WATTS BAR NUCLEAR PLANT

Q-LIST

CORRECTIVE ACTION PROGRAM PLAN

REVISION 5

Prepared:	for T Oliver R Doman	6/25/93 Date
Reviewed:	J.C. Inman Jr.	6/25/93 Date
Concurrence:	C. Randall Mendrick Q-List Project Manager	6/30/93 Date
	R Rice for GLP Site Licensing Manager	7/7/93 Date
Approved:	W L Elliott Site Engineering Manager	6/26/93 Date
VLP 6-28-93	J Christensen Site QA Manager	6/28/93 Date
	J Chandos Manager of Projects	6/30/93 Date
	N/A KLE 6/28/93 Manager, Engineering and Modifications	Date
	N C Kazanas Vice President, Completion Assurance	6/28/93 Date
	W. A. Muselaer Site Vice President	7/8/93 Date

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Q PDR

ENCLOSURE 1

WATTS BAR NUCLEAR PROGRAM

Q-LIST CORRECTIVE ACTION PROGRAM PLAN

REVISION 5

TVA

Title: WATTS BAR Q-LIST CAP PLAN		REVISION LOG
Revision No.	Description of Revision	Date Approved
	For previous revision, see the NRC submittal packages for those revisions.	
5	This is a general revision that clarifies the method of review utilized to evaluate potential impacts on Maintenance and Modifications activities as a result of upgraded components on the new Q-List, makes minor corrections, and updates the CAP to show the current status of the Q-List effort. It also clarifies the interface between the EQ Program and the Q-List. This change combines the previous sections 4.2, Verification of Construction" and 4.3, "Review of Maintenance and Modifications Activities" into section 4.2, "Review of Maintenance and Modifications Activities." Added Attachment 3, "Q-List Development Flowchart," which was inadvertently excluded from Revision 4 of the CAP.	

Q-LIST PROGRAM PLAN
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Q-LIST
PROGRAM PLAN

1.0 INTRODUCTION

10 CFR 50, Appendix B, requires the identification of structures, systems, and components covered by the Quality Assurance (QA) Program. Watts Bar Nuclear Plant (WBN) uses a Quality Assurance List (Q-List) to meet this requirement. Originally, WBN's design and construction organizations determined component QA classification based on design drawings and Construction Specification N3G-881 which was issued by engineering. In April of 1978, TVA's nuclear power organization issued a Critical Structures, Systems, and Components (CSSC) List for use by plant personnel in implementing the Operational QA Program. In order to reduce interpretation requirements, the Office of Engineering (OE) issued a Q-List, referred to as the 91QL Q-List, in January of 1984. This listing, which was maintained to reflect current plant design, contains both QA and non-QA components and was intended to be used by design, construction, and operations. Operations continued to use the CSSC List because it was better suited to their needs. In November 1984, a special sublisting of the Q-List, the CSSC Q-List, was issued through a coordinated effort between Design and Operations.

In August of 1985, Quality Evaluation Report QE-85-09 and Nonconformance Report (NCR) W-269-P were issued to document problems with the Q-List. Also in 1985, five Q-List related employee concerns were initiated. Q-List problems included:

1. Motors and other equipment were not uniquely identified and were not listed on the Q-List.

   The 91QL Q-List reflected only those identifiers specified by the designer for design purposes rather than appropriately considering any special needs for construction, modification, maintenance, and operation. Unified and consistent methods were not used by all organizations.

2. Some component identification numbers on the Q-List were not correct.

   This problem resulted from an incomplete checking process.

3. The Q-List contained incorrect QA classifications.

   This problem was caused by failure to develop and control the application of criteria used for classifying components listed on the Q-List.

4. The Q-List did not differentiate between safety-related and special features (Limited QA) in accordance with the Nuclear Quality Assurance Manual (NQAM).

   This problem was actually a conservative error since the Q-List shows a safety-related ("Q") (i.e., a full 10CFR50, Appendix B Program application) for special features.

These problems did not result in an inadequate design or inadequate QA Program coverage for the design of safety-related structures, systems, and components because the Q-List was not used as design input. However, structures, systems, and components within the scope of the QA Program may have been treated as non-QA during construction, modification, and maintenance activities.

