

QA RECORDS PROJECT  
STATUS REPORT

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I.

EXECUTIVE SUMMARY

The Additional Systematic Records Review (ASRR) for record quality and hardware reinspections have been completed. Reviews for technical content of records should be completed in early January 1993. The development of resolutions for identified problems, including any additional inspections required, should also be completed in January 1993.

To date the ASRR has reviewed over 13,000 records and reinspected over 1400 individual hardware components. The results of this work continue to be favorable in that no design significant issues have been identified. In addition, the hardware deficiencies that have been identified have generally been found to be enveloped by resolutions provided by existing special corrective action programs; e.g., Corrective Action Programs (CAPs), Special Programs (SPs), Corrective Action Tracking Documents (CATDs), etc. In some cases the resolutions, extent of condition evaluations, and corrective actions are being provided through the ASRR. Record quality issues, particularly the problem of missing records, are being resolved in accordance with Revision 5 of the QA Records CAP. Often these resolutions make use of alternative or supplemental records as discussed in some detail in TVA's report submitted on August 24, 1992.

At the completion of implementation of corrective actions, currently scheduled for July 1993, a QA Records Project Final Report will be issued. In order to disseminate information about the results of the ASRR and the methods used for resolution of identified records problems, a final QA Records ASRR report currently is scheduled to be issued at the end of March 1993. As part of the preparation of the final ASRR report, an integrated assessment is being performed by the Records Project to assure that WBN record types have been adequately covered by reviews and inspections. Further, it will assure that adequate extent of condition evaluations have been made for the identified problems. This assessment will also include an evaluation of the resolutions provided for the "old" source conditions adverse to quality reports (CAQRs) that formed the basis for the QA Records CAP. Through this means, the project will be able to demonstrate comprehensive review of WBN record types and complete investigation of identified record problems. This will provide the confidence needed by TVA to assure that WBN is ready to receive an operating license.

II.

PROJECT STATUS

A. Record Quality Reviews

Initial sample reviews have been completed covering the 186 QA record types from ANSI N45.2.9, Appendix-A that apply to WBN. Development and approval of resolutions for deficiencies found during the initial record quality reviews are now essentially complete. Implementation of resolutions is over 50 percent complete.

B. Hardware Reviews

Sample reinspections have been completed covering over 1400 components. Development and approval of resolutions for deficiencies found during the sample reinspections are well underway.

C. Technical Content Reviews

- Civil/Structural Records Completion Team (RCT)

All Record Plans have been issued for the civil/structural elements and programs:

1. Conduit Supports
2. Cable Tray Supports
3. HVAC Supports
4. Large Bore Pipe Supports
5. Small Bore Pipe Supports
6. Structural and Miscellaneous Steel
7. Foundations
8. Masonry Walls
9. Instrument Line Supports
10. Concrete Structures
11. Large Bore Piping
12. Small Bore Piping
13. Soil Liquefaction

Random technical content reviews have been completed and consist of approximately 2000 TVA records in the civil area. Hardware reinspection discrepancies are presently being resolved or corrective action documents are being initiated. In addition, ordered sample reviews have begun on six civil elements: HVAC, Foundations, Small Bore Pipe Supports, Large Bore Piping, Small Bore Piping, and Cable Tray Supports.

- Mechanical Records Completion Team

All Record Plans have been issued for the mechanical elements and programs:

1. Mechanical Equipment
2. Valves
3. HVAC Ducts and Equipment
4. Coatings
5. Electrical Equipment Qualification
6. Mechanical Equipment Qualification
7. Moderate Energy Line Break
8. Containment Cooling
9. Equipment Seismic Qualification
10. Heat Code Traceability

The review of coatings has been completed. The random and ordered reviews for valves, mechanical equipment, and HVAC equipment are

well underway. The RCT is currently finalizing checklists for these reviews and documenting open issues which will require further investigation with the line organization. The RCT is also continuing the documentation of resolutions of the issues identified during the hardware reinspections.

