV -001-011(LS)	X		

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name		Category C	Mild	Not in 10CFR50.49 Scope
2-FCV	-001-011(LS)	X		
1-ZS	-001-011F	X		
2-ZS	-001-011F	X		
1-ZS	-001-011J	X		
2-ZS	-001-011J	X		
1-PCV	-001-012(LS)	X		
2-PCV	-001-012(LS)	X		
1-PT	-001-012		X	
2-PT	-001-012		X	
1-PT	-001-020A		X	
2-PT	-001-020A		X	
1-PT	-001-020B		X	
2-PT	-001-020B		X	
1-FCV	-001-022(LS)	X		

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
2-FCV -001-022(LS)	X		
1-ZS -001-022F	X		
2-ZS -001-022F	X		
1-ZS -001-022J	X		
2-ZS -001-022J	X		
1-PCV -001-023(LS)	X		
[redacted]PCV -001-023(LS)	X		
1-PT -001-023		X	
2-PT -001-023		X	
1-FSV -001-024B			X
2-FSV -001-024B			X
1-PT -001-027A		X	
[redacted]PT -001-027A		X	

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
PT -001-027B		X	
2-PT -001-027B		X	
1-FCV -001-029(LS)	X		
2-FCV -001-029(LS)	X		
1-ZS -001-029F	X		
2-ZS -001-029F	X		
1-ZS -001-029J	X		
2-ZS -001-029J	X		
1-PCV -001-030(LS)	X		
2-PCV -001-030(LS)	X		
1-FSV -003-087			X
2-FSV -003-087			X
1-FCV -003-116A		X	
2-FCV -003-116A		X	

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-FCV -003-116B		X	
2-FCV -003-116B		X	
1-MTR -003-118		X	
2-MTR -003-118		X	
1-PS -003-121A		X	
2-PS -003-121A		X	
[redacted]PS -003-121B		X	
2-PS -003-121B		X	
1-PS -003-121D		X	
2-PS -003-121D		X	
1-PM -003-122			X
2-PM -003-122			X
[redacted]PT -003-122A	X		

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
PT -003-122A	X		
1-FCV -003-126A		X	
2-FCV -003-126A		X	
1-FCV -003-126B		X	
2-FCV -003-126B		X	
1-MTR -003-128		X	
2-MTR -003-128		X	
1-PM -003-132			X
2-PM -003-132			X
1-PT -003-132A	X		
2-PT -003-132A	X		
1-PS -003-138A		X	
2-PS -003-138A		X	
1-PS -003-138B		X	

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
2-PS -003-138B		X	
1-PS -003-139A		X	
2-PS -003-139A		X	
1-PS -003-139B		X	
2-PS -003-139B		X	
1-PS -003-139D		X	
[redacted]-PS -003-139D		X	
1-PS -003-140A			X
2-PS -003-140A			X
1-PS -003-140B			X
2-PS -003-140B			X
1-FT -003-142		X	
[redacted]-FT -003-142		X	

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-PS -003-144A		X	
2-PS -003-144A		X	
1-PS -003-144B		X	
2-PS -003-144B		X	
1-PS -003-144D		X	
2-PS -003-144D		X	
1-LSV -003-148		X	
2-LSV -003-148		X	
1-PS -003-148		X	
2-PS -003-148		X	
1-LSV -003-148A		X	
2-LSV -003-148A		X	
1-PS -003-150A			X
2-PS -003-150A			X

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-PS -003-150B			X
2-PS -003-150B			X
1-LSV -003-156		X	
2-LSV -003-156		X	
1-PS -003-156		X	
2-PS -003-156		X	
[redacted]-LSV -003-156A		X	
2-LSV -003-156A		X	
1-PS -003-160A			X
2-PS -003-160A			X
1-PS -003-160B			X
2-PS -003-160B			X
[redacted]-LSV -003-164		X	

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-LSV -003-164		X	
1-PS -003-164		X	
2-PS -003-164		X	
1-LSV -003-164A		X	
2-LSV -003-164A		X	
1-PS -003-165A			X
2-PS -003-165A			X
1-PS -003-165B			X
2-PS -003-165B			X
1-LSV -003-171		X	
2-LSV -003-171		X	
1-PS -003-171		X	
2-PS -003-171		X	
1-LSV -003-171A		X	

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
2-LSV -003-171A		X	
1-LSV -003-172		X	
2-LSV -003-172		X	
1-LSV -003-173		X	
2-LSV -003-173		X	
0-FCV -012-079(LS)			X
[redacted]-FSV -012-079			X
2-FCV -030-012			X
2-FCO -030-022(LS)			X
2-FSV -030-022		X	
1-MTRA-030-038A			X
2-MTRA-030-038A			X
[redacted]-MTRB-030-039B			X

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
MTRB-030-039B			X
1-FSV -030-086			
1-FCO -030-087(LS)		X	
1-FSV -030-087		X	
1-FCO -030-107(LS)			X
1-FCO -030-107		X	
2-FCO -030-109(LS)			X
2-FSV -030-109		X	
0-FS -030-147			X
0-TC -030-147			X
0-TC -030-156			X
0-FS -030-156			X
2-MTR -030-184		X	
2-TS -030-184		X	

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
2-MTR -030-185		X	
2-TS -030-185		X	
1-TS -030-190		X	
1-MTR -030-190A		X	
1-MTR -030-191			X
1-TS -030-191		X	
-MTR -030-192		X	
0-TS -030-192		X	
0-MTR -030-193		X	
0-TS -030-193		X	
1-FS -030-194			X
2-FS -030-194			X
-FS -030-195			X

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-FS -030-195			X
1-FS -030-196			X
2-FS -030-196			X
1-FS -030-197			X
2-FS -030-197			X
0-MC -030-319			X
0-MC -030-320			X
0-MC -043-320			X
1-H2A -043-200			X
2-H2A -043-200			X
1-H2A -043-210			X
2-H2A -043-210			X
1-RLY -046-001			X
2-RLY -046-001			X

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-RLY -046-002			X
2-RLY -046-002			X
1-RLY -046-003			X
2-RLY -046-003			X
1-RLY -046-004			X
2-RLY -046-004			X
[redacted]RLY -046-005			X
2-RLY -046-005			X
1-RLY -046-006			X
2-RLY -046-006			X
1-FSV -061-096			X
1-FCV -062-072(LS)	X		
[redacted]-FCV -062-072(LS)	X		

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-FCV -062-073(LS)	X		
2-FCV -062-073(LS)	X		
1-FCV -062-074(LS)	X		
2-FCV -062-074(LS)	X		
1-FCV -062-098	X		
2-FCV -062-098	X		
1-FCV -062-099	X		
2-FCV -062-099	X		
1-MTRB-062-104B			X
2-MTRB-062-104B			X
1-MTRA-062-108A			X
2-MTRA-062-108A			X
2-FCV -063-003(LS)			X
1-FCV -063-004(LS)			X

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
2-FCV -063-004(LS)			X
1-FCV -063-072(LS)			X
2-FCV -063-072(LS)			X
1-FCV -063-073(LS)			X
2-FCV -063-073(LS)			X
1-FCV -063-175(LS)			X
2-FCV -063-175(LS)			X
1-FSV -065-005			X
1-FCV -065-008(LS)	X		
1-FSV -065-009			X
0-MC -065-016			X
0-ME -065-016	X		
0-MM -065-016	X		

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
[redacted]MS -065-016	X		
0-TC -065-017			X
0-TS -065-017	X		
0-FS -065-025B/A			X
0-FCO -065-028A(LS)			X
0-FCO -065-028B(LS)			X
0-FS -065-031B/A			X
0-MC -065-036			X
0-ME -065-036	X		
0-MM -065-036	X		
0-MS -065-036	X		
0-TC -065-037			X
0-TS -065-037	X		
[redacted]-FS -065-044B/A			X

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
0-FCO -065-047A(LS)			X
0-FCO -065-047B(LS)			X
1-FCV -065-051(LS)	X		
0-FS -065-055B/A			X
0-FS -065-056A/B			X
0-FS -065-056B/A			X
PCV -065-081(LS)	X		
2-PCV -065-081			X
1-PCV -065-083(LS)	X		
2-PCV -065-083(LS)	X		
1-PCV -065-086(LS)	X		
2-PCV -065-086(LS)	X		
PCV -065-087			X

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
2-PCV -065-087(LS)	X		
1-FCV -067-123		X	
2-FCV -067-123		X	
1-FCV -067-125		X	
2-FCV -067-125		X	
1-FCV -067-146		X	
2-FCV -067-146		X	
0-FCV -067-152		X	
1-FSV -067-162		X	
1-FSV -067-164		X	
1-FSV -067-168	X		
2-FSV -067-168	X		
1-FSV -067-170	X		
2-FSV -067-170	X		

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-FSV -067-176		X	
2-FSV -067-176		X	
1-FSV -067-182		X	
2-FSV -067-182		X	
1-FSV -067-184		X	
2-FSV -067-184		X	
FSV -067-186		X	
2-FSV -067-186		X	
1-FSV -067-188	X		
2-FSV -067-188	X		
1-FSV -067-190	X		
2-FSV -067-190	X		
FSV -067-213		X	

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
2-FSV -067-215		X	
2-FSV -067-217		X	
2-ZS -067-217			X
2-FSV -067-219		X	
2-ZS -067-219			X
1-FCV -067-223	X		
2-FCV -067-223	X		
1-FSV -067-342		X	
2-FSV -067-342		X	
1-FSV -067-344		X	
2-FSV -067-344		X	
1-FSV -067-346		X	
2-FSV -067-346		X	
1-FSV -067-348		X	

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
2-FSV -067-348		X	
1-PT -068-068	X		
2-PT -068-068	X		
1-PCV -068-334(LS)			X
2-PCV -068-334(LS)			X
1-PSV -068-334			X
2-PSV -068-334			X
1-PSV -068-340A			X
2-PSV -068-340A			X
2-PSV -068-340AB			X
1-XE -068-366			X
1-XT -068-366			X
1-TE -068-373			X

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-TE -068-373			X
1-TE -068-374			X
2-TE -068-374			X
1-TE -068-375			X
2-TE -068-375			X
1-TE -068-376			X
2-TE -068-376			X
1-TE -068-377			X
2-TE -068-377			X
1-TE -068-378			X
2-TE -068-378			X
1-TE -068-379			X
2-TE -068-379			X
1-TE -068-380			X

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
2-TE -068-380			X
1-TE -068-381			X
2-TE -068-381			X
1-TE -068-382			X
2-TE -068-382			X
1-TE -068-383			X
-TE -068-383			X
1-TE -068-384			X
2-TE -068-384			X
1-TE -068-385			X
2-TE -068-385			X
1-TE -068-386			X
-TE -068-386			X

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-TE -068-398	X		
2-TE -068-398	X		
0-FCV -070-001		X	
0-FCV -070-011		X	
0-MTR -070-033		X	
0-MTR -070-038		X	
0-FCV -070-040		X	
0-FCV -070-041		X	
0-MTR -070-046			X
0-MTR -070-051		X	
0-MTR -070-59			X
0-FCV -070-111			X
1-FCV -070-153		X	
2-FCV -070-153		X	

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-FCV -070-156		X	
2-FCV -070-156		X	
1-FCV -070-183	X		
2-FCV -070-183	X		
0-FCV -070-193		X	
0-FCV -070-194		X	
[redacted]FCV -070-197		X	
0-FCV -070-198		X	
1-FCV -070-207		X	
2-FCV -070-207		X	
0-FCV -070-208		X	
1-MTRA-074-010A			X
[redacted]-MTRA-074-010A			X

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
1-MTRA-074-020B			X
2-MTRA-074-020B			X
1-FCV -077-016(LS)			X
2-FCV -077-016(LS)			X
1-FSV -077-016			X
2-FSV -077-016			X
1-FSV -077-017			X
2-FSV -077-017			X
0-MTRB-078-009A		X	
0-MTRB-078-012A		X	
0-MTRB-078-035C		X	
0-MTR -313-303B-A			X
0-FSV -313-305	X		
0-LS -313-305	X		

Table VII.1

Deletions made since March 26, 1985 submittal

Component Name	Category C	Mild	Not in 10CFR50.49 Scope
0-MTR -313-338B-A			X
1-FSV -313-340			X
0-LS -313-340	X		

ADDITIONS MADE SINCE 06/26/85 SUBMITTAL

COMPONENT NAME	
2-FT -001-003B	
1-TS -001-017A	
2-TS -001-017A	
1-TS -001-017B	
2-TS -001-017B	
1-PSV -001-024B	
2-PSV -001-024B	
1-LT -003-043	
2-LT -003-043	
1-LT -003-056	
2-LT -003-056	
1-LT -003-098	
2-LT -003-098	
1-LT -003-111	
2-LT -003-111	
2-FCV -030-012	(LS)
2-FCV -030-012	(LS)
1-FCV -030-017	(LS)
1-FCV -030-017	(LS)
2-FCV -030-017	(LS)
2-FCV -030-017	(LS)
1-MTR -030-038A	
2-MTR -030-038A	
1-MTR -030-039B	
2-MTR -030-039B	

ADDITIONS MADE SINCE 06/26/85 SUBMITTAL

COMPONENT NAME	
1-FCV -030-040	(LS)
1-FCV -030-040	(LS)
2-FCV -030-040	(LS)
2-FCV -030-040	(LS)
1-FSV -030-046B	
2-FSV -030-046B	
1-FSV -030-047B	
2-FSV -030-047B	
1-FSV -030-048B	
2-FSV -030-048B	
0-FCO -030-129	(LS)
0-FCO -030-130	(LS)
1-FS -030-147	
0-HTR -030-147A	
2-FS -030-156	
0-HTR -030-156B	
1-FE -030-194	
2-FE -030-194	
1-FE -030-195	
2-FE -030-195	
1-FE -030-196	
2-FE -030-196	
1-FE -030-197	
2-FE -030-197	
2-FS -030-200	

ADDITIONS MADE SINCE 06/26/85 SUBMITTAL

COMPONENT NAME
2-FS -030-207
1-FCO -031-475
2-FCO -031-475
1-ZS -031-475
1-ZS -031-475
2-ZS -031-475
2-ZS -031-475
1-FCO -031-476
2-FCO -031-476
1-ZS -031-476
1-ZS -031-476
2-ZS -031-476
2-ZS -031-476
1-H2E -043-200
2-H2E -043-200
1-HPL -043-200
2-HPL -043-200
1-PDS -043-200
2-PDS -043-200
1-H2E -043-210
2-H2E -043-210
1-HPL -043-210
2-HPL -043-210
1-PDS -043-210
2-PDS -043-210