The overall causes of the Q-List problems were: (1) TVA's design, construction and operations organizations utilized different approaches to identifying and/or listing the plant features that require QA Program application; and (2) the 91QL Q-List was issued to reflect the current design without adequate review or procedural guidance to ensure completeness and accuracy.

One specific corrective action taken was to delete the CSSC Q-List. As a result, after January 31, 1986, the 91QL Q-List was the single controlled listing which identified the structures, systems, and components requiring QA Program application.

The September 17, 1988 revised final 10 CFR 50.55(e) report (CDR 85-56 and 32), which provided corrective actions for the deficiencies identified in NCR W-269-P, stated that a completeness review of the 91QL Q-List would be performed. When the review identified an error rate in excess of the one per cent acceptance criteria, TVA committed to independently develop a 92QL (new) Q-List to supersede the 91QL (old) Q-List. The new Q-List was developed for Unit 1 using the safety-related systems identified in the Design Baseline Verification Program (DBVP). It listed selected Units 0, 1, and those Unit 2 components required to support Unit 1 operations. The Unit 2 components required to support Unit 1 operations have been defined in the Unit 1/Unit 2 Interface Program. The new Q-List was issued as design output by Design Change Notices (DCNs). The old Q-List was voided in September 1990.

Attachment 1 is a chronology of the Q-List development, and Attachment 2 is a chronology of Q-List concerns and corrective actions.

2.0 OBJECTIVE

The objectives of the Q-List Corrective Action Program (CAP) were developed as follows: (1) to more clearly and consistently identify which structures, systems, and components are required to have QA or limited QA Program controls applied during the performance of design, construction, modification, operation, and maintenance; and (2) to ensure that appropriate QA Program controls were applied to quality-related structures, systems, and components when they were constructed, maintained, and modified.

3.0 SCOPE

Components identified on Category I drawings for safety-related systems, or safety-related portions of systems (as identified in Attachment 2 of the DBVP CAP) were to be individually classified on the new Q-List with the following exceptions:

1. Certain types of components, typically those that are of a general nature and can be easily classified, either in total or in clearly defined groups, were to be classified only through the general notes. These notes were to clearly identify, through the use of criteria, standards, calculations, and drawings, which items will have QA or limited QA program controls applied. Examples of types of components which were to be typically classified only through the General Notes are cables, fuses, insulation, and panels.

2. Components in certain systems, in which all or easily identifiable groupings of components have a common classification, could be classified through system specific notes. An example would be the Control Rod Drive System for which the housings, head adaptor plugs, and the seismic supports are Category I, and all remaining components are Seismic Category I(L).

Components in other systems, as well as the nonsafety-related portions of the DBVP systems, may not be individually classified on the Q-List but will be addressed in the general notes. It was estimated that approximately 50,000 components were to be individually classified and that all other structures and components were to be covered by notes.

4.0 DESCRIPTION OF PROGRAM

The corrective actions to resolve NCR W-269-P and related employee concerns are defined in this section. The following corrective actions have been completed:

1. The CSSC Q-List was deleted.

2. A calculation identifying class 1E motors was prepared.

3. A clarifying note was added to the Q-List general notes to ensure that class 1E components associated with flow control valves are consistently identified and evaluated.

4. The Q-List was revised to resolve specific deficiencies defined in NCR W-269-P final 50.55(e) report.

5. A matrix which indicates the source documents for all limited QA programs utilized at WBN was prepared.

In addition, the Q-List CAP: (1) develops a new Q-List, (2) compares this new Q-List to the (old) Q-List to identify upgraded components, and (3) reviews the way maintenance and modifications activities were performed to assure that those activities performed since January 1984, when the (old) Q-List was issued, had proper QA program controls applied when appropriate.

4.1 New Q-List Development Process

The new Q-List has been developed independent of the old Q-List. The classifications included in the new Q-List have been determined by translating current information from design output documents.

The major elements of the development process are shown in Attachment 3. For a typical system the following steps were performed:

a. A review of the system to determine quality-related aspects.

b. Development of a list of components depicted on issued design output drawings (the latest configuration control drawing, as-constructed drawing, or as-designed drawing, as appropriate).

c. Determination of each component's QA classification using proceduralized criteria.

d. Initiation of Design Change Notices (DCNs) to issue the new Q-List and to revise other appropriate design output documents.