- Electrical Records Completion Team (RCT)

All Record Plans for the electrical elements and programs have been issued:

1. Cable
2. Cable Raceway
3. Electrical Equipment
4. Instruments
5. Instrument Lines
6. Master Fuse List
7. Control Room Design Review
8. Radiation Monitoring

The review/evaluation of unsatisfactory findings identified during the hardware review are still underway. The random sample technical content reviews for approximately 730 TVA records are nearing completion. The technical content review for the ordered sample has been started on three of the five electrical elements: Cable Raceway, Instruments, and Instrument Lines. The two remaining electrical elements are Cable and Electrical Equipment.

- Workplan Records Completion Team

There have been 413 workplans reviewed in accordance with review procedure QAI-17.03, "Review of Workplans and Maintenance Request." Resolution of the identified potential technical issues is well underway with minimal hardware impact resulting. At this time, it does not appear that continued random review of workplans is warranted; however, extent of condition evaluations may dictate continued reviews on a discipline basis. The ASRR will also assess the available data from the Safety Net Review (SNR) of workplans to ensure the completion of a fully adequate extent of condition evaluation for workplans at WBN. Should it be determined unnecessary to continue to perform reviews, a revision to the QA Records CAP will be made to clarify the total scope of workplans addressed.

Currently, Revision 5 of the QA Records CAP states that a 100 percent evaluation of workplans from the CAP/SP era (1988-1990) will be performed. At the initiation of Revision 5, TVA believed that this population of workplans numbered approximately 225. It was later learned that the population was approximately 575. In light of the larger than expected population, the ASRR has proceeded to evaluate and resolve the deficiencies found during the review of the 275 workplans prior to going ahead with any further reviews. Reviews have been completed by major discipline corresponding in number to the percentage of workplans by discipline in the composite population. Up to the present time,

there have been no design significant deficiencies identified as a result of these evaluations. As stated above, continued review may result upon evaluation of the discipline extent of condition. The combined approach of utilizing both ASRR and SNR data allows for the most effective manner of assessing the overall status of WBN workplans and related hardware.

Workplan indexing to unique identifiers continues to progress in support of the QA Records CAP 75 percent completion milestone.

- Vendor/Material Records Completion Team (RCT)

Record plans have been issued for the following CAP/SPs:

1. Q-List CAP
2. Vendor Information CAP
3. Fire Protection CAP
4. Microbiologically Induced Corrosion (MIC) SP
5. Use-As-Is CAQ SP
6. Welding CAP
7. DBVP CAP
8. Replacement Items Program (RIP) CAP

A team of personnel with significant industry experience in vendor records was established in September 1992 to review over 1000 reels of microfilm. Upon locating vendor QA records on the microfilm, the team is documenting information relevant to record indexing in order to facilitate future retrieval of these records. Standard forms with typical data fields are being used to record this information and transmit it to Document Control and Records Management (DCRM) for input into the computerized records management system. Approximately 30 percent of this effort is complete. Scheduled completion date for this activity is mid-1993.

A number of record types generated by vendors were not required by TVA to be submitted for retention. Typically, suppliers are required to submit records which provide direct evidence of the quality of the final, as-fabricated products; e.g., Code Data Reports, As-Built Drawings, Certificates of Compliance. During audits and surveillances of suppliers facilities, TVA reviewed manufacturing records, as appropriate, to ensure compliance with contract and QA program requirements. Attachment 3 has a list of the record types that have not been required by TVA to be submitted for retention. These records are not being subjected to the review/resolution process of the ASRR. Individual position papers have been developed for each and will be made part of the ASRR Final Report.

#### D. Closure Packages Completed

To date, closure packages have been completed for 77 of 198 ANSI record types for Record Quality. Twelve of the closures justify exclusions of record types that do not apply to WBN at this time. A listing of these closure packages is provided in Attachment 1 to

this enclosure. Attachment 2 contains a list of the record types which have been completed through the random technical content review and resolution process. Completed closure packages are available for review at WBN site. Closure of the remaining record types will be ongoing as corrective action implementation is completed between now and July 1993.