ADDITIONS MADE SINCE 06/26/85 SUBMITTAL

COMPONENT NAME
1-FSV -043-250
2-FSV -043-250
1-FSV -043-251
2-FSV -043-251
1-FSV -043-268
2-FSV -043-268
1-FSV -043-269
2-FSV -043-269
1-FSV -043-287
2-FSV -043-287
1-FSV -043-288
2-FSV -043-288
1-FSV -043-307
2-FSV -043-307
1-FSV -043-309
2-FSV -043-309
1-FSV -043-310
2-FSV -043-310
1-FSV -043-317
2-FSV -043-317
1-FSV -043-318
2-FSV -043-318
1-FSV -043-319
2-FSV -043-319
1-FSV -043-325

ADDITIONS MADE SINCE 06/26/85 SUBMITTAL

COMPONENT NAME	
2-FSV -043-325	
1-FSV -043-341	
2-FSV -043-341	
1-MTR -062-104B	
2-MTR -062-104B	
1-MTR -062-108A	
2-MTR -062-108A	
1-LCV -062-135	
2-LCV -062-135	
1-LCV -062-136	
2-LCV -062-136	
1-ZS -063-003	
1-ZS -063-003	
2-ZS -063-003	
1-ZS -063-004	
1-ZS -063-004	
2-ZS -063-004	
2-ZS -063-004	
1-FCV -063-023	(LS)
2-FCV -063-023	(LS)
1-FCV -063-038	(LS)
2-FCV -063-038	(LS)
1-FCV -063-041	(LS)
2-FCV -063-041	(LS)
1-FCV -063-042	(LS)

ADDITIONS MADE SINCE 06/26/85 SUBMITTAL

COMPONENT NAME	
2-FCV -063-042	(LS)
1-FCV -063-064	(LS)
2-FCV -063-064	(LS)
1-ZS -063-072	
2-ZS -063-072	
1-ZS -063-073	
2-ZS -063-073	
1-FCV -063-084	(LS)
2-FCV -063-084	(LS)
1-ZS -063-175	
1-ZS -063-175	
2-FSV -065-004	
1-FCV -068-305	(LS)
2-FCV -068-305	(LS)
1-PCV -068-334	
2-PCV -068-334	
2-PCV -068-334	
1-PCV -068-340A	
2-PCV -068-340A	
1-FCV -070-092	
1-FCV -074-001	
2-FCV -074-001	
1-FCV -074-002	
2-FCV -074-002	
1-MTR -074-010A	

ADDITIONS MADE SINCE 06/26/85 SUBMITTAL

COMPONENT NAME	
2-MTR -074-010A	
1-MTR -074-020B	
2-MTR -074-020B	
1-FCV -074-033	
2-FCV -074-033	
1-FCV -074-035	
2-FCV -074-035	
1-FCV -077-019	(LS)
2-FCV -077-019	(LS)
1-FCV -077-020	(LS)
2-FCV -077-020	(LS)
1-FCV -081-012	(LS)
2-FCV -081-012	(LS)
2-FCV -090-113	(LS)

VIII. 10CFR50.49 MASTER LIST

The 10CFR50.49 list is a compilation of data for electrical equipment which has been determined to be within the scope of 10CFR50.49 via the process beginning with the SQEL through the evaluations performed in preparing a qualification binder as discussed in Section III. The list will be maintained for the life of the plant as a permanent record. This maintenance will include revisions resulting from changes occurring in the plant design and configuration which impact the equipment within the scope of 10CRF50.49.

The information presented in the list includes the device identification number, and whether the device is for post-accident monitoring or to satisfy NUREG-0737 commitments.

To support the 10CFR50.49 list, additional backup data is available at TVA which documents that all equipment on the SQEL has been evaluated to determine if the equipment must be placed in the scope of 10CFR50.49. Those items which are determined to be outside the scope of 10CFR50.49 were either Category C, or located in a mild environment.

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2
1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
1-FT	-001-003A
2-FT	-001-003A
1-FT	-001-003B
2-FT	-001-003B
1-FSV	-001-004A
2-FSV	-001-004A
1-FSV	-001-004B
2-FSV	-001-004B
1-FSV	-001-004D
2-FSV	-001-004D
1-FSV	-001-004E
2-FSV	-001-004E
1-FSV	-001-004F
2-FSV	-001-004F
1-FSV	-001-004G
2-FSV	-001-004G
1-FSV	-001-004H
2-FSV	-001-004H
1-FSV	-001-004J
2-FSV	-001-004J
1-PSV	-001-006A
2-PSV	-001-006A
1-PSV	-001-006B

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
2-PSV -001-006B		
1-PSV -001-006B	(CS)	(CONDUIT SEAL)
2-PSV -001-006B	(CS)	(CONDUIT SEAL)
1-FSV -001-007		
2-FSV -001-007		
1-FT -001-010A		
2-FT -001-010A		
1-FT -001-010B		
2-FT -001-010B		
1-FSV -001-011A		
2-FSV -001-011A		
1-FSV -001-011B		
2-FSV -001-011B		
1-FSV -001-011D		
2-FSV -001-011D		
1-FSV -001-011E		
2-FSV -001-011E		
1-FSV -001-011F		
2-FSV -001-011F		
1-FSV -001-011G		
2-FSV -001-011G		
1-FSV -001-011H		
2-FSV -001-011H		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
1-FSV -001-011J		
2-FSV -001-011J		
1-PSV -001-013A		
2-PSV -001-013A		
1-PSV -001-013B		
2-PSV -001-013B		
1-PSV -001-013B	(CS)	(CONDUIT SEAL)
2-PSV -001-013B	(CS)	(CONDUIT SEAL)
1-FSV -001-014		
2-FSV -001-014		
1-FCV -001-015		
2-FCV -001-015		
1-FCV -001-016		
2-FCV -001-016		
1-FCV -001-017		
2-FCV -001-017		
1-TS -001-017A		
2-TS -001-017A		
1-TS -001-017B		
2-TS -001-017B		
1-FCV -001-018		
2-FCV -001-018		
1-TS -001-018A		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
2-TS	-001-018A
1-TS	-001-018B
2-TS	-001-018B
1-FT	-001-021A
2-FT	-001-021A
1-FT	-001-021B
2-FT	-001-021B
1-FSV	-001-022A
-FSV	-001-022A
1-FSV	-001-022B
2-FSV	-001-022B
1-FSV	-001-022D
2-FSV	-001-022D
1-FSV	-001-022E
2-FSV	-001-022E
1-FSV	-001-022F
2-FSV	-001-022F
1-FSV	-001-022G
2-FSV	-001-022G
1-FSV	-001-022H
2-FSV	-001-022H
1-FSV	-001-022J
2-FSV	-001-022J

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
1	-PSV -001-024A		
2	-PSV -001-024A		
1	-PSV -001-024B		
2	-PSV -(-024B		
1	-PSV -001-024B	(CS)	(CONDUIT SEAL)
2	-PSV -001-024B	(CS)	(CONDUIT SEAL)
1	-FSV -001-025		
2	-FSV -001-025		
1	-FT -001-028A		
2	-FT -001-028A		
1	-FT -001-028B		
2	-FT -001-028B		
1	-FSV -001-029A		
2	-FSV -001-029A		
1	-FSV -001-029B		
2	-FSV -001-029B		
1	-FSV -001-029D		
2	-FSV -001-029D		
1	-FSV -001-029E		
2	-FSV -001-029E		
1	-FSV -001-029F		
2	-FSV -001-029F		
1	-FSV -001-029G		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2	-FSV -001-029G		
1	-FSV -001-029H		
2	-FSV -001-029H		
1	-FSV -001-029J		
2	-FSV 001-029J		
1	-PSV -001-031A		
2	-PSV -001-031A		
1	-PSV -001-031B		
2	-PSV -001-031B		
1	-PSV -001-031B	(CS)	(CONDUIT SEAL)
2	-PSV -001-031B	(CS)	(CONDUIT SEAL)
1	-FSV -001-032		
2	-FSV -001-032		
1	-FCV -001-147	(LS)	(LIMIT SWITCH)
1	-FCV -001-147	(LS)	(LIMIT SWITCH)
2	-FCV -001-147	(LS)	(LIMIT SWITCH)
2	-FCV -001-147	(LS)	(LIMIT SWITCH)
1	-FSV -001-147		
2	-FSV -001-147		
1	-ZS -001-147	(CS)	(CONDUIT SEAL)
1	-ZS -001-147	(CS)	(CONDUIT SEAL)
2	-ZS -001-147	(CS)	(CONDUIT SEAL)
2	-ZS -001-147	(CS)	(CONDUIT SEAL)

UNIT DEVICE ID NUMBER		
1-FCV -001-148	(LS)	(LIMIT SWITCH)
1-FCV -001-148	(LS)	(LIMIT SWITCH)
2-FCV -001-148	(LS)	(LIMIT SWITCH)
2-FCV -001-148	(LS)	(LIMIT SWITCH)
1-FSV -001-148		
2-FSV -001-148		
1-ZS -001-148	(CS)	(CONDUIT SEAL)
1-ZS -001-148	(CS)	(CONDUIT SEAL)
2-ZS -001-148	(CS)	(CONDUIT SEAL)
2-ZS -001-148	(CS)	(CONDUIT SEAL)
1-FCV -001-149	(LS)	(LIMIT SWITCH)
1-FCV -001-149	(LS)	(LIMIT SWITCH)
2-FCV -001-149	(LS)	(LIMIT SWITCH)
2-FCV -001-149	(LS)	(LIMIT SWITCH)
1-FSV -001-149		
2-FSV -001-149		
1-ZS -001-149	(CS)	(CONDUIT SEAL)
1-ZS -001-149	(CS)	(CONDUIT SEAL)
2-ZS -001-149	(CS)	(CONDUIT SEAL)
2-ZS -001-149	(CS)	(CONDUIT SEAL)
1-FCV -001-150	(LS)	(LIMIT SWITCH)
1-FCV -001-150	(LS)	(LIMIT SWITCH)
2-FCV -001-150	(LS)	(LIMIT SWITCH)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
2-FCV -001-150	(LS)	(LIMIT SWITCH)
1-FSV -001-150		
2-FSV -001-150		
1-ZS -001-150	(CS)	(CONDUIT SEAL)
1-ZS -001-150	(CS)	(CONDUIT SEAL)
2-ZS -001-150	(CS)	(CONDUIT SEAL)
2-ZS -001-150	(CS)	(CONDUIT SEAL)
1-FSV -001-181		
2-FSV -001-181		
1-ZS -001-181		
1-ZS -001-181		
2-ZS -001-181		
2-ZS -001-181		
1-ZS -001-181	(CS)	(CONDUIT SEAL)
1-ZS -001-181	(CS)	(CONDUIT SEAL)
2-ZS -001-181	(CS)	(CONDUIT SEAL)
2-ZS -001-181	(CS)	(CONDUIT SEAL)
1-FSV -001-182		
2-FSV -001-182		
1-ZS -001-182		
1-ZS -001-182		
2-ZS -001-182		
2-ZS -001-182		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
1-ZS	-001-182	(CS)	(CONDUIT SEAL)
1-ZS	-001-182	(CS)	(CONDUIT SEAL)
2-ZS	-001-182	(CS)	(CONDUIT SEAL)
2-ZS	-001-182	(CS)	(CONDUIT SEAL)
1-FSV	-001-183		
2-FSV	-001-183		
1-ZS	-001-183		
1-ZS	-001-183		
2-ZS	-001-183		
2-ZS	-001-183		
1-ZS	-001-183	(CS)	(CONDUIT SEAL)
1-ZS	-001-183	(CS)	(CONDUIT SEAL)
2-ZS	-001-183	(CS)	(CONDUIT SEAL)
2-ZS	-001-183	(CS)	(CONDUIT SEAL)
1-FSV	-001-184		
2-FSV	-001-184		
1-ZS	-001-184		
1-ZS	-001-184		
2-ZS	-001-184		
2-ZS	-001-184		
1-ZS	-001-184	(CS)	(CONDUIT SEAL)
1-ZS	-001-184	(CS)	(CONDUIT SEAL)
2-ZS	-001-184	(CS)	(CONDUIT SEAL)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2-ZS	-001-184	(CS)	(CONDUIT SEAL)
1-FCV	-003-033		
2-FCV	-003-033		
1-LT	-003-038		
2-LT	-003-038		
1-LT	-003-039	PAM	
2-LT	-003-039	PAM	
1-LT	-003-042		
2-LT	-003-042		
1-LT	-003-043	PAM	
2-LT	-003-043	PAM	
1-FCV	-003-047		
2-FCV	-003-047		
1-LT	-003-051		
2-LT	-003-051		
1-LT	-003-052	PAM	
2-LT	-003-052	PAM	
1-LT	-003-055		
2-LT	-003-055		
1-LT	-003-056	PAM	
2-LT	-003-056	PAM	
1-FCV	-003-087		
2-FCV	-003-087		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER	
1-LT	-003-093	
2-LT	-003-093	
1-LT	-003-094	PAM
2-LT	-003-094	PAM
1-LT	-003-097	
2-LT	-003-097	
1-LT	-003-098	PAM
2-LT	-003-098	PAM
1-FCV	-003-100	
2-FCV	-003-100	
1-LT	-003-106	
2-LT	-003-106	
1-LT	-003-107	PAM
2-LT	-003-107	PAM
1-LT	-003-110	
2-LT	-003-110	
1-LT	-003-111	PAM
2-LT	-003-111	PAM
1-HS	-003-116A/B	
2-HS	-003-116A/B	
1-HS	-003-116B/B	
2-HS	-003-116B/B	
1-HS	-003-118B	