4.1.1 System Selection

Selected components in safety-related systems, or safety-related portions of systems (as identified in Attachment 2 of the Design Baseline Verification Program (DBVP) CAP), will be uniquely classified on the Q-List (See Section 3.0).

4.1.2 Development of a Component Listing

The selected systems were reviewed to determine the reference design output drawings for that system. The set of reference design output drawings were used to establish unique identifiers necessary to support operations and maintenance. Any changes to existing identifiers or the addition of new identifiers were marked on a working copy of the reference drawings and entered in the data base. These identifiers were established using TVA procedures which were coordinated with the technical support and maintenance organizations.

4.1.3 Classification of System Components

The classification process utilized classification criteria for applicable QA and Quality Related programs found in the Nuclear Quality Assurance Plan (NQAP). These criteria were issued in a project procedure which controlled the classification process. The classification criteria were applied to the component listings. Discrepancies in design input and output documents identified in the classification process were tracked as open items, documented in accordance with the WBN corrective action program when appropriate, and corrected through the issuance of DCNs.

4.1.4 Issuance of the New Q-List

A package was generated for each system during the component identification process which contained marked-up system drawings and computer printouts which identified system components. This information together with the component classification package formed the basis of a system DCN package which contained reference drawings and the new Q-List. The new Q-List was integrated into the Equipment Management System (EMS), a QA-qualified data base.

4.2 Review of Maintenance and Modification Activities

Classifications in the new Q-List were compared to the old Q-List classifications on a system by system basis. Approximately 5000 differences in component classification which were upgrades were listed. Discrepancies with design documents for upgraded components were evaluated in the open item process as described in Section 4.1.3 above. Maintenance and modifications procedures, work processes, and, as required, work records, were reviewed to determine if the upgrades as a result of errors in the old Q-List could have resulted in instances of structures, systems, and components being treated incorrectly.

4.2.1 Initial Installations and Design Modifications

A review was performed of workplan procedures governing the installation, inspection, and documentation processes to evaluate the impact from components being upgraded. The use of a Q-List was not a requirement for modification activities. Modifications determined that the applicable modifications procedures required that installed and modified components use the design output documents; which included DCNs, drawings, bills of material, design specifications, equipment contracts, etc. These design documents included quality classifications. Accordingly, compliance with the design documents would cause appropriate quality controls to be implemented.

4.2.2 Maintenance

A review was performed of the work process which governed maintenance requests as defined by controlling procedures. This was a programmatic review of how maintenance work practices applied to the various classification levels of the upgraded components.

The maintenance program maintained the equipment to the original design specifications/information (parts were replaced at least "like-for-like" or better); however, the Q-List was used to determine the classification of the work to be performed on the maintenance requests.

To determine if there was any differences in the way work was performed for the different component classifications involved in the upgrading, the upgraded components were grouped into categories (categories of upgrades from one quality classification to another). The maintenance work practices for the different quality classifications in those categories were then compared to determine

if there were any changes. The review concluded that the only potential difference for the upgraded components would have been in the level of QC inspection; however, it was found that the level of QC inspection was not affected by the upgrades except for two categories. A review of the maintenance records for the components in those categories indicated that either no work was performed or that work was performed to the correct quality classification.

4.2.3 Work Release

It should be noted that there also existed a process called "work release" which allowed rework of permanent equipment or materials. This process was primarily used to accommodate in process work requiring temporary removal of other equipment for access. All work authorized by this release process required returning material to the drawing requirements.

It is TVA's judgement that changes to the Q-List did not impact maintenance and modifications work for the components which were evaluated.

4.3 Recurrence Control

One Q-List is being utilized for design, construction, modification, maintenance and operation to identify which structures and components require QA program application, and procedures have been developed to maintain the Q-List current and support the needs of all WBN organizations. Q-List changes are controlled through the design change process to ensure continued completeness and accuracy.

5.0 PROGRAM INTERFACES

Coordination has been planned between the Q-List and several other WBN special programs. The Equipment Seismic Qualification Program used the new Q-List as a means of verifying the accuracy of the seismic component list and ensuring the Q-List accurately reflects seismic classifications. The Vendor Information Program used the Q-List to determine which equipment required approved vendor technical manuals and requested changes to the Q-List when needed. The Q-List Program interfaces with the 10 CFR 50.49, "Environmental Qualification (EQ) Program" within the EMS where the EQ program has responsibility for the accuracy of information that specifies EQ applicability for each Q-List component.