E. QA Records CAP Integrated Assessment

The Integrated Assessment will provide important bases supporting closure of the QA Records CAP. The objective of the integrated assessment is to draw overall conclusions on the adequacy of WBN QA Records and the records management system. Inputs to this assessment include results of past records-related CAQRs to resolve known issues and implementation of the ASRR to identify and resolve any previously undetected issues. The integrated assessment will:

- Collectively assess the results of the ASRR and associated corrective actions that demonstrate that critical records exist and are adequate with respect to quality, technical content, and consistency with the physical configuration.
- Demonstrate that known records issues arising from historical weaknesses identified in previous records-related CAQRs have been resolved.
- Demonstrate that the root cause and extent-of-condition of records deficiencies have been adequately evaluated.
- Demonstrate the adequacy of actions to preclude recurrence of records deficiencies.
- Verify that no additional corrective actions are required.
- Verify that all CAP objectives and commitments have been met.

The Integrated Assessment methodology has been developed and implementation has recently been initiated. This effort is currently scheduled to be completed in March 1993 to support the ASRR Final Report.

III. PROJECT RESULTS

Results of the ASRR reviews and evaluations continue to be favorable in that no design significant issues have been identified. In addition, the hardware deficiencies that have been identified have generally been found to be enveloped by resolutions provided by existing special corrective action programs; e.g., CAPs, SPs, CATDs, etc. In some cases the resolutions, extent of condition evaluations, and corrective actions are being provided through the ASRR. Wherever necessary, the corrective action documents, including Problem Evaluation Reports (PERs), Significant Corrective Action Reports (SCARs), or Record Review Summary Sheets, are referenced to the components of the affected population through the records index to assure retrieval.

A. Civil/Structural

1. Conduit Supports

The ASRR has completed reinspection of the required sample of conduit supports under the hardware review to verify that records accurately reflect the actual physical installation. A number of configuration discrepancies have been identified and have been determined to be the same type of problems that are resolved by the Conduit and Conduit Supports CAP. A record plan has been issued for conduit supports which identifies the essential records to be relied upon for licensing WBN. The RCT has worked with DCRM to develop a program for indexing the record plan to each conduit support. The RCT has worked with the line organization to insure supplemental data sheets are retrievable for conduit supports. These data sheets provide the references to walkthrough/walkdown records and to the qualifying calculations. This activity was a prototype for the methods used for indexing records for other elements and programs.

Specific corrective actions are being performed for the issue of missing conduit support inspection records. The following is an updated status of these corrective actions:

Based on a data base review of inspection records (for those supports confirmed to be in existence with ID tag numbers during the CAP walkthrough), approximately 1,860 supports have nonretrievable inspection records. A random sample of 72 supports from this population were selected for reinspection. Since a typical conduit run is supported by 4 supports, special consideration is being given to those cases where 4 consecutively numbered supports have nonretrievable records. A biased sample for reinspection was developed consisting of the first numbered support for each instance of nonretrievable records for 4 or more consecutively numbered supports. Additionally, a population of supports without ID tags was identified and a random sample of 72 supports was selected for reinspection. In total, over 260 conduit supports will receive a detailed reinspection.

The sample reinspection program, as defined above, is currently in process with an anticipated completion date of February 1993. The results thus far show that the supports conform to design output with a few minor discrepancies noted; however, these discrepancies are enveloped by the CAP and are no different in frequency or magnitude than the ones found on supports with original inspection records.

Upon completion of the Civil/Structural RCT reviews of conduit support records, the record plan will be cross-referenced in the Records Management System (RMS) to each component in the safety-related support population. This is currently scheduled for completion in February 1993.

In order to assure the timely identification and retrieval of the key essential records for licensing and avoid confusion with the

original QC records, TVA will reclassify the original records. These records will be downloaded from the primary RMS index data base and placed in a backup file for reference only. The location of these records will be noted in the system so that those users who have historical needs will be able to access the original records. Reclassifying these records will be done following completion of the new alternate and supplemental records.