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2
1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2-HS	-003-118B		
1-HS	-003-126A/B		
2-HS	-003-126A/B		
1-HS	-003-126B/B		
2-HS	-003-126B/B		
1-HS	-003-128B		
2-HS	-003-128B		
1-FCV	-003-136A		
2-FCV	-003-136A		
1-HS	-003-136A/B		
2-HS	-003-136A/B		
1-FCV	-003-136B		
2-FCV	-003-136B		
1-HS	-003-136B/B		
2-HS	-003-136B/B		
1-FT	-003-147		
2-FT	-003-147		
1-LCV	-003-148	(VP) TMI	(VALVE POSITIONER)
2-LCV	-003-148	(VP) TMI	(VALVE POSITIONER)
1-LT	-003-148		
2-LT	-003-148		
1-LT	-003-148	(CS)	(CONDUIT SEAL)
2-LT	-003-148	(CS)	(CONDUIT SEAL)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
1-LM -003-148A		
2-LM -003-148A		
1-FT -003-155		
2-FT -003-155		
1-LCV -003-156	(VP)	(VALVE POSITIONER)
2-LCV -003-156	(VP)	(VALVE POSITIONER)
1-LT -003-156		
2-LT -003-156		
1-LT -003-156	(CS)	(CONDUIT SEAL)
2-LT -003-156	(CS)	(CONDUIT SEAL)
1-LM -003-156A		
2-LM -003-156A		
1-FT -003-163		
2-FT -003-163		
1-LCV -003-164	(VP)	(VALVE POSITIONER)
2-LCV -003-164	(VP)	(VALVE POSITIONER)
1-LT -003-164		
2-LT -003-164		
1-LT -003-164	(CS)	(CONDUIT SEAL)
2-LT -003-164	(CS)	(CONDUIT SEAL)
1-LM -003-164A		
2-LM -003-164A		
1-FT -003-170		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2-FT	-003-170		
1-LCV	-003-171	(VP)	(VALVE POSITIONER)
2-LCV	-003-171	(VP)	(VALVE POSITIONER)
1-LT	-003-171		
2-LT	-003-171		
1-LT	-003-171	(CS)	(CONDUIT SEAL)
2-LT	-003-171	(CS)	(CONDUIT SEAL)
1-LM	-003-171A		
2-LM	-003-171A		
1-LCV	-003-172	(VP) TMI	(VALVE POSITIONER)
2-LCV	-003-172	(VP) TMI	(VALVE POSITIONER)
1-LT	-003-172		
2-LT	-003-172		
1-LT	-003-172	(CS)	(CONDUIT SEAL)
2-LT	-003-172	(CS)	(CONDUIT SEAL)
1-LCV	-003-173	(VP) TMI	(VALVE POSITIONER)
2-LCV	-003-173	(VP) TMI	(VALVE POSITIONER)
1-LT	-003-173		
2-LT	-003-173		
1-LT	-003-173	(CS)	(CONDUIT SEAL)
2-LT	-003-173	(CS)	(CONDUIT SEAL)
1-LCV	-003-174	(VP) TMI	(VALVE POSITIONER)
2-LCV	-003-174	(VP) TMI	(VALVE POSITIONER)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER			
1-LSV -003-174			
2-LSV -003-174			
1-LT -003-174			
2-LT -003-174			
1-LT -003-174	(CS)		(CONDUIT SEAL)
2-LT -003-174	(CS)		(CONDUIT SEAL)
1-LCV -003-175	(VP)	TMI	(VALVE POSITIONER)
2-LCV -003-175	(VP)	TMI	(VALVE POSITIONER)
1-LSV -003-175			
2-LSV -003-175			
1-LT -003-175			
2-LT -003-175			
1-LT -003-175	(CS)		(CONDUIT SEAL)
2-LT -003-175	(CS)		(CONDUIT SEAL)
1-FCV -003-179A			
2-FCV -003-179A			
1-HS -003-179A/B			
2-HS -003-179A/B			
1-FCV -003-179B			
2-FCV -003-179B			
1-HS -003-179B/B			
2-HS -003-179B/B			
0-TS -012-091A			

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
0-TS	-012-091B
0-TS	-012-092A
0-TS	-012-092B
0-TS	-012-093A
0-TS	-012-093B
0-TS	-012-094A
0-TS	-012-094B
0-TS	-012-095A
0-TS	-012-095B
0-TS	-012-096A
0-TS	-012-096B
0-TS	-012-097A
0-TS	-012-097B
0-TS	-012-098A
0-TS	-012-098B
0-TS	-012-099A
0-TS	-012-099B
1-FCV	-026-240
2-FCV	-026-240
1-HS	-026-240
2-HS	-026-240
1-FCV	-026-241
2-FCV	-026-241

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
1-HS -026-241		
2-HS -026-241		
1-FCV -026-242		
2-FCV -026-242		
1-HS -026-242		
2-HS -026-242		
1-FCV -026-243		
2-FCV -026-243		
1-HS -026-243		
2-HS -026-243		
1-FCV -026-244		
2-FCV -026-244		
1-HS -026-244		
2-HS -026-244		
1-FCV -026-245		
2-FCV -026-245		
1-HS -026-245		
2-HS -026-245		
1-FCV -030-002	(LS)	(LIMIT SWITCH)
1-FCV -030-002	(LS)	(LIMIT SWITCH)
2-FCV -030-002	(LS)	(LIMIT SWITCH)
2-FCV -030-002	(LS)	(LIMIT SWITCH)
1-FSV -030-002		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
2-FSV -030-002		
1-FCV -030-005	(LS)	(LIMIT SWITCH)
1-FCV -030-005	(LS)	(LIMIT SWITCH)
2-FCV -030-005	(LS)	(LIMIT SWITCH)
2-FCV -030-005	(LS)	(LIMIT SWITCH)
1-FSV -030-005		
2-FSV -030-005		
1-FSV -030-007		
2-FSV -030-007		
1-ZS -030-007		
1-ZS -030-007		
2-ZS -030-007		
2-ZS -030-007		
1-FSV -030-008		
2-FSV -030-008		
1-ZS -030-008		
1-ZS -030-008		
2-ZS -030-008		
2-ZS -030-008		
1-ZS -030-008	(CS)	(CONDUIT SEAL)
1-ZS -030-008	(CS)	(CONDUIT SEAL)
2-ZS -030-008	(CS)	(CONDUIT SEAL)
2-ZS -030-008	(CS)	(CONDUIT SEAL)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
1-FSV -030-009		
2-FSV -030-009		
1-ZS -030-009		
1-ZS -030-009		
2-ZS -030-009		
2-ZS -030-009		
1-FSV -030-010		
2-FSV -030-010		
1-ZS -030-010		
1-ZS -030-010		
2-ZS -030-010		
2-ZS -030-010		
1-ZS -030-010	(CS)	(CONDUIT SEAL)
1-ZS -030-010	(CS)	(CONDUIT SEAL)
2-ZS -030-010	(CS)	(CONDUIT SEAL)
2-ZS -030-010	(CS)	(CONDUIT SEAL)
1-FCV -030-012	(LS)	(LIMIT SWITCH)
1-FCV -030-012	(LS)	(LIMIT SWITCH)
2-FCV -030-012	(LS)	(LIMIT SWITCH)
2-FCV -030-012	(LS)	(LIMIT SWITCH)
1-FSV -030-012		
2-FSV -030-012		
1-FSV -030-014		

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2
1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2	-FSV -030-014		
1	-ZS -030-014		
1	-ZS -030-014		
2	-ZS -030-014		
2	-ZS -030-014		
1	-FSV -030-015		
2	-FSV -030-015		
1	-ZS -030-015		
1	-ZS -030-015		
2	-ZS -030-015		
2	-ZS -030-015		
1	-ZS -030-015	(CS)	(CONDUIT SEAL)
1	-ZS -030-015	(CS)	(CONDUIT SEAL)
2	-ZS -030-015	(CS)	(CONDUIT SEAL)
2	-ZS -030-015	(CS)	(CONDUIT SEAL)
1	-FCV -030-016	(LS)	(LIMIT SWITCH)
1	-FCV -030-016	(LS)	(LIMIT SWITCH)
2	-FCV -030-016	(LS)	(LIMIT SWITCH)
2	-FCV -030-016	(LS)	(LIMIT SWITCH)
1	-FSV -030-016		
2	-FSV -030-016		
1	-FCV -030-017	(LS)	(LIMIT SWITCH)
1	-FCV -030-017	(LS)	(LIMIT SWITCH)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2	-FCV -030-017	(LS)	(LIMIT SWITCH)
2	-FCV -030-017	(LS)	(LIMIT SWITCH)
1	-FSV -030-017		
2	-FSV -030-017		
1	-ZS -030-017	(CS)	(CONDUIT SEAL)
1	-ZS -030-017	(CS)	(CONDUIT SEAL)
2	-ZS -030-017	(CS)	(CONDUIT SEAL)
2	-ZS -030-017	(CS)	(CONDUIT SEAL)
1	-FSV -030-019		
2	-FSV -030-019		
1	-ZS -030-019		
1	-ZS -030-019		
2	-ZS -030-019		
2	-ZS -030-019		
1	-FSV -030-020		
2	-FSV -030-020		
1	-ZS -030-020		
1	-ZS -030-020		
2	-ZS -030-020		
2	-ZS -030-020		
1	-ZS -030-020	(CS)	(CONDUIT SEAL)
1	-ZS -030-020	(CS)	(CONDUIT SEAL)
2	-ZS -030-020	(CS)	(CONDUIT SEAL)

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2
1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2-	ZS -030-020	(CS)	(CONDUIT SEAL)
1-	FCV -030-037	(LS)	(LIMIT SWITCH)
1-	FCV -030-037	(LS)	(LIMIT SWITCH)
2-	FCV -030-037	(LS)	(LIMIT SWITCH)
2-	FCV -030-037	(LS)	(LIMIT SWITCH)
1-	FSV -030-037		
2-	FSV -030-037		
1-	MTR -030-038A		
2-	MTR -030-038A		
1-	MTR -030-039B		
2-	MTR -030-039B		
1-	FCV -030-040	(LS)	(LIMIT SWITCH)
1-	FCV -030-040	(LS)	(LIMIT SWITCH)
2-	FCV -030-040	(LS)	(LIMIT SWITCH)
2-	FCV -030-040	(LS)	(LIMIT SWITCH)
1-	FSV -030-040		
2-	FSV -030-040		
1-	ZS -030-040	(CS)	(CONDUIT SEAL)
1-	ZS -030-040	(CS)	(CONDUIT SEAL)
2-	ZS -030-040	(CS)	(CONDUIT SEAL)
2-	ZS -030-040	(CS)	(CONDUIT SEAL)
1-	PDT -030-042		
2-	PDT -030-042		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
1-PDT -030-043	
2-PDT -030-043	
1-PDT -030-044	PAM
2-PDT -030-044	PAM
1-PDT -030-045	PAM
2-PDT -030-045	PAM
1-ZS -030-046	
1-ZS -030-046	
2-ZS -030-046	
2-ZS -030-046	
1-FSV -030-046A	
2-FSV -030-046A	
1-PS -030-046A	
2-PS -030-046A	
1-FSV -030-046B	
2-FSV -030-046B	
1-PS -030-046B	
2-PS -030-046B	
1-ZS -030-047	
1-ZS -030-047	
2-ZS -030-047	
2-ZS -030-047	
1-FSV -030-047A	

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
2	-FSV -030-047A
1	-PS -030-047A
2	-PS -030-047A
1	-FSV -030-047B
2	-FSV -030-047B
1	-PS -030-047B
2	-PS -030-047B
1	-ZS -030-048
1	-ZS -030-048
2	-ZS -030-048
2	-ZS -030-048
1	-FSV -030-048A
2	-FSV -030-048A
1	-PS -030-048A
2	-PS -030-048A
1	-FSV -030-048B
2	-FSV -030-048B
1	-PS -030-048B
2	-PS -030-048B
1	-FSV -030-050
2	-FSV -030-050
1	-ZS -030-050
1	-ZS -030-050

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2-	ZS -030-050		
2-	ZS -030-050		
1-	ZS -030-050	(CS)	(CONDUIT SEAL)
1-	ZS -030-050	(CS)	(CONDUIT SEAL)
2-	ZS -030-050	(CS)	(CONDUIT SEAL)
2-	ZS -030-050	(CS)	(CONDUIT SEAL)
1-	FSV -030-051		
2-	FSV -030-051		
1-	ZS -030-051		
1-	ZS -030-051		
2-	ZS -030-051		
2-	ZS -030-051		
1-	FSV -030-052		
2-	FSV -030-052		
1-	ZS -030-052		
1-	ZS -030-052		
2-	ZS -030-052		
2-	ZS -030-052		
1-	ZS -030-052	(CS)	(CONDUIT SEAL)
1-	ZS -030-052	(CS)	(CONDUIT SEAL)
2-	ZS -030-052	(CS)	(CONDUIT SEAL)
2-	ZS -030-052	(CS)	(CONDUIT SEAL)
1-	FSV -030-053		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
2-FSV -030-053		
1-ZS -030-053		
1-ZS -030-053		
2-ZS -030-053		
2-ZS -030-053		
1-FCV -030-054	(LS)	(LIMIT SWITCH)
1-FCV -030-054	(LS)	(LIMIT SWITCH)
2-FCV -030-054	(LS)	(LIMIT SWITCH)
2-FCV -030-054	(LS)	(LIMIT SWITCH)
1-FSV -030-054		
2-FSV -030-054		
1-FSV -030-056		
2-FSV -030-056		
1-ZS -030-056		
1-ZS -030-056		
2-ZS -030-056		
2-ZS -030-056		
1-ZS -030-056	(CS)	(CONDUIT SEAL)
1-ZS -030-056	(CS)	(CONDUIT SEAL)
2-ZS -030-056	(CS)	(CONDUIT SEAL)
2-ZS -030-056	(CS)	(CONDUIT SEAL)
1-FSV -030-057		
2-FSV -030-057		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
1-ZS	-030-057		
1-ZS	-030-057		
2-ZS	-030-057		
2-ZS	-030-057		
1-FSV	-030-058		
2-FSV	-030-058		
1-ZS	-030-058		
1-ZS	-030-058		
2-ZS	-030-058		
2-ZS	-030-058		
1-ZS	-030-058	(CS)	(CONDUIT SEAL)
1-ZS	-030-058	(CS)	(CONDUIT SEAL)
2-ZS	-030-058	(CS)	(CONDUIT SEAL)
2-ZS	-030-058	(CS)	(CONDUIT SEAL)
1-FSV	-030-059		
2-FSV	-030-059		
1-ZS	-030-059		
1-ZS	-030-059		
2-ZS	-030-059		
2-ZS	-030-059		
1-FCV	-030-061	(LS)	(LIMIT SWITCH)
1-FCV	-030-061	(LS)	(LIMIT SWITCH)
2-FCV	-030-061	(LS)	(LIMIT SWITCH)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
2-FCV -030-061	(LS)	(LIMIT SWITCH)
1-FSV -030-061		
2-FSV -030-061		
1-FCV -030-062	(LS)	(LIMIT SWITCH)
1-FCV -030-062	(LS)	(LIMIT SWITCH)
2-FCV -030-062	(LS)	(LIMIT SWITCH)
2-FCV -030-062	(LS)	(LIMIT SWITCH)
1-FSV -030-062		
2-FSV -030-062		
0-FCO -030-129	(LS)	(LIMIT SWITCH)
0-FCO -030-130	(LS)	(LIMIT SWITCH)
1-FSV -030-134		
2-FSV -030-134		
1-FSV -030-134	(CS)	(CONDUIT SEAL)
2-FSV -030-134	(CS)	(CONDUIT SEAL)
1-FSV -030-135		
2-FSV -030-135		
1-FSV -030-146A		
1-MTR -030-146A		
1-FSV -030-146B		
1-HS -030-146B		
1-FS -030-147		
0-TS -030-147		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
0-HTR	-030-147A
2-FS	-030-156
0-TS	-030-156
0-HTR	-030-156B
2-FSV	-030-157A
2-FSV	-030-157B
2-HS	-030-157B
2-MTR	-030-157B
1-HS	-030-175
2-HS	-030-175
1-MTR	-030-175
2-MTR	-030-175
1-HS	-030-176
2-HS	-030-176
1-MTR	-030-176
2-MTR	-030-176
1-HS	-030-177
2-HS	-030-177
1-MTR	-030-177
2-MTR	-030-177
1-HS	-030-178
2-HS	-030-178
1-MTR	-030-178