6.0 PROGRAM IMPLEMENTATION

Nuclear Engineering (NE) is the WBN lead organization in implementing the Q-List CAP. A task engineer is responsible for coordinating activities within TVA and for interfacing with contractors and users as appropriate. Implementation of the Q-List CAP requires support from site organizations as identified below:

6.1 Engineering

Engineering issued procedures for Q-List generation, use, and revision control with other site procedures revised as required; issued the new Q-List as design output; and compared the classified components of the new Q-List to the old Q-List to generate a list of upgraded components.

6.2 Maintenance

Maintenance reviewed the work practices as they applied to the different levels of component classifications that were changed.

6.3 Modifications

Modifications reviewed applicable modifications procedures governing work control to determine if the Q-List was ever applied.

7.0 PROGRAM DOCUMENTATION

Use and maintenance of the WBN Q-List is controlled by Site Standard Practice (SSP)-3.03, "Using and Maintaining the WBN Q-List" and applies to all WBN site personnel. Revisions to the WBN Q-List are controlled by the design change process. The individual steps necessary to complete the CAP corrective actions will be performed in accordance with applicable standards and procedures.

Any discrepancies identified during either the comparison of the new and old Q-List or the review of maintenance and modification activities were evaluated in accordance with the WBN Corrective Action Program.

Q-List program completion will be documented by a Q-List CAP final report which will document program results with respect to the objectives stated in Section 2.0.

8.0 CONCLUSIONS

In addition to the completed corrective actions for NCR W-269-P as stated in the revised final 10 CFR 50.55(e) report (CDRs 390/85-56 and 391/85-32), the Q-List CAP:

1. Defines the scope of QA program application for design, construction, modification, operations, and maintenance activities at WBN.

2. Identifies discrepancies in the old Q-List and verifies that quality-related features for upgraded components have been constructed, modified, and maintained with appropriate QA program controls applied.

ATTACHMENT 1
Q-LIST DEVELOPMENT CHRONOLOGY

1973	Design and construction organizations use design drawings and Construction Specification N3G-881 to determine QA levels prior to 1984.
1978, April	Nuclear Power (NUC PR) issues CSSC List for plant use in applying operational QA program.
1984, Jan.	Engineering Design (EN DES, not NE) issues WBN Q-List for use by all organizations, but NUC PR continues use of CSSC List.
1984, Nov.	Office of Engineering (OE, now NE) issues special sublisting of Q-List called CSSC Q-List.
1985, Jan.	NUC PR issues AI-7.6 providing for use of CSSC Q-List in lieu of CSSC List. Discrepancies between these two lists become evident and investigations begin (see attachment 2).
1985, July	WBN CSSC List deleted from Nuclear Quality Assurance Manual (NQAM), Appendix A.
1985, Aug.	TVA issues Nonconformance Report (NCR) W-269-P documenting Q-List and CSSC Q-List problems.
1985, Oct.	TVA reports NCR W-269-P to NRC in accordance with 10 CFR 50.55(e).
1985, Dec.	TVA interim 10 CFR 50.55(e) report issued to NRC on W-269-P.
1986, Jan.	As partial resolution of NCR W-269-P, NUC PR revised AI-7.6 to delete CSSC Q-List, implementing the 91QLXXX-0 Q-List for use by all.
1986, March	TVA final 10 CFR 50.55(e) report issued to NRC on NCR W-269-P.
1986, Sept.	TVA issues revised final 10 CFR 50.55(e) report to NRC on NCR W-269-P.
1989, Jan.	TVA issued Watts Bar Procedure WBEP 5.63 "Identification of Structures, Systems, and Components for the Watts Bar Q-List."
1989, Feb.	TVA issued WBN procedure WBEP-5.64, "Classification of Structures, Systems, and Components for the WBN Quality Assurance List (Q-List)".
1990, Feb. to Sept.	TVA issued 53 System DCNs which documented the 92QLXXX Q-List System and Q-List General Notes and voided the 91QL Q-List.