## 2. Cable Tray Supports

The ASRR has completed reinspection of the required sample of cable tray supports. The data is under review by the Civil RCT team. Random technical review of ANSI N45.2.9 record categories and TVA record types has been completed for this element. No missing or unacceptable technical data was found during this review for this element.

## 3. HVAC Supports

The ASRR has completed reinspection of the required sample of HVAC supports. The data has been reviewed and a CAQ (WBPER 920007) was issued to resolve the discrepancies. Many of the individual discrepancies were added to the HVAC support CAP source CAQ (WBN870316SCA) and will be resolved as part of the HVAC Support CAP. Eight discrepancies were resolved on DCN Q-21489A and will be identified on SSP-2.A, "Guidelines for Integration of Records Generated by Corrective Action Programs and Special Programs," forms. Random technical reviews of ANSI N45.2.9 record categories and TVA record types have been completed for this element. No missing or unacceptable technical data was found during this review for this element. The ordered review has been started on this element.

## 4. Large Bore Pipe Supports

The ASRR has completed reinspection of the required sample of large bore pipe supports. The data is under review by the Civil RCT team. The discrepancies are within the scope of the Hanger and Analysis Update Program (HAAUP) CAP. Further review of WP 32, "HAAUP Walkdown Procedure," walkdown data, and resulting Design Change Authorizations will be completed to insure compliance prior to completion of this element hardware review. Random technical reviews have been completed for this element. No missing or unacceptable technical data was found during this review for this element. The ordered technical review has been started on this element.

## 5. Small Bore Pipe Supports

The ASRR has completed reinspection of the required sample of small bore pipe supports. The data is under review by the Civil RCT team. Random technical reviews have been completed for this element. No missing or unacceptable technical data was found

during this review for this element. The ordered sample review has begun on this element.

#### 6. Structural and Miscellaneous Steel

The ASRR has completed reinspection of the required sample of structural and miscellaneous steel. The data is presently being reviewed by the Civil RCT. Random technical reviews are nearing completion on this element. One technical record omission has been discovered in the area of material toughness testing on the containment vessel. The Charpy V-notch test results were available for all but one CMTR for half-inch material. This issue will be investigated and appropriate steps taken to resolve the apparent omission of information. These steps will include retesting and regeneration of records if necessary. The ordered sample review has begun on this element.

#### 7. Foundations

The ASRR has completed reinspection of the required sample of foundations. The data has been reviewed by the Civil RCT team with no significant unresolved discrepancies identified. Random technical reviews have been completed for this element with no adverse technical data findings.

#### 8. Masonry Walls

The ASRR has completed reinspection of the required sample of masonry walls. This hardware data has been reviewed by the Civil RCT team with no significant unresolved discrepancies identified. Random technical reviews have been completed for this element with no adverse technical data findings.

#### 9. Instrument Line Supports

The ASRR has completed reinspection of the required sample of the instrument line supports. The hardware data was reviewed and resolved with the exception of two outliers, misrouted instrument line through incorrect penetration and bolts undertorqued, which were incorporated into a CAQ (WBPER920070). This CAQ is being resolved, in part, by a testing program. The testing program was performed by Singleton Laboratories (SL Report 209-101A), which tested 1/2-inch, 3/8-inch, and 1/4-inch instrumentation clamps with torque values set at the lowest value found in a plant reinspection. The purpose of the test was to determine acceptability of lower torque values for previously installed bolting. These results were used for engineering disposition. These values were not previously covered by Engineering requirements. The resulting test values in combination with a qualifying calculation show that the clamps with reduced torque can be accepted as-is. Random technical reviews have been completed for this element with one finding to be resolved dealing with recess of concrete anchors.

## 10. Concrete Structures

The ASRR has completed reinspection of the required sample of concrete structures. The hardware data was reviewed and resolution of the discrepancies was accomplished by a Q-DCN (Q-18881-B). Random technical reviews have been completed for this element with no adverse findings.