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
2-MTR	-030-178
1-HS	-030-179
2-HS	-030-179
1-MTR	-030-179
2-MTR	-030-179
1-HS	-030-180
2-HS	-030-180
1-MTR	-030-180
2-MTR	-030-180
1-HS	-030-182
2-HS	-030-182
1-MTR	-030-182
2-MTR	-030-182
1-HS	-030-183
2-HS	-030-183
1-MTR	-030-183
2-MTR	-030-183
2-HS	-030-184
2-HS	-030-185
1-HS	-030-186
2-HS	-030-186
1-MTR	-030-186
2-MTR	-030-186

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
1-TS	-030-186
2-TS	-030-186
1-HS	-030-187
2-HS	-030-187
1-MTR	-030-187
2-MTR	-030-187
1-TS	-030-187
2-TS	-030-187
1-HS	-030-190
1-HS	-030-191
0-HS	-030-192
0-HS	-030-193
1-FE	-030-194
2-FE	-030-194
1-HS	-030-194
2-HS	-030-194
1-MTR	-030-194
2-MTR	-030-194
1-TS	-030-194
2-TS	-030-194
1-FE	-030-195
2-FE	-030-195
1-HS	-030-195

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER
2-HS -030-195
1-MTR -030-195
2-MTR -030-195
1-TS -030-195
2-TS -030-195
1-FE -030-196
2-FE -030-196
1-HS -030-196
2-HS -030-196
1-MTR -030-196
2-MTR -030-196
1-TS -030-196
2-TS -030-196
1-FE -030-197
2-FE -030-197
1-HS -030-197
2-HS -030-197
1-MTR -030-197
2-MTR -030-197
1-TS -030-197
2-TS -030-197
2-FS -030-200
2-HS -030-200

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER	
2-MTR	-030-200	
1-HS	-030-201	
2-HS	-030-201	
1-MTR	-030-201	
2-MTR	-030-201	
1-TS	-030-201	
2-TS	-030-201	
1-HS	-030-202	
2-HS	-030-202	
1-MTR	-030-202	
2-MTR	-030-202	
1-TS	-030-202	
2-TS	-030-202	
2-FS	-030-207	
2-HS	-030-207	
2-MTR	-030-207	
1-HS	-030-214	
2-HS	-030-214	
1-PT	-030-310	PAM
2-PT	-030-310	PAM
1-PT	-030-311	PAM
2-PT	-030-311	PAM
0-ME	-030-319	

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
0-MM -030-319		
0-MS -030-319		
0-ME -030-320		
0-MM -030-320		
0-MS -030-320		
1-FCO -031-475		
2-FCO -031-475		
1-ZS -031-475		
1-ZS -031-475		
2-ZS -031-475		
2-ZS -031-475		
1-FCO -031-476		
2-FCO -031-476		
1-ZS -031-476		
1-ZS -031-476		
2-ZS -031-476		
2-ZS -031-476		
1-FCV -032-080	(LS)	(LIMIT SWITCH)
1-FCV -032-080	(LS)	(LIMIT SWITCH)
1-FSV -032-080A		
1-HS -032-080A		
1-FSV -032-080B		
1-HS -032-080B		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2	-FCV -032-081	(LS)	(LIMIT SWITCH)
2	-FCV -032-081	(LS)	(LIMIT SWITCH)
2	-FSV -032-081A		
2	-HS -032-081A		
2	-FSV -032-081B		
2	-HS -032-081B		
1	-FCV -032-102	(LS)	(LIMIT SWITCH)
1	-FCV -032-102	(LS)	(LIMIT SWITCH)
1	-FSV -032-102A		
1	-HS -032-102A		
1	-FSV -032-102B		
1	-HS -032-102B		
2	-FCV -032-103	(LS)	(LIMIT SWITCH)
2	-FCV -032-103	(LS)	(LIMIT SWITCH)
2	-FSV -032-103A		
2	-HS -032-103A		
2	-FSV -032-103B		
2	-HS -032-103B		
1	-FCV -032-110	(LS)	(LIMIT SWITCH)
1	-FCV -032-110	(LS)	(LIMIT SWITCH)
1	-FSV -032-110A		
1	-HS -032-110A		
1	-FSV -032-110B		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
1-HS	-032-110B		
2-FCV	-032-111	(LS)	(LIMIT SWITCH)
2-FCV	-032-111	(LS)	(LIMIT SWITCH)
2-FSV	-032-111A		
2-HS	-032-111A		
2-FSV	-032-111B		
2-HS	-032-111B		
1-FSV	-043-002		
2-FSV	-043-002		
1-HS	-043-002		
2-HS	-043-002		
1-HS	-043-002A		
2-HS	-043-002A		
1-FSV	-043-003		
2-FSV	-043-003		
1-HS	-043-003		
2-HS	-043-003		
1-FSV	-043-011		
2-FSV	-043-011		
1-HS	-043-011		
2-HS	-043-011		
1-FSV	-043-012		
2-FSV	-043-012		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
1-HS	-043-012
2-HS	-043-012
1-FSV	-043-022
2-FSV	-043-022
1-HS	-043-022
2-HS	-043-022
1-FSV	-043-023
2-FSV	-043-023
1-HS	-043-023
2-HS	-043-023
1-FSV	-043-034
2-FSV	-043-034
1-HS	-043-034
2-HS	-043-034
1-FSV	-043-035
2-FSV	-043-035
1-HS	-043-035
2-HS	-043-035
1-FSV	-043-075
2-FSV	-043-075
1-HS	-043-075
2-HS	-043-075
1-FSV	-043-077

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
2-FSV -043-077		
1-HS -043-077		
2-HS -043-077		
1-H2E -043-200		
2-H2E -043-200		
1-HPL -043-200		
2-HPL -043-200		
1-PDS -043-200		
2-PDS -043-200		
1-HS -043-200D		
2-HS -043-200D		
1-FSV -043-201		
2-FSV -043-201		
1-FSV -043-201	(CS)	(CONDUIT SEAL)
2-FSV -043-201	(CS)	(CONDUIT SEAL)
1-FSV -043-202		
2-FSV -043-202		
1-FSV -043-202	(CS)	(CONDUIT SEAL)
2-FSV -043-202	(CS)	(CONDUIT SEAL)
1-FSV -043-207		
2-FSV -043-207		
1-FSV -043-207	(CS)	(CONDUIT SEAL)
2-FSV -043-207	(CS)	(CONDUIT SEAL)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
1	-FSV -043-208		
2	-FSV -043-208		
1	-FSV -043-208	(CS)	(CONDUIT SEAL)
2	-FSV -043-208	(CS)	(CONDUIT SEAL)
1	-H2E -043-210		
2	-H2E -043-210		
1	-HPL -043-210		
2	-HPL -043-210		
1	-PDS -043-210		
2	-PDS -043-210		
1	-HS -043-210D		
2	-HS -043-210D		
1	-FSV -043-250		
2	-FSV -043-250		
1	-FSV -043-251		
2	-FSV -043-251		
1	-FSV -043-251	(CS)	(CONDUIT SEAL)
2	-FSV -043-251	(CS)	(CONDUIT SEAL)
1	-FSV -043-268		
2	-FSV -043-268		
1	-FSV -043-269		
2	-FSV -043-269		
1	-FSV -043-287		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2	-FSV -043-287		
1	-FSV -043-288		
2	-FSV -043-288		
1	-FSV -043-288	(CS)	(CONDUIT SEAL)
2	-FSV -043-288	(CS)	(CONDUIT SEAL)
1	-FSV -043-307		
2	-FSV -043-307		
1	-FSV -043-309		
2	-FSV -043-309		
1	-FSV -043-310		
2	-FSV -043-310		
1	-FSV -043-310	(CS)	(CONDUIT SEAL)
2	-FSV -043-310	(CS)	(CONDUIT SEAL)
1	-FSV -043-317		
2	-FSV -043-317		
1	-FSV -043-318		
2	-FSV -043-318		
1	-FSV -043-319		
2	-FSV -043-319		
1	-FSV -043-319	(CS)	(CONDUIT SEAL)
2	-FSV -043-319	(CS)	(CONDUIT SEAL)
1	-FSV -043-325		
2	-FSV -043-325		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
1	-FSV -043-341		
2	-FSV -043-341		
2	-FCV -061-096	(LS)	(LIMIT SWITCH)
2	-FCV -061-096	(LS)	(LIMIT SWITCH)
2	-FSV -061-096		
1	-FCV -061-097	(LS)	(LIMIT SWITCH)
1	-FCV -061-097	(LS)	(LIMIT SWITCH)
2	-FCV -061-097	(LS)	(LIMIT SWITCH)
2	-FCV -061-097	(LS)	(LIMIT SWITCH)
1	-FSV -061-097		
2	-FSV -061-097		
1	-ZS -061-097	(CS)	(CONDUIT SEAL)
1	-ZS -061-097	(CS)	(CONDUIT SEAL)
2	-ZS -061-097	(CS)	(CONDUIT SEAL)
2	-ZS -061-097	(CS)	(CONDUIT SEAL)
2	-FCV -061-110	(LS)	(LIMIT SWITCH)
2	-FCV -061-110	(LS)	(LIMIT SWITCH)
2	-FSV -061-110		
1	-FCV -061-122	(LS)	(LIMIT SWITCH)
1	-FCV -061-122	(LS)	(LIMIT SWITCH)
2	-FCV -061-122	(LS)	(LIMIT SWITCH)
2	-FCV -061-122	(LS)	(LIMIT SWITCH)
1	-FSV -061-122		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
2-FSV -061-122		
1-ZS -061-122	(CS)	(CONDUIT SEAL)
1-ZS -061-122	(CS)	(CONDUIT SEAL)
2-ZS -061-122	(CS)	(CONDUIT SEAL)
2-ZS -061-122	(CS)	(CONDUIT SEAL)
1-FCV -061-192	(LS)	(LIMIT SWITCH)
1-FCV -061-192	(LS)	(LIMIT SWITCH)
2-FCV -061-192	(LS)	(LIMIT SWITCH)
2-FCV -061-192	(LS)	(LIMIT SWITCH)
1-FSV -061-192		
2-FSV -061-192		
1-ZS -061-192	(CS)	(CONDUIT SEAL)
1-ZS -061-192	(CS)	(CONDUIT SEAL)
2-ZS -061-192	(CS)	(CONDUIT SEAL)
2-ZS -061-192	(CS)	(CONDUIT SEAL)
1-FCV -061-194	(LS)	(LIMIT SWITCH)
1-FCV -061-194	(LS)	(LIMIT SWITCH)
2-FCV -061-194	(LS)	(LIMIT SWITCH)
2-FCV -061-194	(LS)	(LIMIT SWITCH)
1-FSV -061-194		
2-FSV -061-194		
1-ZS -061-194	(CS)	(CONDUIT SEAL)
1-ZS -061-194	(CS)	(CONDUIT SEAL)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2-ZS	-061-194	(CS)	(CONDUIT SEAL)
2-ZS	-061-194	(CS)	(CONDUIT SEAL)
1-FCV	-062-061		
2-FCV	-062-061		
1-FCV	-062-063		
2-FCV	-062-063		
1-HS	-062-063B		
2-HS	-062-063B		
1-FCV	-062-069	(LS)	(LIMIT SWITCH)
1-FCV	-062-069	(LS)	(LIMIT SWITCH)
2-FCV	-062-069	(LS)	(LIMIT SWITCH)
2-FCV	-062-069	(LS)	(LIMIT SWITCH)
1-FSV	-062-069		
2-FSV	-062-069		
1-ZS	-062-069	(CS)	(CONDUIT SEAL)
1-ZS	-062-069	(CS)	(CONDUIT SEAL)
2-ZS	-062-069	(CS)	(CONDUIT SEAL)
2-ZS	-062-069	(CS)	(CONDUIT SEAL)
1-FCV	-062-070	(LS)	(LIMIT SWITCH)
1-FCV	-062-070	(LS)	(LIMIT SWITCH)
2-FCV	-062-070	(LS)	(LIMIT SWITCH)
2-FCV	-062-070	(LS)	(LIMIT SWITCH)
1-FSV	-062-070		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2-FSV	-062-070		
1-ZS	-062-070	(CS)	(CONDUIT SEAL)
1-ZS	-062-070	(CS)	(CONDUIT SEAL)
2-ZS	-062-070	(CS)	(CONDUIT SEAL)
2-ZS	-062-070	(CS)	(CONDUIT SEAL)
1-FSV	-062-072		
2-FSV	-062-072		
1-FSV	-062-073		
2-FSV	-062-073		
1-FSV	-062-074		
2-FSV	-062-074		
1-FCV	-062-077	(LS)	(LIMIT SWITCH)
1-FCV	-062-077	(LS)	(LIMIT SWITCH)
2-FCV	-062-077	(LS)	(LIMIT SWITCH)
2-FCV	-062-077	(LS)	(LIMIT SWITCH)
1-FSV	-062-077		
2-FSV	-062-077		
1-FCV	-062-090		
2-FCV	-062-090		
1-HS	-062-090B		
2-HS	-062-090B		
1-FCV	-062-091		
2-FCV	-062-091		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
1-HS	-062-091B
2-HS	-062-091B
1-HS	-062-104B
2-HS	-062-104B
1-MTR	-062-104B
2-MTR	-062-104B
1-MTR	-062-108A
2-MTR	-062-108A
1-HS	-062-108B
2-HS	-062-108B
1-LCV	-062-132
2-LCV	-062-132
1-HS	-062-132B
2-HS	-062-132B
1-LCV	-062-133
2-LCV	-062-133
1-HS	-062-133B
2-HS	-062-133B
1-LCV	-062-135
2-LCV	-062-135
1-HS	-062-135B
2-HS	-062-135B
1-LCV	-062-136