ATTACHMENT 1
Q-LIST DEVELOPMENT CHRONOLOGY

1991, Sept	TVA closed NCR W-269-P.
1992 Apr.	Q-List General Notes were placed in EMS for use throughout the site.
1992, Aug.	Issued the Q-List General Notes as a TVA drawing 92QL000-0.

ATTACHMENT 2
CHRONOLOGY OF Q-LIST CONCERNS AND CORRECTIVE ACTIONS

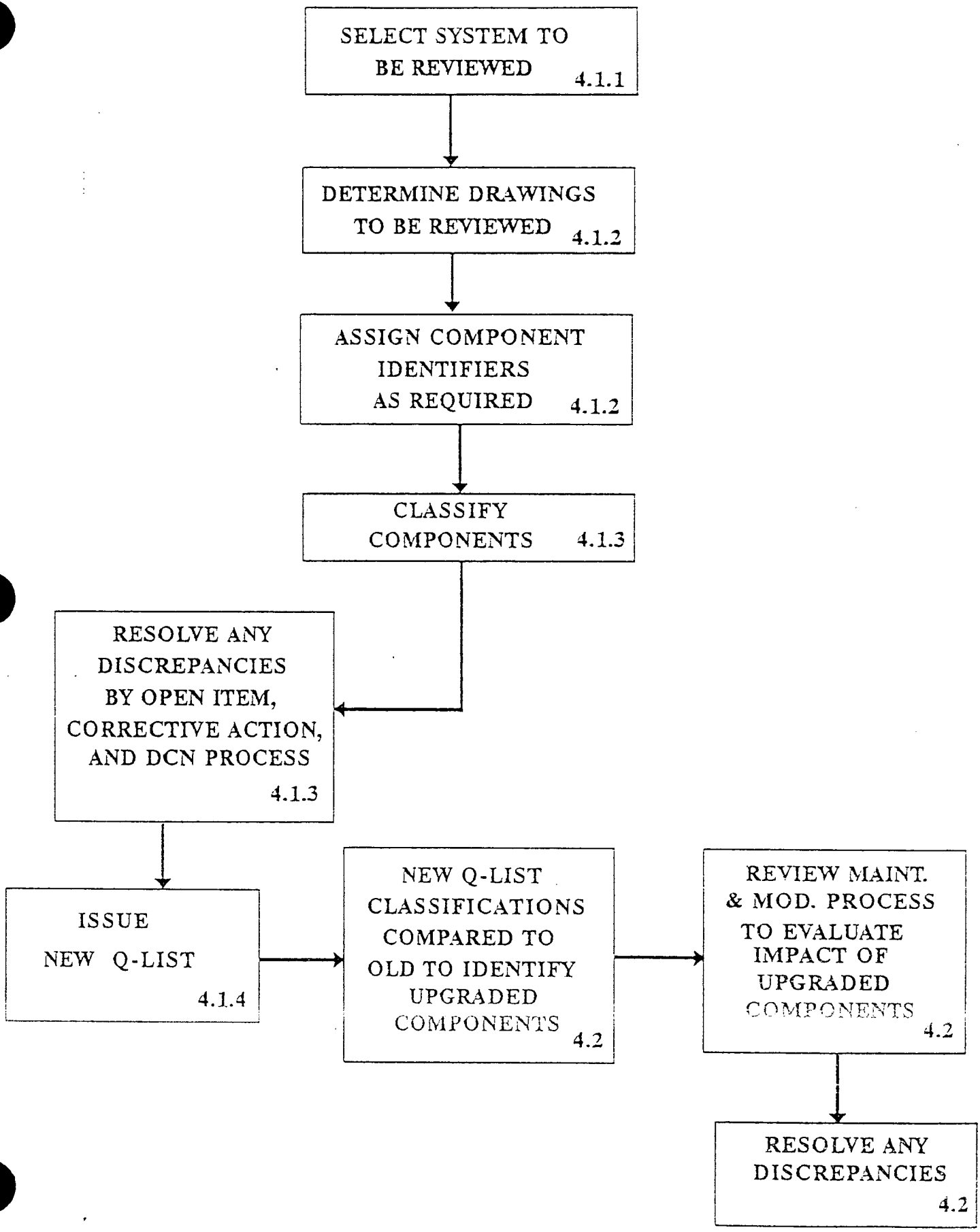
1985, Jan.	Q-List review initiated by plant QA staff to investigate alleged discrepancies.
1985, July	TVA receives Employee Concern IN-85-688-003.
1985, Aug.	TVA receives Employee Concerns IN-85-407-001, IN-86-087-004, and IN-86-090-001.
	Quality Evaluation Report QE-85-09 issued documenting discrepancies between CSSC List and CSSC Q-List.
	WB-CAR-85-45 issued to require NUC PR action on certain CSSC Q-List discrepancies.
	NCR W-269-P issued to document programmatic and specific Q-List discrepancies.
1985, Sept.	NCR WBN 6326 issued documenting incorrect component classifications for temperature elements on centrifugal charging pumps.
1985, Oct.	NSRS Investigation Report No. I-85-422-WBN issued documenting review of employee concerns.
	NCR W-269-P, R1, issued to expand detail of the identified Q-List discrepancies.
1985, Nov.	TVA receives Employee Concern IN-86-095-002.
1986, Feb.	WB-CAR-85-45 corrective action completed and CAR closed.
	NCR WBN 6695 issued to document discrepancies between the Q-List and Construction Specification N3G-881 (NCR W-504-P issued October 1986, and NCR W-504-PS issued January 1987 for same discrepancies).
1986, May	Problem Identification Report (PIR) WBNMEB8653 issued to document incorrect component classification information for system 47 instrumentation.
1988, Feb.	Condition Adverse to Quality Report (CAQR) WBP880095 issued to document omission of various instrument panels from Q-List.
1988, Oct.	Q-List Corrective Action Program Plan Revision 1 issued.
1990, July	Q-List Corrective Action Program Plan Revision 3 issued.
1990, Nov.	Q-List Corrective Action Program Plan Revision 4 issued.