### B. Mechanical

#### 1. Coatings

As previously reported, inconsistencies had been found in the documentation of the qualification of containment coatings. WBPEN 920196 was initiated to address these inconsistencies. As a result, a Quality Information Request was issued to provide the qualification of containment coatings, and to provide retrievability to the coating qualifications.

#### 2. Large and Small Bore Piping

Three efforts are currently well underway, the N-5 program, the resolution of hardware issues from the ASRR sample reinspections, and the technical content reviews. Each effort is discussed below.

The N-5 program has completed its first phase, which entailed the review of records for systems at the point of each system's original transfer to Operations. In addition to the actions cited in our last status report, the N-5 program has identified isolated instances of missing NPP-1 forms. This has been documented in WBPEN920273 for resolution.

The second phase of the N-5 program was initiated in October 1992. During the second phase, the N-5 program is looking at changes made to system configurations since the original turnover to Operations. This effort will continue through March 1993.

The evaluation of ASRR sample hardware reinspection results for large and small bore piping has been completed. Numerous issues originally identified as discrepancies have been resolved. Random technical content reviews are nearing completion, and no unacceptable or missing technical content has yet been discovered.

#### 3. Mechanical Equipment

The technical content review is in progress. To date, the only issue that has been identified is regarding vendor requirements for bolt torque for the RHR Vertical Heat Exchanger. Instances were found where vendor requirements and torque testing requirements were not addressed during installation. WBPEN920269 was initiated to address the problem. The extent of this condition is under evaluation.

The resolution of hardware issues uncovered one problem regarding missing documentation for a Class 3 weld at an interface with a commercial grade air filter. The problem was documented in WBPER920195. A corrective action plan is being developed.

#### 4. Valves

The sample hardware review of valves identified that certain types of Class 3 threaded connections were not inspected or documented in accordance with TVA installation procedures. The threaded connections were at isolation valves for flow measuring annubars. The issue is being tracked with WBPER920229. A corrective action plan is being developed.

To date, the technical content review of valve records has not identified any problems.

#### 5. HVAC Equipment

The random and ordered technical content review is still in progress, with no issues uncovered, to date.

The sample hardware reinspection found no problems with HVAC equipment. The documentation of the reinspection is in progress.

### C. Electrical

#### 1. General

Validation of the record plans are currently underway and will be finalized upon completion of the technical content reviews for the random/ordered samples. To date, no design significant (primary) deficiencies have been identified from the hardware reinspections or the random sample technical content reviews. Relative to the secondary deficiencies described below, (1) none have been identified which would have an adverse impact on the safe operation or safe shutdown of the plant; (2) a number of the issues, such as cable bend radius and cable damage are being addressed by previously identified corrective action programs; and (3) the number of deficiencies confirmed to date appear within the established acceptance criteria for the rate of deficiencies.

#### 2. Cable

The initial issue of the record plan has been completed. The technical content review for the random sample is nearing completion with some open items that will require additional evaluation; a number of secondary deficiencies (e.g., math errors in calculating cable lengths, incorrect start/stop footage markers, minor errors associated with the calculated maximum allowable conductor pulling force, etc.) have been identified in the installation documentation containing technical content. The errors associated with the cable pulling tension calculations

will be evaluated in light of TVA's response to NRC Violation 390/92-01-03 dated October 28, 1992, and SCAR WBSA920041.

Evaluation/disposition of findings from the sample hardware reinspections is well underway. A number of secondary deficiencies (e.g., incorrect identification tags, minimum bend radius violations, conductor insulation damage, terminal lug installations which do not conform to the current acceptance criteria, etc.) have been confirmed and identified for rework where needed.

### 3. Cable Raceway

The initial issue of the record plan has been completed. The technical content review for the random sample is nearing completion with no open items and no secondary deficiencies identified at this time.

Evaluation/disposition of findings from the sample hardware reinspections is well underway. A number of secondary deficiencies (e.g., incorrect/missing identification tags, missing cable tray covers, etc.) have been confirmed and identified for rework where needed.