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
2-LCV	-062-136
1-HS	-062-136B
2-HS	-062-136B
1-FCV	-063-001
2-FCV	-063-001
1-HS	-063-001B
2-HS	-063-001B
1-FCV	-063-003
2-FCV	-063-003
1-ZS	-063-003
1-ZS	-063-003
2-ZS	-063-003
1-HS	-063-003B
2-HS	-063-003B
1-FCV	-063-004
2-FCV	-063-004
1-ZS	-063-004
1-ZS	-063-004
2-ZS	-063-004
2-ZS	-063-004
1-HS	-063-004B
2-HS	-063-004B
1-FCV	-063-005

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
2-FCV	-063-005
1-HS	-063-005B
2-HS	-063-005B
1-FCV	-063-006
2-FCV	-063-006
1-HS	-063-006B
2-HS	-063-006B
1-FCV	-063-007
2-FCV	-063-007
1-HS	-063-007B
2-HS	-063-007B
1-FCV	-063-008
2-FCV	-063-008
1-HS	-063-008B
2-HS	-063-008B
1-MTR	-063-010A
2-MTR	-063-010A
1-HS	-063-010B
2-HS	-063-010B
1-FCV	-063-011
2-FCV	-063-011
1-HS	-063-011B
2-HS	-063-011B

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
1-HS -063-015B		
2-HS -063-015B		
1-MTR -063-015B		
2-MTR -063-015B		
1-FCV -063-022		
2-FCV -063-022		
1-HS -063-022B		
2-HS -063-022B		
1-FCV -063-023	(LS)	(LIMIT SWITCH)
2-FCV -063-023	(LS)	(LIMIT SWITCH)
1-FSV -063-023		
2-FSV -063-023		
1-FCV -063-025		
2-FCV -063-025		
1-HS -063-025B		
2-HS -063-025B		
1-FCV -063-026		
2-FCV -063-026		
1-HS -063-026B		
2-HS -063-026B		
1-FCV -063-038	(LS)	(LIMIT SWITCH)
2-FCV -063-038	(LS)	(LIMIT SWITCH)
1-FSV -063-038		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2	-FSV -063-038		
1	-FCV -063-039		
2	-FCV -063-039		
1	-HS -063-039B		
2	-HS -063-039B		
1	-FCV -063-040		
2	-FCV -063-040		
1	-HS -063-040B		
2	-HS -063-040B		
1	-FCV -063-041	(LS)	(LIMIT SWITCH)
2	-FCV -063-041	(LS)	(LIMIT SWITCH)
1	-FSV -063-041		
2	-FSV -063-041		
1	-FCV -063-042	(LS)	(LIMIT SWITCH)
2	-FCV -063-042	(LS)	(LIMIT SWITCH)
1	-FSV -063-042		
2	-FSV -063-042		
1	-FCV -063-047		
2	-FCV -063-047		
1	-HS -063-047B		
2	-HS -063-047B		
1	-FCV -063-048		
2	-FCV -063-048		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
1-HS -063-048B		
2-HS -063-048B		
1-FCV -063-064	(LS)	(LIMIT SWITCH)
2-FCV -063-064	(LS)	(LIMIT SWITCH)
1-FSV -063-064		
2-FSV -063-064		
1-FCV -063-071	(LS)	(LIMIT SWITCH)
1-FCV -063-071	(LS)	(LIMIT SWITCH)
2-FCV -063-071	(LS)	(LIMIT SWITCH)
2-FCV -063-071	(LS)	(LIMIT SWITCH)
1-FSV -063-071		
2-FSV -063-071		
1-ZS -063-071	(CS)	(CONDUIT SEAL)
1-ZS -063-071	(CS)	(CONDUIT SEAL)
2-ZS -063-071	(CS)	(CONDUIT SEAL)
2-ZS -063-071	(CS)	(CONDUIT SEAL)
1-FCV -063-072		
2-FCV -063-072		
1-ZS -063-072		
2-ZS -063-072		
1-HS -063-072B		
2-HS -063-072B		
1-FCV -063-073		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
2-FCV -063-073		
1-ZS -063-073		
2-ZS -063-073		
1-HS -063-073B		
2-HS -063-073B		
1-FCV -063-084	(LS)	(LIMIT SWITCH)
2-FCV -063-084	(LS)	(LIMIT SWITCH)
1-FSV -063-084		
2-FSV -063-084		
1-FCV -063-093		
2-FCV -063-093		
1-HS -063-093B		
2-HS -063-093B		
1-FCV -063-094		
2-FCV -063-094		
1-HS -063-094B		
2-HS -063-094B		
1-FCV -063-152		
2-FCV -063-152		
1-HS -063-152B		
2-HS -063-152B		
1-FCV -063-153		
2-FCV -063-153		

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2
1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER	
1-HS	-063-153B	
2-HS	-063-153B	
1-FCV	-063-156	
2-FCV	-063-156	
1-HS	-063-156B	
2-HS	-063-156B	
1-FCV	-063-157	
2-FCV	-063-157	
1-HS	-063-157B	
2-HS	-063-157B	
1-FCV	-063-172	
2-FCV	-063-172	
1-FCV	-063-175	
2-FCV	-063-175	
1-ZS	-063-175	
1-ZS	-063-175	
1-HS	-063-175B	
2-HS	-063-175B	
1-LT	-063-176	PAM
2-LT	-063-176	PAM
1-LT	-063-177	PAM
2-LT	-063-177	PAM
1-LT	-063-178	

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
2-LT -063-178		
1-LT -063-179		
2-LT -063-179		
2-FCV -065-004	(LS)	(LIMIT SWITCH)
2-FCV -065-004	(LS)	(LIMIT SWITCH)
2-FSV -065-004		
2-FCV -065-005	(LS)	(LIMIT SWITCH)
2-FCV -065-005	(LS)	(LIMIT SWITCH)
2-FSV -065-005		
2-FSV -065-007		
1-FSV -065-008		
2-FSV -065-009		
1-FSV -065-010		
0-MTR -065-023A		
0-HS -065-023B		
0-FSV -065-024		
0-FS -065-025A/B		
1-FSV -065-026		
1-FSV -065-027		
0-FSV -065-028A		
0-FSV -065-028B		
2-FSV -065-029		
1-FSV -065-030		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
0-FS -065-031A/B		
0-HS -065-042B		
0-MTR -065-042B		
0-FSV -065-043		
0-FS -065-044A/B		
2-FSV -065-045		
2-FSV -065-046		
0-FSV -065-047A		
0-FSV -065-047B		
2-FSV -065-050		
1-FSV -065-051		
1-FCV -065-052	(LS)	(LIMIT SWITCH)
1-FCV -065-052	(LS)	(LIMIT SWITCH)
1-FSV -065-052		
1-FCV -065-053	(LS)	(LIMIT SWITCH)
1-FCV -065-053	(LS)	(LIMIT SWITCH)
1-FSV -065-053		
0-FS -065-055A/B		
1-HS -065-080		
2-HS -065-080		
1-PDT -065-080		
2-PDT -065-080		
1-PSV -065-081		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
2-PSV	-065-081
1-HS	-065-082
2-HS	-065-082
1-PDT	-065-082
2-PDT	-065-082
1-PSV	-065-083
2-PSV	-065-083
1-HS	-065-090
2-HS	-065-090
1-PDT	-065-090
2-PDT	-065-090
1-HS	-065-097
2-HS	-065-097
1-PDT	-065-097
2-PDT	-065-097
1-FCV	-067-083
2-FCV	-067-083
1-HS	-067-083B
2-HS	-067-083B
1-FCV	-067-087
2-FCV	-067-087
1-FCV	-067-088
2-FCV	-067-088

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER
1-HS -067-088B
2-HS -067-088B
1-FCV -067-091
2-FCV -067-091
1-HS -067-091B
2-HS -067-091B
1-FCV -067-095
2-FCV -067-095
1-FCV -067-096
2-FCV -067-096
1-HS -067-096B
2-HS -067-096B
1-FCV -067-099
2-FCV -067-099
1-HS -067-099B
2-HS -067-099B
1-FCV -067-103
2-FCV -067-103
1-FCV -067-104
2-FCV -067-104
1-HS -067-104B
2-HS -067-104B
1-FCV -067-107

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
2-FCV	-067-107
1-HS	-067-107B
2-HS	-067-107B
1-FCV	-067-111
2-FCV	-067-111
1-FCV	-067-112
2-FCV	-067-112
1-HS	-067-112B
2-HS	-067-112B
1-HS	-067-123B
2-HS	-067-123B
1-FCV	-067-124
2-FCV	-067-124
1-HS	-067-124B
2-HS	-067-124B
1-HS	-067-125B
2-HS	-067-125B
1-FCV	-067-126
2-FCV	-067-126
1-HS	-067-126B
2-HS	-067-126B
1-FCV	-067-130
2-FCV	-067-130

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
1-HS	-067-130B
2-HS	-067-130B
1-FCV	-067-131
2-FCV	-067-131
1-HS	-067-131B
2-HS	-067-131B
1-FCV	-067-133
2-FCV	-067-133
1-HS	-067-133B
2-HS	-067-133B
1-FCV	-067-134
2-FCV	-067-134
1-HS	-067-134B
2-HS	-067-134B
1-FCV	-067-138
2-FCV	-067-138
1-HS	-067-138B
2-HS	-067-138B
1-FCV	-067-139
2-FCV	-067-139
1-HS	-067-139B
2-HS	-067-139B
1-FCV	-067-141

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2	-FCV -067-141		
1	-HS -067-141B		
2	-HS -067-141B		
1	-FCV -067-142		
2	-FCV -067-142		
1	-HS -067-142B		
2	-HS -067-142B		
1	-HS -067-146B		
2	-HS -067-146B		
0	-HS -067-152B		
1	-FCV -067-295		
2	-FCV -067-295		
1	-FCV -067-296		
2	-FCV -067-296		
1	-FCV -067-297		
2	-FCV -067-297		
1	-FCV -067-298		
2	-FCV -067-298		
2	-FSV -067-336		
2	-FSV -067-338		
1	-FSV -067-350		
2	-FSV -067-350		
1	-FSV -067-350	(CS)	(CONDUIT SEAL)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER			
2-FSV -067-350	(CS)		(CONDUIT SEAL)
1-FSV -067-352			
2-FSV -067-352			
1-FSV -067-352	(CS)		(CONDUIT SEAL)
2-FSV -067-352	(CS)		(CONDUIT SEAL)
1-FSV -067-354			
2-FSV -067-354			
1-FSV -067-354	(CS)		(CONDUIT SEAL)
2-FSV -067-354	(CS)		(CONDUIT SEAL)
1-FSV -067-356			
2-FSV -067-356			
1-FSV -067-356	(CS)		(CONDUIT SEAL)
2-FSV -067-356	(CS)		(CONDUIT SEAL)
1-TE -068-001		PAM	
2-TE -068-001		PAM	
1-TE -068-002A			
2-TE -068-002A			
1-TE -068-002B			
2-TE -068-002B			
1-TE -068-014A			
2-TE -068-014A			
1-TE -068-014B			
2-TE -068-014B			

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2
1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER	
1-TE	-068-018	PAM
2-TE	-068-018	PAM
1-TE	-068-024	PAM
2-TE	-068-024	PAM
1-TE	-068-025A	
2-TE	-068-025A	
1-TE	-068-025B	
2-TE	-068-025B	
1-TE	-068-037A	
2-TE	-068-037A	
1-TE	-068-037B	
2-TE	-068-037B	
1-TE	-068-041	PAM
2-TE	-068-041	PAM
1-TE	-068-043	PAM
2-TE	-068-043	PAM
1-TE	-068-044A	
2-TE	-068-044A	
1-TE	-068-044B	
2-TE	-068-044B	
1-TE	-068-056A	
2-TE	-068-056A	
1-TE	-068-056B	

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2-TE	-068-056B		
1-TE	-068-060	PAM	
2-TE	-068-060	PAM	
1-TE	-068-065	PAM	
2-TE	-068-065	PAM	
1-PT	-068-066	PAM	
2-PT	-068-066	PAM	
1-TE	-068-067A		
2-TE	-068-067A		
1-TE	-068-067B		
2-TE	-068-067B		
1-PT	-068-069	PAM	
2-PT	-068-069	PAM	
1-TE	-068-079A		
2-TE	-068-079A		
1-TE	-068-079B		
2-TE	-068-079B		
1-TE	-068-083	PAM	
2-TE	-068-083	PAM	
1-FCV	-068-305	(LS)	(LIMIT SWITCH)
2-FCV	-068-305	(LS)	(LIMIT SWITCH)
1-FSV	-068-305		
2-FSV	-068-305		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER			
1	-FSV -068-307			
2	-FSV -068-307			
1	-FCV -068-308	(LS)		(LIMIT SWITCH)
1	-FCV -068-308	(LS)		(LIMIT SWITCH)
2	-FCV -068-308	(LS)		(LIMIT SWITCH)
2	-FCV -068-308	(LS)		(LIMIT SWITCH)
1	-FSV -068-308			
2	-FSV -068-308			
1	-ZS -068-308	(CS)		(CONDUIT SEAL)
1	-ZS -068-308	(CS)		(CONDUIT SEAL)
2	-ZS -068-308	(CS)		(CONDUIT SEAL)
2	-ZS -068-308	(CS)		(CONDUIT SEAL)
1	-LT -068-320		PAM	
2	-LT -068-320		PAM	
1	-PT -068-322			
2	-PT -068-322			
1	-PT -068-323			
2	-PT -068-323			
1	-FCV -068-332			
2	-FCV -068-332			
1	-FCV -068-333			
2	-FCV -068-333			
1	-PCV -068-334			