ATTACHMENT 2
CHRONOLOGY OF Q-LIST CONCERNS AND CORRECTIVE ACTIONS

1991, Jan.	Problem Evaluation Report (PER) WBP910030PPER issued to document Q-List Drawing Change Authorization (DCA) problem.
1991, Feb.	PER WBP910113PPER issued to document problem with Q-List Fire Protection Limited QA (FPLQA) for panels in nonseismic buildings.
1991, Nov.	PER WBPER910464 issued to document additional FPLQA problems on Q-List.
1992, Aug.	PER WBPER920080 issued to document miscellaneous 92QL Q-List problems. PER WBNPER920182 has been incorporated into this PER.
1992, Mar.	FIR WBFIR920010207 issued to document that administration of site procedures is not being accomplished in accordance with SSP-3.03.
1992, Apr.	Closed PERs WBP910030PPER and WBPER910464.

ATTACHMENT 3

Q-LIST DEVELOPMENT FLOWCHART



ENCLOSURE 2

REVIEW OF MAINTENANCE AND MODIFICATION ACTIVITIES

Revision 4 of the Q-List CAP, Section 4.3, committed to a review of maintenance and modification records for the upgraded component classifications in the new Q-List to identify any potential incorrect QA applications. Also, each item was to be tracked and, when appropriate, documented through the Watts Bar Corrective Action Program. The purpose of this enclosure is to clarify the approach that was taken to perform this task.

A listing of approximately 5000 components classified to a higher level during the new Q-List development was provided to the Maintenance and Modifications organizations by Nuclear Engineering (NE). This listing provided unique component identifications and the classification changes made from the old to the new Q-List.

The new Q-List was developed independent of the 91QL-Q-List, which contained numerous errors. The new Q-List was generated from source documents and the latest drawings. The approximately 5000 component classification upgrades made during the development of the 92QL Q-List were a result of two conditions: (1) there were errors in the 91QL Q-List and (2) Design changes in classification were recognized as needed during the development of the 92QL Q-List. The design changes were made through the issuance of design output revisions, component modifications were made as required, and, as appropriate, any discrepancies were resolved through the corrective action program. Since this second condition was dispositioned through existing program controls, no additional reviews were required in this area. Therefore, Q-List errors (classification upgrades) were the only changes requiring a review of modifications and maintenance activities. The two types of work implementing documents in place at the time of the 91QL Q-List were workplans and maintenance requests. The following approach was taken for the review of these documents:

WORK PLANS

A programmatic review of the controlling procedures and processes was performed rather than a detailed records review, since once the programmatic approach was known, it would apply to all the components involved.