### 4. Electrical Equipment

The initial issue of the record plan has been completed. The technical content review for the random sample is well underway; no secondary deficiencies have been identified at this time.

Evaluation/disposition of findings from the sample hardware reinspections is nearing completion. A number of secondary deficiencies (e.g., incorrect identification tags, incorrect drawing references, etc.) have been confirmed and identified for rework where needed.

### 5. Instruments

The initial issue of the record plan has been completed. The technical content review for the random sample is complete since none of the sampled records contained technical content.

Evaluation/disposition of findings from the sample hardware reinspections is nearing completion. A number of secondary deficiencies (e.g., incorrect identification tags, damaged pressure gauge, etc.) have been confirmed and identified for rework where needed.

### 6. Instrument Lines

The initial issue of the record plan has been completed. The technical content review for the random sample is nearing completion with no open items and no deficiencies (primary or secondary) identified at this time.

Evaluation/disposition of findings from the sample hardware reinspections is underway. A number of secondary deficiencies (e.g., "gouges," loose fittings, low points, etc.) have been confirmed and identified for rework where needed.

#### IV. CONCLUSION

From the preceding sections, it is apparent that considerable work is being completed on the QA Records CAP. Substantial progress has been made since the last status report submitted to NRC on August 24, 1992. The results of this work continue to be favorable in that no design significant (primary) issues have been identified to date. In addition, the secondary deficiencies identified have generally been found to be enveloped by resolutions provided by existing special corrective action programs; e.g., CAPs, SPs, CATDs, etc. In certain cases, additional work is being performed to evaluate problems, determine extent of condition, and provide corrective actions.

Near-term schedule milestones include completion of the reviews and resolutions in January 1993. The Integrated Assessment, which will provide important bases supporting closure of the CAP, has been initiated and is scheduled for completion by March 1993. Data from the Integrated Assessment and the ASRR will be reported in the ASRR Final Report, which is scheduled for the end of March 1993. This Final Report will provide a comprehensive explanation of the reviews and inspections performed by the ASRR and the methods used to resolve deficiencies identified, the resolution of "historical" records-related CAQs, and the bases for closure of the CAP.

The major task remaining after March 1993 is the completion of implementation of corrective actions. One of the most important activities in this task is the enhancement of the records indexing data base. This will provide improved retrievability through a more user oriented record management system and more rapid and successful record searches. This activity is due to be completed in July 1993. The overall conclusions upon completion of implementation will be included in the QA Records Project Final Report.

ATTACHMENT 1

RECORDS CLOSURE PACKAGES  
RECORDS QUALITY REVIEWS

<u>Number</u>	<u>ANSI Type</u>	<u>Description</u>
1.	A10	Purchase and Design Specification and Amendments
2.	A11	QA Audit Reports of NE Systems
3.	A13	Safety Analysis Report
4.	A14	Stress Reports
5.	A15	System Descriptions
6.	B01	Aggregate Test Reports
7.	B02	Batch Plant Operation Reports
8.	B04	Checkoff Sheets Off for Tendon Installation
9.	B05	Concrete Cylinder Test Reports and Charts
10.	B06	Concrete Mix Design Reports
11.	B08	Inspection Reports for Channel Pressure Tests
12.	B09	Material Property Reports on Containment Liner and Accessories*
13.	B10	Material Property Reports on Metal Containment Shell and Accessories
14.	B13	Material Property Reports on Steel Embedments in Concrete
15.	B14	Material Property Reports on Steel Piling
16.	B15	Material Property Reports on Structural Steel and Bolting
17.	B17	Mix Water Chemical Analysis
18.	B19	Pile Loading Test Reports
19.	B20	Procedure for Containment Vessel Press/Proof Test & Leak Rate Test
20.	B21	Reinforcing Steel Splice Operator Qualification Reports
21.	B22	Release to Place Concrete

\*Do not apply to WBN at this time.