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER			
1	-FSV -068-307			
2	-FSV -068-307			
1	-FCV -068-308	(LS)		(LIMIT SWITCH)
1	-FCV -068-308	(LS)		(LIMIT SWITCH)
2	-FCV -068-308	(LS)		(LIMIT SWITCH)
2	-FCV -068-308	(LS)		(LIMIT SWITCH)
1	-FSV -068-308			
2	-FSV -068-308			
1	-ZS -068-308	(CS)		(CONDUIT SEAL)
1	-ZS -068-308	(CS)		(CONDUIT SEAL)
2	-ZS -068-308	(CS)		(CONDUIT SEAL)
2	-ZS -068-308	(CS)		(CONDUIT SEAL)
1	-LT -068-320		PAM	
2	-LT -068-320		PAM	
1	-PT -068-322			
2	-PT -068-322			
1	-PT -068-323			
2	-PT -068-323			
1	-FCV -068-332			
2	-FCV -068-332			
1	-FCV -068-333			
2	-FCV -068-333			
1	-PCV -068-334			

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
2-PCV -068-334		
2-PCV -068-334		
1-PCV -068-334	(CS)	(CONDUIT SEAL)
2-PCV -068-334	(CS)	(CONDUIT SEAL)
1-PT -068-334		
2-PT -068-334		
1-XE -068-334		
2-XE -068-334		
1-XT -068-334		
2-XT -068-334		
1-LT -068-335	PAM	
2-LT -068-335	PAM	
1-LT -068-339		
2-LT -068-339		
1-PT -068-340		
2-PT -068-340		
1-PCV -068-340A		
2-PCV -068-340A		
1-PCV -068-340A	(CS)	(CONDUIT SEAL)
2-PCV -068-340A	(CS)	(CONDUIT SEAL)
1-XE -068-340A		
2-XE -068-340A		
1-XT -068-340A		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2-XT	-068-340A		
1-XE	-068-363		
2-XE	-068-363		
1-XT	-068-363		
2-XT	-068-363		
1-XE	-068-364		
2-XE	-068-364		
1-XT	-068-364		
2-XT	-068-364		
1-XE	-068-365		
2-XE	-068-365		
1-XT	-068-365		
2-XT	-068-365		
2-XE	-068-366		
2-XT	-068-366		
1-FSV	-068-394		
2-FSV	-068-394		
1-FSV	-068-394	(CS)	(CONDUIT SEAL)
2-FSV	-068-394	(CS)	(CONDUIT SEAL)
1-FSV	-068-395		
2-FSV	-068-395		
1-FSV	-068-395	(CS)	(CONDUIT SEAL)
2-FSV	-068-395	(CS)	(CONDUIT SEAL)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
1	-FSV -068-396		
2	-FSV -068-396		
1	-FSV -068-396	(CS)	(CONDUIT SEAL)
2	-FSV -068-396	(CS)	(CONDUIT SEAL)
1	-FSV -068-397		
2	-FSV -068-397		
1	-FSV -068-397	(CS)	(CONDUIT SEAL)
2	-FSV -068-397	(CS)	(CONDUIT SEAL)
0	-HS -070-001B		
0	-HS -070-011B		
2	-HS -070-033B		
1	-HS -070-038B		
0	-HS -070-040B		
0	-HS -070-041B		
1	-HS -070-046B		
1	-HS -070-051B		
2	-HS -070-051B		
2	-HS -070-059B		
1	-FCV -070-085	(LS)	(LIMIT SWITCH)
1	-FCV -070-085	(LS)	(LIMIT SWITCH)
2	-FCV -070-085	(LS)	(LIMIT SWITCH)
2	-FCV -070-085	(LS)	(LIMIT SWITCH)
1	-FSV -070-085		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER
2-FSV -070-085
1-FCV -070-087
2-FCV -070-087
1-FCV -070-089
2-FCV -070-089
1-FCV -070-090
2-FCV -070-090
1-HS -070-090B
2-HS -070-090B
1-FCV -070-092
2-FCV -070-092
1-HS -070-092B
2-HS -070-092B
1-FCV -070-133
2-FCV -070-133
1-HS -070-133B
2-HS -070-133B
1-FCV -070-134
2-FCV -070-134
1-HS -070-134B
2-HS -070-134B
1-FCV -070-140
2-FCV -070-140

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
1-HS	-070-140B
2-HS	-070-140B
1-FCV	-070-143
2-FCV	-070-143
1-HS	-070-143B
2-HS	-070-143B
1-HS	-070-153B
2-HS	-070-153B
1-HS	-070-156B
2-HS	-070-156B
0-HS	-070-193B
0-HS	-070-194B
0-HS	-070-197B
0-HS	-070-198B
0-FCV	-070-206
0-HS	-070-206B
1-HS	-070-207B
2-HS	-070-207B
0-HS	-070-208B
1-FCV	-072-002
2-FCV	-072-002
1-HS	-072-002B
2-HS	-072-002B

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER
1-MTR -072-010
2-MTR -072-010
1-HS -072-010B
2-HS -072-010B
1-FCV -072-013
2-FCV -072-013
1-FT -072-013
2-FT -072-013
1-HS -072-013B
2-HS -072-013B
1-FCV -072-020
2-FCV -072-020
1-HS -072-020B
2-HS -072-020B
1-FCV -072-021
2-FCV -072-021
1-HS -072-021B
2-HS -072-021B
1-FCV -072-022
2-FCV -072-022
1-HS -072-022B
2-HS -072-022B
1-FCV -072-023

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER
2-FCV -072-023
1-HS -072-023B
2-HS -072-023B
1-MTR -072-027
2-MTR -072-027
1-HS -072-027B
2-HS -072-027B
1-FCV -072-034
2-FCV -072-034
1-FT -072-034
2-FT -072-034
1-HS -072-034B
2-HS -072-034B
1-FCV -072-039
2-FCV -072-039
1-HS -072-039B
2-HS -072-039B
1-FCV -072-040
2-FCV -072-040
1-FCV -072-041
2-FCV -072-041
1-FCV -074-001
2-FCV -074-001

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
1	-FCV -074-002
2	-FCV -074-002
1	-FCV -074-003
2	-FCV -074-003
1	-HS -074-003B
2	-HS -074-003B
1	-MTR -074-010A
2	-MTR -074-010A
1	-HS -074-010B
2	-HS -074-010B
1	-FCV -074-012
2	-FCV -074-012
1	-HS -074-012B
2	-HS -074-012B
1	-HS -074-020B
2	-HS -074-020B
1	-MTR -074-020B
2	-MTR -074-020B
1	-FCV -074-021
2	-FCV -074-021
1	-HS -074-021B
2	-HS -074-021B
1	-FCV -074-024

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
2-FCV -074-024		
1-HS -074-024B		
2-HS -074-024B		
1-FCV -074-033		
2-FCV -074-033		
1-HS -074-033B		
2-HS -074-033B		
1-FCV -074-035		
2-FCV -074-035		
1-HS -074-035B		
2-HS -074-035B		
1-FCV -077-009	(LS)	(LIMIT SWITCH)
1-FCV -077-009	(LS)	(LIMIT SWITCH)
2-FCV -077-009	(LS)	(LIMIT SWITCH)
2-FCV -077-009	(LS)	(LIMIT SWITCH)
1-FSV -077-009		
2-FSV -077-009		
1-ZS -077-009	(CS)	(CONDUIT SEAL)
1-ZS -077-009	(CS)	(CONDUIT SEAL)
2-ZS -077-009	(CS)	(CONDUIT SEAL)
2-ZS -077-009	(CS)	(CONDUIT SEAL)
1-FSV -077-010		
2-FSV -077-010		

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2
1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
1-FCV -077-018	(LS)	(LIMIT SWITCH)
1-FCV -077-018	(LS)	(LIMIT SWITCH)
2-FCV -077-018	(LS)	(LIMIT SWITCH)
2-FCV -077-018	(LS)	(LIMIT SWITCH)
1-FSV -077-018		
2-FSV -077-018		
1-ZS -077-018	(CS)	(CONDUIT SEAL)
1-ZS -077-018	(CS)	(CONDUIT SEAL)
2-ZS -077-018	(CS)	(CONDUIT SEAL)
2-ZS -077-018	(CS)	(CONDUIT SEAL)
1-FCV -077-019	(LS)	(LIMIT SWITCH)
2-FCV -077-019	(LS)	(LIMIT SWITCH)
1-FSV -077-019		
2-FSV -077-019		
1-FCV -077-020	(LS)	(LIMIT SWITCH)
2-FCV -077-020	(LS)	(LIMIT SWITCH)
1-FSV -077-020		
2-FSV -077-020		
1-FCV -077-127	(LS)	(LIMIT SWITCH)
1-FCV -077-127	(LS)	(LIMIT SWITCH)
2-FCV -077-127	(LS)	(LIMIT SWITCH)
2-FCV -077-127	(LS)	(LIMIT SWITCH)
1-FSV -077-127		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
2-FSV -077-127		
1-ZS -077-127	(CS)	(CONDUIT SEAL)
1-ZS -077-127	(CS)	(CONDUIT SEAL)
2-ZS -077-127	(CS)	(CONDUIT SEAL)
2-ZS -077-127	(CS)	(CONDUIT SEAL)
1-FCV -077-128	(LS)	(LIMIT SWITCH)
1-FCV -077-128	(LS)	(LIMIT SWITCH)
2-FCV -077-128	(LS)	(LIMIT SWITCH)
2-FCV -077-128	(LS)	(LIMIT SWITCH)
1-FSV -077-128		
2-FSV -077-128		
1-FCV -081-012	(LS)	(LIMIT SWITCH)
2-FCV -081-012	(LS)	(LIMIT SWITCH)
1-FSV -081-012		
2-FSV -081-012		
1-HTR -083-001A		
2-HTR -083-001A		
1-HTR -083-002B		
2-HTR -083-002B		
1-FSV -087-007		
2-FSV -087-007		
1-FSV -087-008		
2-FSV -087-008		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
1-FCV -090-107	(LS)	(LIMIT SWITCH)
2-FCV -090-107	(LS)	(LIMIT SWITCH)
1-FSV -090-107		
2-FSV -090-107		
1-FCV -090-108	(LS)	(LIMIT SWITCH)
2-FCV -090-108	(LS)	(LIMIT SWITCH)
1-FSV -090-108		
2-FSV -090-108		
1-ZS -090-108	(CS)	(CONDUIT SEAL)
2-ZS -090-108	(CS)	(CONDUIT SEAL)
1-FCV -090-109	(LS)	(LIMIT SWITCH)
2-FCV -090-109	(LS)	(LIMIT SWITCH)
1-FSV -090-109		
2-FSV -090-109		
1-ZS -090-109	(CS)	(CONDUIT SEAL)
2-ZS -090-109	(CS)	(CONDUIT SEAL)
1-FCV -090-110	(LS)	(LIMIT SWITCH)
2-FCV -090-110	(LS)	(LIMIT SWITCH)
1-FSV -090-110		
2-FSV -090-110		
1-ZS -090-110	(CS)	(CONDUIT SEAL)
2-ZS -090-110	(CS)	(CONDUIT SEAL)
1-FCV -090-111	(LS)	(LIMIT SWITCH)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2	-FCV -090-111	(LS)	(LIMIT SWITCH)
1	-FSV -090-111		
2	-FSV -090-111		
1	-FCV -090-113	(LS)	(LIMIT SWITCH)
2	-FCV -090-113	(LS)	(LIMIT SWITCH)
1	-FSV -090-113		
2	-FSV -090-113		
1	-FCV -090-114	(LS)	(LIMIT SWITCH)
2	-FCV -090-114	(LS)	(LIMIT SWITCH)
1	-FSV -090-114		
2	-FSV -090-114		
1	-ZS -090-114	(CS)	(CONDUIT SEAL)
2	-ZS -090-114	(CS)	(CONDUIT SEAL)
1	-FCV -090-115	(LS)	(LIMIT SWITCH)
2	-FCV -090-115	(LS)	(LIMIT SWITCH)
1	-FSV -090-115		
2	-FSV -090-115		
1	-ZS -090-115	(CS)	(CONDUIT SEAL)
2	-ZS -090-115	(CS)	(CONDUIT SEAL)
1	-FCV -090-116	(LS)	(LIMIT SWITCH)
2	-FCV -090-116	(LS)	(LIMIT SWITCH)
1	-FSV -090-116		
2	-FSV -090-116		