The Q-List was not used to perform workplans. Procedures which controlled workplan writing and processing were reviewed to determine the installation, inspection, and documentation processes. The procedures required the workplans to be prepared and processed in accordance with the latest design output documents such as flow diagrams and schematics regardless of component classifications of the old Q-List.

ENCLOSURE 2

REVIEW OF MAINTENANCE AND MODIFICATION ACTIVITIES

MAINTENANCE REQUESTS

The Q-List was used on maintenance requests to determine the classification of the work to be performed. The different work classifications were tied to specific administrative instructions which defined the work practices associated with each classification. For the maintenance activities review, the upgraded components were grouped into categories (categories of upgrades from one quality classification to another). The maintenance practices for the different quality classifications in those categories were compared to determine if there were any changes. This approach was chosen because it offered an effective and efficient means to assess the impact of the Q-List classification changes. It was recognized that we could, and in fact, did pull individual records whenever necessary to confirm results or check specific questions.

The initial review concluded that the only potential difference for the upgraded components would be the level of inspection, i.e., QC versus Maintenance, for those components that were upgraded from Non-Seismic to Seismic Category I or Seismic Category I(L)A or I(L)B. The components included in these categories of upgrades were either instrumentation or mechanical. Since there are no QC inspections required in the instrumentation portion of the Maintenance program, there was no difference in the level of inspection for instrumentation.

The Maintenance program scope for Seismic Category I(L)B, position retention, includes only the supports and equipment mounting hardware, which have always been treated Q in all Category I structures. There was, therefore, no difference in QC inspection for mechanical components upgraded from Non-Seismic to Seismic Category I(L)B.

There were only 10 upgraded mechanical components in the remaining categories of non-seismic to Seismic Category I and I(L)A. A review of Maintenance records for those components indicated that either no work was performed or that work was performed to the correct quality classification. There was, therefore, no difference in the level of QC inspection for upgraded components.

Work Release

It should be noted that there also existed a process called "work release" which allowed rework of permanent equipment or components. This process was primarily used to accommodate in process work requiring temporary removal of equipment for access. This process required returning material to the drawing requirements.

QA Records Review

A subsequent QA inspection in preparation for the 75% NRC Inspection verified, through a selective review of the records of the upgraded components, that work was performed to the correct quality classification. This conclusion was based on a review of installation/maintenance records and verification of existing programs/processes (e.g., Integrated Interaction Program, Equipment Seismic Qualification Program, Environmental Qualification Packages, Etc.) which provide alternate records (consistent with the QA Records CAP) for those components for which original installation records were not available.

REVIEW OF MAINTENANCE AND MODIFICATION ACTIVITIES

Conclusion

Maintenance and Modifications reviews of processes and, as required, records indicated no impact on work performed as a result of Q-List errors which resulted in component classification upgrades on the 92QL Q-List. A selective review of records by QA verified this conclusion. Needed design changes which were recognized during the development of the 92QL Q-List were made through TVA's standard design change program, which implemented component changes as necessary.

ENCLOSURE 3
NRC COMMENTS FROM THE LETTER OF JANUARY 23, 1991
AND TVA'S RESPONSE
AND
NRC COMMENT FROM INSPECTION REPORTS 50-390/90-08 AND 50-391/90-08
TVA'S RESPONSE

NRC COMMENTS FROM THE LETTER OF JANUARY 23, 1991, CORRECTIVE ACTION PROGRAM PLAN ON THE Q-LIST (TAC 63590), AND TVA'S RESPONSE:

NRC COMMENT 1

"The response to Question 1 states that Revision 2 of the Q-List CAP Plan was not submitted to the NRC since it was apparent that another revision was needed. We believe that the staff should have been informed of this when Revision 3 was submitted."

TVA RESPONSE

TVA acknowledges the comment. It is now TVA's policy to present CAP revisions affecting scope and/or methodology to NRC.