ATTACHMENT 1

RECORDS CLOSURE PACKAGES  
RECORDS QUALITY REVIEWS

<u>Number</u>	<u>ANSI Type</u>	<u>Description</u>
22.	B23	Reports for Periodic Tendon Inspection*
23.	B26	Soil Compaction Test Reports
24.	C11	Voltage Breakdown Tests on Liquid Insulation
25.	D04	QA Field Audit Reports
26.	E04	Code Data Reports
27.	E11	Lubrication Procedures
28.	E13	Material Property Records (CMTRS)
29.	E16	Pipe and Fitting Material Property Reports
30.	E18	Safety Valve Response Test Procedure
31.	G03	Receipt Inspection Reports on Items
32.	H01	Ferrite Test Procedures
33.	H04	Heat Treatment Records
34.	H06	Liquid Penetrant Test Procedures
35.	H08	Magnetic Particle Test Procedures
36.	H10	Radiographic Test Final Results
37.	H12	Ultrasonic Test Final Results
38.	H15	Weld Location Diagrams
39.	H18	Welding Filler Metal Material Reports
40.	H19	Welding Materials Control Procedures
41.	H20	Welding Personnel Qualifications
42.	J06	Eddy Current Examination Procedures
43.	K01	Abnormal Occurrence Records

\*Do not apply to WBN at this time.

ATTACHMENT 1

RECORDS CLOSURE PACKAGES  
RECORDS QUALITY REVIEWS

<u>Number</u>	<u>ANSI Type</u>	<u>Description</u>
44.	K03	Current Individual Plant Staff Member Qualification Exp, Tran & Rec
45.	K04	Minutes of Meetings of the Plant Nuclear Safety Committee
46.	K05	New/Spent Fuel Inventory, Transfer of Fuel, and Assembly History
47.	K06	Normal Nuclear Unit Operations Including Power Levels*
48.	K07	Offsite Environmental Monitoring Survey Records
49.	K12	Radioactive Shipment Records
50.	K13	Radioactivity Levels of Liquid and Gaseous Waste Released*
51.	K14	Reactor Coolant System In-Service Inspection Records*
52.	K16	Special Reactor Test/Experimental Records
53.	K17	Transient/Operational Cycling Records for Plant Components
54.	M01	Automatic Emergency Power Source Transfer Procedures and Results
55.	M02	Final Systems Adjustment Data
56.	M03	Flushing Procedures and Results*
57.	M04	Hydrostatic Pressure Test Procedures and Results*
58.	M05	Initial Heatup, Hot Functional and Cooldown Procedures and Results
59.	M06	Initial Plant Loading Data*
60.	M07	Initial Reactor Criticality Test Procedures and Results
61.	M08	Instrument AC Systems and Inverters Test Procedures and Reports
62.	M09	Main and Auxiliary Power Transformer Test Procedures and Results

\*Do not apply to WBN at this time.

ATTACHMENT 1

RECORDS CLOSURE PACKAGES  
RECORDS QUALITY REVIEWS

<u>Number</u>	<u>ANSI Type</u>	<u>Description</u>
63.	M10	Offsite Emergency Power Source Energizing Procedure and Results
64.	M11	Onsite Emergency Power Source Test Procedures and Test Reports
65.	M12	Plant Load Ramp Change Data*
66.	M13	Plant Load Step Change Data
67.	M14	Power Transmission Substation Test Procedures and Results
68.	M15	Preoperational Test Procedures and Results
69.	M16	Primary & Secondary Auxiliary Power Test Procedures and Results
70.	M17	Reactor Protection System Tests and Results
71.	M18	Startup Logs*
72.	M19	Startup Problems and Resolutions*
73.	M20	Startup Test Procedures and Results
74.	M21	Station Battery and DC Power Distribution Test Procedure and Reports
75.	N02	Procurement Procedures
76.	N05	Purchaser's Pre-Award Quality Assurance Survey
77.	N06	Receiving Records

\*Do not apply to WBN at this time.