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
1-ZS -090-116	(CS)	(CONDUIT SEAL)
2-ZS -090-116	(CS)	(CONDUIT SEAL)
1-FCV -090-117	(LS)	(LIMIT SWITCH)
2-FCV -090-117	(LS)	(LIMIT SWITCH)
1-FSV -090-117		
2-FSV -090-117		
1-RE -090-271		
2-RE -090-271		
1-RE -090-272		
2-RE -090-272		
1-RE -090-273		
2-RE -090-273		
1-RE -090-274		
2-RE -090-274		
1-FCV -313-222	(LS)	(LIMIT SWITCH)
1-FCV -313-222	(LS)	(LIMIT SWITCH)
2-FCV -313-222	(LS)	(LIMIT SWITCH)
1-FSV -313-222		
2-FSV -313-222		
1-FCV -313-223	(LS)	(LIMIT SWITCH)
1-FCV -313-223	(LS)	(LIMIT SWITCH)
2-FCV -313-223	(LS)	(LIMIT SWITCH)
2-FCV -313-223	(LS)	(LIMIT SWITCH)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
1-FSV -313-223		
2-FSV -313-223		
1-ZS -313-223	(CS)	(CONDUIT SEAL)
1-ZS -313-223	(CS)	(CONDUIT SEAL)
2-ZS -313-223	(CS)	(CONDUIT SEAL)
2-ZS -313-223	(CS)	(CONDUIT SEAL)
1-FCV -313-224	(LS)	(LIMIT SWITCH)
1-FCV -313-224	(LS)	(LIMIT SWITCH)
2-FCV -313-224	(LS)	(LIMIT SWITCH)
2-FCV -313-224	(LS)	(LIMIT SWITCH)
1-FSV -313-224		
2-FSV -313-224		
1-FCV -313-225	(LS)	(LIMIT SWITCH)
1-FCV -313-225	(LS)	(LIMIT SWITCH)
2-FCV -313-225	(LS)	(LIMIT SWITCH)
2-FCV -313-225	(LS)	(LIMIT SWITCH)
1-FSV -313-225		
2-FSV -313-225		
1-ZS -313-225	(CS)	(CONDUIT SEAL)
1-ZS -313-225	(CS)	(CONDUIT SEAL)
2-ZS -313-225	(CS)	(CONDUIT SEAL)
2-ZS -313-225	(CS)	(CONDUIT SEAL)
1-FCV -313-229	(LS)	(LIMIT SWITCH)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER		
1-FCV -313-229	(LS)	(LIMIT SWITCH)
2-FCV -313-229	(LS)	(LIMIT SWITCH)
2-FCV -313-229	(LS)	(LIMIT SWITCH)
1-FSV -313-229		
2-FSV -313-229		
1-FCV -313-230	(LS)	(LIMIT SWITCH)
1-FCV -313-230	(LS)	(LIMIT SWITCH)
2-FCV -313-230	(LS)	(LIMIT SWITCH)
2-FCV -313-230	(LS)	(LIMIT SWITCH)
1-FSV -313-230		
2-FSV -313-230		
1-ZS -313-230	(CS)	(CONDUIT SEAL)
1-ZS -313-230	(CS)	(CONDUIT SEAL)
2-ZS -313-230	(CS)	(CONDUIT SEAL)
2-ZS -313-230	(CS)	(CONDUIT SEAL)
1-FCV -313-231	(LS)	(LIMIT SWITCH)
1-FCV -313-231	(LS)	(LIMIT SWITCH)
2-FCV -313-231	(LS)	(LIMIT SWITCH)
2-FCV -313-231	(LS)	(LIMIT SWITCH)
1-FSV -313-231		
2-FSV -313-231		
1-FCV -313-232	(LS)	(LIMIT SWITCH)
1-FCV -313-232	(LS)	(LIMIT SWITCH)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER		
2	-FCV -313-232	(LS)	(LIMIT SWITCH)
2	-FCV -313-232	(LS)	(LIMIT SWITCH)
1	-FSV -313-232		
2	-FSV -313-232		
1	-ZS -313-232	(CS)	(CONDUIT SEAL)
1	-ZS -313-232	(CS)	(CONDUIT SEAL)
2	-ZS -313-232	(CS)	(CONDUIT SEAL)
2	-ZS -313-232	(CS)	(CONDUIT SEAL)
0	-HS -313-303B		
0	-HS -313-338B		
	EB 5	(TB)	(TERMINAL BLOCK)
	EB 25	(TB)	(TERMINAL BLOCK)
	EB 27	(TB)	(TERMINAL BLOCK)
	CR 15A	(TB)	(TERMINAL BLOCK)
	CR151B	(TB)	(TERMINAL BLOCK)
	10987H	(TB)	(TERMINAL BLOCK)
	0075		(JUNCTION BOX)
	0076		(JUNCTION BOX)
	0125		(JUNCTION BOX)
	0407		(JUNCTION BOX)
	0408		(JUNCTION BOX)
	0435		(JUNCTION BOX)
	0442		(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
0752	(JUNCTION BOX)
0753	(JUNCTION BOX)
0754	(JUNCTION BOX)
0755	(JUNCTION BOX)
0756	(JUNCTION BOX)
0757	(JUNCTION BOX)
0758	(JUNCTION BOX)
0759	(JUNCTION BOX)
1025	(JUNCTION BOX)
1030	(JUNCTION BOX)
1104	(JUNCTION BOX)
1105	(JUNCTION BOX)
1106	(JUNCTION BOX)
1107	(JUNCTION BOX)
1108	(JUNCTION BOX)
1109	(JUNCTION BOX)
1110	(JUNCTION BOX)
1155	(JUNCTION BOX)
1156	(JUNCTION BOX)
1157	(JUNCTION BOX)
1158	(JUNCTION BOX)
1163	(JUNCTION BOX)
1164	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
1189	(JUNCTION BOX)
1190	(JUNCTION BOX)
1191	(JUNCTION BOX)
1192	(JUNCTION BOX)
1195	(JUNCTION BOX)
1196	(JUNCTION BOX)
1197	(JUNCTION BOX)
1198	(JUNCTION BOX)
1231	(JUNCTION BOX)
1232	(JUNCTION BOX)
1233	(JUNCTION BOX)
1234	(JUNCTION BOX)
1235	(JUNCTION BOX)
1236	(JUNCTION BOX)
1252	(JUNCTION BOX)
1253	(JUNCTION BOX)
1315	(JUNCTION BOX)
1342	(JUNCTION BOX)
1343	(JUNCTION BOX)
1344	(JUNCTION BOX)
1352	(JUNCTION BOX)
1353	(JUNCTION BOX)
1354	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
1355	(JUNCTION BOX)
1356	(JUNCTION BOX)
1357	(JUNCTION BOX)
1358	(JUNCTION BOX)
1359	(JUNCTION BOX)
1360	(JUNCTION BOX)
1361	(JUNCTION BOX)
1362	(JUNCTION BOX)
1363	(JUNCTION BOX)
1364	(JUNCTION BOX)
1365	(JUNCTION BOX)
1367	(JUNCTION BOX)
1368	(JUNCTION BOX)
1369	(JUNCTION BOX)
1370	(JUNCTION BOX)
1371	(JUNCTION BOX)
1372	(JUNCTION BOX)
1373	(JUNCTION BOX)
1374	(JUNCTION BOX)
1375	(JUNCTION BOX)
1376	(JUNCTION BOX)
1407	(JUNCTION BOX)
1408	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
1409	(JUNCTION BOX)
1410	(JUNCTION BOX)
1413	(JUNCTION BOX)
1414	(JUNCTION BOX)
1415	(JUNCTION BOX)
1416	(JUNCTION BOX)
1421	(JUNCTION BOX)
1422	(JUNCTION BOX)
1423	(JUNCTION BOX)
1424	(JUNCTION BOX)
1425	(JUNCTION BOX)
1426	(JUNCTION BOX)
1428	(JUNCTION BOX)
1429	(JUNCTION BOX)
1446	(JUNCTION BOX)
1447	(JUNCTION BOX)
1448	(JUNCTION BOX)
1449	(JUNCTION BOX)
1502	(JUNCTION BOX)
1503	(JUNCTION BOX)
1504	(JUNCTION BOX)
1505	(JUNCTION BOX)
1506	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
1507	(JUNCTION BOX)
1508	(JUNCTION BOX)
1509	(JUNCTION BOX)
1543	(JUNCTION BOX)
1544	(JUNCTION BOX)
1545	(JUNCTION BOX)
1546	(JUNCTION BOX)
1547	(JUNCTION BOX)
1548	(JUNCTION BOX)
1549	(JUNCTION BOX)
1550	(JUNCTION BOX)
1551	(JUNCTION BOX)
1552	(JUNCTION BOX)
1553	(JUNCTION BOX)
1554	(JUNCTION BOX)
1555	(JUNCTION BOX)
1556	(JUNCTION BOX)
1564	(JUNCTION BOX)
1565	(JUNCTION BOX)
1566	(JUNCTION BOX)
1567	(JUNCTION BOX)
1568	(JUNCTION BOX)
1569	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
1570	(JUNCTION BOX)
1571	(JUNCTION BOX)
1575	(JUNCTION BOX)
1576	(JUNCTION BOX)
1577	(JUNCTION BOX)
1578	(JUNCTION BOX)
1598	(JUNCTION BOX)
1599	(JUNCTION BOX)
1600	(JUNCTION BOX)
1601	(JUNCTION BOX)
1637	(JUNCTION BOX)
1728	(JUNCTION BOX)
1739	(JUNCTION BOX)
1741	(JUNCTION BOX)
1750	(JUNCTION BOX)
1751	(JUNCTION BOX)
1752	(JUNCTION BOX)
1757	(JUNCTION BOX)
1759	(JUNCTION BOX)
1849	(JUNCTION BOX)
1853	(JUNCTION BOX)
1854	(JUNCTION BOX)
1905	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
1912	(JUNCTION BOX)
1916	(JUNCTION BOX)
1942	(JUNCTION BOX)
1943	(JUNCTION BOX)
1944	(JUNCTION BOX)
1945	(JUNCTION BOX)
1946	(JUNCTION BOX)
1985	(JUNCTION BOX)
1986	(JUNCTION BOX)
1987	(JUNCTION BOX)
1988	(JUNCTION BOX)
1997	(JUNCTION BOX)
1998	(JUNCTION BOX)
2003	(JUNCTION BOX)
2004	(JUNCTION BOX)
2005	(JUNCTION BOX)
2006	(JUNCTION BOX)
2012	(JUNCTION BOX)
2013	(JUNCTION BOX)
2014	(JUNCTION BOX)
2015	(JUNCTION BOX)
2021	(JUNCTION BOX)
2022	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER	
	2041	(JUNCTION BOX)
	2042	(JUNCTION BOX)
	2049	(JUNCTION BOX)
	2050	(JUNCTION BOX)
	2059	(JUNCTION BOX)
	2060	(JUNCTION BOX)
	2063	(JUNCTION BOX)
	2064	(JUNCTION BOX)
	2065	(JUNCTION BOX)
	2066	(JUNCTION BOX)
	2072	(JUNCTION BOX)
	2093	(JUNCTION BOX)
	2117	(JUNCTION BOX)
	2120	(JUNCTION BOX)
	2122	(JUNCTION BOX)
	2123	(JUNCTION BOX)
	2124	(JUNCTION BOX)
	2146	(JUNCTION BOX)
	2180	(JUNCTION BOX)
	2181	(JUNCTION BOX)
	2182	(JUNCTION BOX)
	2183	(JUNCTION BOX)
	2247	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
2248	(JUNCTION BOX)
2262	(JUNCTION BOX)
2263	(JUNCTION BOX)
2264	(JUNCTION BOX)
2265	(JUNCTION BOX)
2266	(JUNCTION BOX)
2267	(JUNCTION BOX)
2268	(JUNCTION BOX)
2269	(JUNCTION BOX)
2270	(JUNCTION BOX)
2271	(JUNCTION BOX)
2274	(JUNCTION BOX)
2275	(JUNCTION BOX)
2276	(JUNCTION BOX)
2277	(JUNCTION BOX)
2291	(JUNCTION BOX)
2292	(JUNCTION BOX)
2296	(JUNCTION BOX)
2297	(JUNCTION BOX)
2304	(JUNCTION BOX)
2306	(JUNCTION BOX)
2313	(JUNCTION BOX)
2314	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
2315	(JUNCTION BOX)
2322	(JUNCTION BOX)
2326	(JUNCTION BOX)
2327	(JUNCTION BOX)
2328	(JUNCTION BOX)
2346	(JUNCTION BOX)
2347	(JUNCTION BOX)
2366	(JUNCTION BOX)
2367	(JUNCTION BOX)
2374	(JUNCTION BOX)
2445	(JUNCTION BOX)
2446	(JUNCTION BOX)
2489	(JUNCTION BOX)
2560	(JUNCTION BOX)
2612	(JUNCTION BOX)
2613	(JUNCTION BOX)
2617	(JUNCTION BOX)
2651	(JUNCTION BOX)
2653	(JUNCTION BOX)
2670	(JUNCTION BOX)
2671	(JUNCTION BOX)
2674	(JUNCTION BOX)
2675	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
2701	(JUNCTION BOX)
2702	(JUNCTION BOX)
2714	(JUNCTION BOX)
2715	(JUNCTION BOX)
2716	(JUNCTION BOX)
2717	(JUNCTION BOX)
2720	(JUNCTION BOX)
2721	(JUNCTION BOX)
2722	(JUNCTION BOX)
2723	(JUNCTION BOX)
2724	(JUNCTION BOX)
2725	(JUNCTION BOX)
2726	(JUNCTION BOX)
2727	(JUNCTION BOX)
2736	(JUNCTION BOX)
2737	(JUNCTION BOX)
2738	(JUNCTION BOX)
2739	(JUNCTION BOX)
2744	(JUNCTION BOX)
2745	(JUNCTION BOX)
2746	(JUNCTION BOX)
2747	(JUNCTION BOX)
2754	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
2755	(JUNCTION BOX)
2761	(JUNCTION BOX)
2762	(JUNCTION BOX)
2765	(JUNCTION BOX)
2766	(JUNCTION BOX)
2781	(JUNCTION BOX)
2782	(JUNCTION BOX)
2784	(JUNCTION BOX)
2785	(JUNCTION BOX)
2793	(JUNCTION BOX)
2795	(JUNCTION BOX)
2800	(JUNCTION BOX)
2801	(JUNCTION BOX)
2802	(JUNCTION BOX)
2803	(JUNCTION BOX)
2817	(JUNCTION BOX)
2818	(JUNCTION BOX)
2819	(JUNCTION BOX)
2820	(JUNCTION BOX)
2857	(JUNCTION BOX)
2858	(JUNCTION BOX)
2890	(JUNCTION BOX)
2891	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
2892	(JUNCTION BOX)
2893	(JUNCTION BOX)
2915	(JUNCTION BOX)
2916	(JUNCTION BOX)
2917	(JUNCTION BOX)
2918	(JUNCTION BOX)
2919	(JUNCTION BOX)
2920	(JUNCTION BOX)
2921	(JUNCTION BOX)
2922	(JUNCTION BOX)
2923	(JUNCTION BOX)
2924	(JUNCTION BOX)
2925	(JUNCTION BOX)
2926	(JUNCTION BOX)
2927	(JUNCTION BOX)
2928	(JUNCTION BOX)
2929	(JUNCTION BOX)
2930	(JUNCTION BOX)
2932	(JUNCTION BOX)
2933	(JUNCTION BOX)
2934	(JUNCTION BOX)
2935	(JUNCTION BOX)
2936	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
2937	(JUNCTION BOX)
2938	(JUNCTION BOX)
2941	(JUNCTION BOX)
2973	(JUNCTION BOX)
2974	(JUNCTION BOX)
3001	(JUNCTION BOX)
3002	(JUNCTION BOX)
3003	(JUNCTION BOX)
3004	(JUNCTION BOX)
3005	(JUNCTION BOX)
3006	(JUNCTION BOX)
3007	(JUNCTION BOX)
3008	(JUNCTION BOX)
3041	(JUNCTION BOX)
3042	(JUNCTION BOX)
3061	(JUNCTION BOX)
3062	(JUNCTION BOX)
3063	(JUNCTION BOX)
3064	(JUNCTION BOX)
3065	(JUNCTION BOX)
3066	(JUNCTION BOX)
3067	(JUNCTION BOX)
3068	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
3069	(JUNCTION BOX)
3070	(JUNCTION BOX)
3075	(JUNCTION BOX)
3076	(JUNCTION BOX)
3077	(JUNCTION BOX)
3078	(JUNCTION BOX)
3112	(JUNCTION BOX)
3113	(JUNCTION BOX)
3114	(JUNCTION BOX)
3115	(JUNCTION BOX)
3116	(JUNCTION BOX)
3117	(JUNCTION BOX)
3132	(JUNCTION BOX)
3133	(JUNCTION BOX)
3190	(JUNCTION BOX)
3191	(JUNCTION BOX)
3198	(JUNCTION BOX)
3199	(JUNCTION BOX)
3215	(JUNCTION BOX)
3216	(JUNCTION BOX)
3217	(JUNCTION BOX)
3218	(JUNCTION BOX)
3233	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
3234	(JUNCTION BOX)
3235	(JUNCTION BOX)
3236	(JUNCTION BOX)
3367	(JUNCTION BOX)
3368	(JUNCTION BOX)
3369	(JUNCTION BOX)
3370	(JUNCTION BOX)
3428	(JUNCTION BOX)
3429	(JUNCTION BOX)
3430	(JUNCTION BOX)
3649	(JUNCTION BOX)
3650	(JUNCTION BOX)
3651	(JUNCTION BOX)
3652	(JUNCTION BOX)
3801	(JUNCTION BOX)
3802	(JUNCTION BOX)
3803	(JUNCTION BOX)
3804	(JUNCTION BOX)
3914	(JUNCTION BOX)
3915	(JUNCTION BOX)
3916	(JUNCTION BOX)
3917	(JUNCTION BOX)
4498	(JUNCTION BOX)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
4499	(JUNCTION BOX)
4500	(JUNCTION BOX)
4501	(JUNCTION BOX)
1-1	(PENETRATION)
1-2	(PENETRATION)
2-1	(PENETRATION)
2-2	(PENETRATION)
3-1	(PENETRATION)
3-2	(PENETRATION)
4-1	(PENETRATION)
4-2	(PENETRATION)
6-1	(PENETRATION)
6-2	(PENETRATION)
7-1	(PENETRATION)
7-2	(PENETRATION)
8-1	(PENETRATION)
8-2	(PENETRATION)
9-1	(PENETRATION)
9-2	(PENETRATION)
11-1	(PENETRATION)
11-2	(PENETRATION)
12-1	(PENETRATION)
12-2	(PENETRATION)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
13-1	(PENETRATION)
13-2	(PENETRATION)
14-1	(PENETRATION)
14-2	(PENETRATION)
15-1	(PENETRATION)
15-2	(PENETRATION)
16-1	(PENETRATION)
16-2	(PENETRATION)
17-1	(PENETRATION)
17-2	(PENETRATION)
18-1	(PENETRATION)
18-2	(PENETRATION)
19-1	(PENETRATION)
19-2	(PENETRATION)
20-1	(PENETRATION)
20-2	(PENETRATION)
21-1	(PENETRATION)
21-2	(PENETRATION)
22-1	(PENETRATION)
22-2	(PENETRATION)
23-1	(PENETRATION)
23-2	(PENETRATION)
24-1	(PENETRATION)