NRC COMMENT 2

"The useability of the Q-List will be determined by the staff during an inspection after the list has been issued for use by TVA personnel. This inspection will evaluate (1) whether those who use the list understand how to use it and they use it properly, (2) whether procedures are in-place on how to use the list and how to keep the list updated in a timely manner, (3) whether the list is available via computer terminals, as well as in hard copy form, (4) whether site-wide implementation of the list is complete by February 28, 1991, and (5) whether the list agrees with Table 3.2.1 of the FSAR. These are our interpretations of the commitments in Enclosure 1 of TVA's November 7, 1990 letter."

TVA RESPONSE

TVA is prepared to support an inspection of the useability of the Q-List at the staff's earliest convenience.

NRC COMMENT 3

"The acceptability of TVA's response to Question 7 cannot be determined until the next FSAR amendment is reviewed to determine whether the updated response to FSAR Question 260.2 is acceptable."

ENCLOSURE 3

NRC COMMENTS FROM THE LETTER OF JANUARY 23, 1991
AND TVA'S RESPONSE
AND
NRC COMMENT FROM INSPECTION REPORTS 50-390/90-08 AND 50-391/90-08
TVA'S RESPONSE

TVA RESPONSE

The letter to NRC dated November 7, 1990, indicated that FSAR Question 260.2 will be updated in the next FSAR amendment to reflect Q-List changes in subsection 17.2-1 resulting from Amendment 57.

Subsequently, in a letter dated September 24, 1991, Additional Diesel Generator (TAC 63606), TVA outlined plans to delete the questions and responses from the FSAR, with the intent that the licensing basis for the plant is to be the FSAR in itself. Accordingly, TVA no longer plans to update FSAR Question 260.2. FSAR subsection 17.2-1 will be updated to address the Q-List and essential quality-related systems.

NRC COMMENT 4

"Revision 4 of the Q-List CAP Plan should be dated. We believe each signature on the cover should be dated. (Note that Supplement 17S-1 of NQA-1 states: "Documents shall be considered valid records only if stamped, initialed, or signed and dated by authorized personnel or otherwise authenticated.")"

TVA RESPONSE

The form cover sheet example in Site Administrative Instruction (SAI)-10.02, "Preparation, Review, and Approval of Corrective Action Programs," currently provides a place for dates corresponding to each signature.

NRC COMMENT FROM NRC INSPECTION REPORT NOS. 50-390/90-08 AND 50-391/90-08 (CONCERNING EQUIPMENT TAGGING IN RELATION TO THE NEW Q-LIST IMPLEMENTATION) AND TVA'S RESPONSE:

NRC COMMENT

"DCN implementation may require additional actions such as....tagging equipment..."

TVA RESPONSE

The new Q-List was issued by Design Change Notices (DCNs) which added component identifiers. Procedures are in place to ensure that components are tagged/retagged, as necessary, due to design changes affecting component identifiers.

ENCLOSURE 4

PROPOSED CHANGE TO FSAR, 17.2.1

17.2.1 Identification of Safety-Related Features

The Watts Bar Nuclear Plant Q-List is a listing of structures, systems, and components covered by the Nuclear Quality Assurance program as set forth in the Nuclear Quality Assurance Plan, TVA-NQA-PLN 89-A.

The Q-List consists of a combination of an itemized section and notes. Items addressed on this list are handled in accordance with the TVA Quality Assurance Program. The Q-List contains safety-related features. Safety-related features are those structures, systems, and components that are necessary to ensure:

1. The integrity of the reactor coolant pressure boundary.

2. The capability to shut down the reactor and maintain it in a safe condition.

3. The capability to prevent or mitigate the consequences of an incident which could result in potential offsite exposures comparable to those specified in 10 CFR 100.

Additionally, the Q-List includes quality-related and some non quality-related features which are not safety-related. TVA identified quality-related features are also defined by the TVA Nuclear Quality Assurance Plan.

The Q-List is in the Equipment Management System (EMS), a QA software database, as a computer generated list and is maintained per engineering site procedure. Hard copy reports, (i.e., Q-List), are extracted from the data base and can be issued as QA design outputs. The EMS data is accessible from computer terminals throughout the plant.

In addition, a sitewide procedure provides guidelines for using the WBN Q-List to determine the 10CFR 50, Appendix B QA program application. Q-List changes are controlled through the design change process/administrative process to ensure continued completeness and accuracy.