UNIT DEVICE ID NUMBER	
24-2	(PENETRATION)
25-1	(PENETRATION)
25-2	(PENETRATION)
26-1	(PENETRATION)
26-2	(PENETRATION)
27-1	(PENETRATION)
27-2	(PENETRATION)
28-1	(PENETRATION)
28-2	(PENETRATION)
29-1	(PENETRATION)
29-2	(PENETRATION)
30-1	(PENETRATION)
30-2	(PENETRATION)
31-1	(PENETRATION)
31-2	(PENETRATION)
32-1	(PENETRATION)
32-2	(PENETRATION)
33-1	(PENETRATION)
33-2	(PENETRATION)
34-1	(PENETRATION)
34-2	(PENETRATION)
35-1	(PENETRATION)
35-2	(PENETRATION)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
36-1	(PENETRATION)
36-2	(PENETRATION)
37-1	(PENETRATION)
37-2	(PENETRATION)
38-1	(PENETRATION)
38-2	(PENETRATION)
39-1	(PENETRATION)
39-2	(PENETRATION)
40-1	(PENETRATION)
40-2	(PENETRATION)
43-1	(PENETRATION)
43-2	(PENETRATION)
44-1	(PENETRATION)
44-2	(PENETRATION)
45-1	(PENETRATION)
45-2	(PENETRATION)
46-1	(PENETRATION)
46-2	(PENETRATION)
47-1	(PENETRATION)
47-2	(PENETRATION)
48-1	(PENETRATION)
48-2	(PENETRATION)
49-1	(PENETRATION)

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
49-2	(PENETRATION)
50-1	(PENETRATION)
50-2	(PENETRATION)
51-1	(PENETRATION)
51-2	(PENETRATION)
52-1	(PENETRATION)
52-2	(PENETRATION)
53-1	(PENETRATION)
53-2	(PENETRATION)
SLEEVE	(SPLICE) 78KA3-779752
SLEEVE	(SPLICE) 79K8-825348
SPLICE	(CABLE CONNECTION HEAT SHRINK SPLICES)
SPLICE	(MOTOR CONNECTION KIT)
WDD	(CABLE) 72C7-75228-1
WDE	(CABLE) 79K7-825687
WDE	(CABLE) 72C7-75228-1
WDE	(CABLE) 75K7-86150-2
WDE	(CABLE) 72C7-83874-2
WDG	(CABLE) 72C7-75228-1

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
WDH	(CABLE) 72C7-75228-1
WDH	(CABLE) 71C7-54762-1
WDH	(CABLE) 72C7-83874-2
WDJ	(CABLE) 74C7-85333
WDJ	(CABLE) 71C7-54762-1
WDK	(CABLE) 78X5-824164
WDK	(CABLE) 74C7-85333
WDK	(CABLE) 79K6-825722-1
WDK	(CABLE) 79K5-825342-1
WDK	(CABLE) 79K7-86150-2
WDK	(CABLE) 71C7-54762-1
WDK	(CABLE) 72C7-83874-2
WDN	(CABLE) 79K6-825722-1
WDP	(CABLE) 72C7-75228-1
WDP	(CABLE) 75K7-86150-2
WFA	(CABLE) 76K5-820013

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT DEVICE ID NUMBER	
WFB	(CABLE) 78K5-823412-1
WFB	(CABLE) 79K5-824597
WFB	(CABLE) 86506-1
WFB	(CABLE) 79K5-825342-2
WFB	(CABLE) 71C7-54762-2
WFC	(CABLE) 71C7-54762-2
WFD	(CABLE) 72C7-83874-1
WFG	(CABLE) 79K5-825342-2
WFG	(CABLE) 72C7-83874-1
WFL	(CABLE) 71C7-54762-2
WGB	(CABLE) 79K5-825342-2
WGB	(CABLE) 81K5-828920-3
WGB	(CABLE) 81K6-828714
WGB	(CABLE) 81K8-828419
WGB	(CABLE) 78K5-822803-1
WGB	(CABLE) 78X5-824164

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2
1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
WGB	(CABLE) 76K5-820013
WGB	(CABLE) 81K5-827928
WGC	(CABLE) 79K5-825342-2
WGC	(CABLE) 71C7-54762-2
WGD	(CABLE) 71C7-54762-2
WGE	(CABLE) 79K6-825722-2
WGE	(CABLE) 71C7-54762-2
WGG	(CABLE) 79K5-825342-2
WGG	(CABLE) 71C7-54762-2
WGH	(CABLE) 79K6-825722-2
WGH	(CABLE) 71C7-54762-2
WGK	(CABLE) 71C7-54762-2
WHB	(CABLE) 79K5-825342-2
WHB	(CABLE) 81K5-828920-3
WHB	(CABLE) 77K5-821609-1
WHB	(CABLE) 78K5-822803-1

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
WHB	(CABLE) 79K7-825687
WHB	(CABLE) 86506-1
WHB	(CABLE) 75K7-86150-1
WHB	(CABLE) 80K6-827320-1
WHB	(CABLE) 78K5-824443-2
WHB	(CABLE) 71C7-54762-2
WHC	(CABLE) 79K5-825342-2
WHC	(CABLE) 78K5-823412-1
WHC	(CABLE) 74C7-85069-1
WHC	(CABLE) 74C7-85333
WHC	(CABLE) 78K5-824443-2
WHC	(CABLE) 71C7-54762-2
WHC	(CABLE) 72C7-83874-1
WHD	(CABLE) 79K5-825342-2
WHD	(CABLE) 79K7-825687
WHD	(CABLE) 75K7-86150-1

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER	
	WHD	(CABLE) 71C7-54762-2
	WHE	(CABLE) 79K5-825342-2
	WHE	(CABLE) 78X5-824164
	WHE	(CABLE) 79K6-825722-2
	WHE	(CABLE) 74C7-85069-1
	WHE	(CABLE) 75K7-86150-1
	WHE	(CABLE) 78K5-824443-2
	WHG	(CABLE) 79K5-825342-2
	WHG	(CABLE) 71C7-54762-2
	WHG	(CABLE) 72C7-83874-1
	WHH	(CABLE) 79K5-825342-2
	WHH	(CABLE) 77K5-821609-1
	WHH	(CABLE) 78K5-822803-1
	WHH	(CABLE) 74C7-85333
	WHH	(CABLE) 78K5-824443-2
	WHH	(CABLE) 71C7-54762-2

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
WHJ	(CABLE) 79K5-825342-2
WHJ	(CABLE) 81K5-828920-3
WHJ	(CABLE) 78K5-823412-1
WHJ	(CABLE) 74C7-85333
WIK	(CABLE) 81K9-828797
WJG	(CABLE) 86F[illegible]D-838433
WLB	(CABLE) 74C7-85333
WLB	(CABLE) 71C7-54762-1
WLC	(CABLE) 72C7-75228-1
WLC	(CABLE) 71C7-54762-1
WLC	(CABLE) 72C7-83874-2
WLD	(CABLE) 72C7-75228-1
WLE	(CABLE) 72C7-75228-1
WLJ	(CABLE) 71C7-54762-1
WLK	(CABLE) 72C7-75228-1
WLN	(CABLE) 74C7-85333

UNIT DEVICE ID NUMBER	
WLN	(CABLE) 72C7-75228-1
WLN	(CABLE) 71C7-54762-1
WLO	(CABLE) 72C7-75228-1
WLO	(CABLE) 71C7-54762-1
WLO	(CABLE) 72C7-83874-2
WMB	(CABLE) 74C7-85333
WMB	(CABLE) 72C7-75228-1
WMB	(CABLE) 74C7-85069-2
WMB	(CABLE) 71C7-54762-1
WMJ	(CABLE) 74C7-85333
WMJ	(CABLE) 72C7-75228-1
WMJ	(CABLE) 72C7-83874-2
WMQ	(CABLE) 72C7-75228-1
WMQ	(CABLE) 71C7-54762-1
WMT	(CABLE) 72C7-75228-1
WNB	(CABLE) 75K5-86506-3

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER	
	WNC	(CABLE) 81K5-827750
	WNC	(CABLE) 72C7-75228
	WPA	(CABLE) 77K5-822502
	WPA	(CABLE) 73C7-83999
	WPA	(CABLE) 823428
	WPA	(CABLE) 824308
	WPA	(CABLE) 87235
	WPB	(CABLE) 75C7-85861
	WPB	(CABLE) 824308
	WPH	(CABLE) 79K5-825018
	WPH	(CABLE) 823428
	WTU	(CABLE) 73C7-84595
	WVA	(CABLE) 76K5-87232
	WVA	(CABLE) 78K5-824447
	WVA	(CABLE) 80K5-827297
	WVA	(CABLE) 77K5-822000

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
WVA	(CABLE) 80K6-825419
WVA	(CABLE) 77K5-821722
WVA	(CABLE) 79K5-825772
WVA	(CABLE) 80K8-826598
WVA	(CABLE) 823265
WVA	(CABLE) 826961
WVA	(CABLE) 74C7-85574
WVB	(CABLE) 80K6-825419
WVB	(CABLE) 77K5-822000
WVB	(CABLE) 79K7-825651
WVB	(CABLE) 74910-2
WVC	(CABLE) 76K5-87232
WVC	(CABLE) 78K5-824447
WVC	(CABLE) 74C7-85259
WVC	(CABLE) 77K5-820991
WVC	(CABLE) 80K6-825419

1E ELECTRICAL EQUIPMENT
REQUIRING QUALIFICATION
UNDER 10CFR50.49

UNIT	DEVICE ID NUMBER
WVC	(CABLE) 77K5-822000
WVC	(CABLE) 77K5-820991
WVC	(CABLE) 73C7-84211
WVD	(CABLE) 73C7-84211
WVD	(CABLE) 74910-2
WVK	(CABLE) 78K5-824447
WVK	(CABLE) 76K5-87232
WWK	(CABLE) 75C7-85838
WWK	(CABLE) 80K8-826505
WWK	(CABLE) 79K7-825280
WWK	(CABLE) 84K6-833922