ATTACHMENT 2

COMPLETED RECORDS TYPES  
RANDOM TECHNICAL CONTENT REVIEW  
AND RESOLUTION PROCESS

<u>NUMBER</u>	<u>RECORD TYPE</u>	<u>DESCRIPTION</u>
1	B01	Aggregate Test Reports
2	B02	Batch Plant Operations
3	B04	Check-off Sheets for Tendon Installation
4	B05	Concrete Cylinder Test Reports and Charts
5	B06	Concrete Design Mix Reports
6	B08	Inspection Reports for Channel Pressure Tests
7	B09	Material Property Reports on Containment Liner and Accessories
8	B13	Material Property Reports on Steel Embedments in Concrete
9	B14	Material Property Reports on Steel Piping
10	B17	Mix Water Chemical Analysis
11	B19	Pile Loading Test Results
12	B20	Procedure for Containment Vessel Press-Proof Test and Leak Rate Test and Res
13	B21	Reinforcing Steel Splice Operator Qualification Reports
14	B22	Release to Place Concrete
15	B23	Reports for Periodic Tendon Inspection
16	C11	Voltage Breakdown Tests on Liquid Insulation
17	D04	Field Audit Reports
18	E04	Code Data Reports
19	E11	Lubrication Procedures
20	E13	Material Property Reports (CMTRs)
21	E16	Pipe and Fitting Material Reports
22	E18	Safety Valve Response Test Procedures
23	G03	Receipt Inspection Reports on Items
24	H01	Ferrite Test Procedures
25	H06	Liquid Penetrant Test Procedures
26	H08	Magnetic Particle Test Procedures
27	H15	Weld Location Diagrams
28	H19	Welding Materials Control Materials
29	H20	Welding Personnel Qualifications
30	J06	Eddy Current Examination Procedures
31	K01	Abnormal Occurrence Procedures
32	K03	Current Individual Plant Staff Member Qualification, Experience, Training, and Records
33	K04	Minutes of Meetings of the Plant Nuclear Safety Committee
34	K05	New/Spent Fuel Inventory, Transfer of Fuel, and Assembly History
35	K06	Normal Nuclear Unit Operation Including Power Levels
36	K07	Offsite Environmental Monitoring Survey Records

ATTACHMENT 2

COMPLETED RECORDS TYPES  
RANDOM TECHNICAL CONTENT REVIEW  
AND RESOLUTION PROCESS

<u>NUMBER</u>	<u>RECORD TYPE</u>	<u>DESCRIPTION</u>
37	K12	Radioactive Shipment Records
38	K13	Radioactivity Levels of Liquid and Gaseous Waste Released
39	K14	Reactor Coolant System In-service Inspection Records
40	K16	Special Reactor Test/Experiment Records
41	K17	Transient/Operational Cycling Records for Plant Components
42	M01	Automatic Emergency Power Source Transfer Procedure and Results
43	M02	Final Systems Adjustment Data
44	M03	Flushing Procedures and Results
45	M04	Hydrostatic Pressure Test Procedures and Results
46	M05	Initial Heatup, Hot Functional and Cooldown Procedures and Results
47	M06	Initial Plant Loading Data
48	M07	Initial Reactor Criticality Test Procedures and Results
49	M08	Instrument AC Systems and Inverters Test Procedures and Results
50	M09	Main and Auxiliary Power Transformer Test Procedures and Test Results
51	M10	Offsite Power Source Energizing Procedure and Test Results
52	M11	Onsite Emergency Power Source Energizing Procedures and Test Reports
53	M12	Plant Load Ramp Change Data
54	M13	Plant Load Step Change Data
55	M14	Power Transmission Substation Test Procedures and Results
56	M15	Preoperational Test Procedures and Results
57	M16	Primary and Secondary Auxiliary Power Test Procedures and Results
58	M17	Reactor Protection System Tests and Results
59	M18	Startup Logs
60	M19	Startup Problems and Resolutions
61	M20	Startup Test Procedures and Results
62	M21	Station Battery and DC Power Distribution Test Procedures and Reports
63	N02	Procedure Procedures
64	N05	Purchaser's Pre-Award Quality Assurance Survey
65	N06	Receiving Records

ATTACHMENT 3

VENDOR RECORDS NOT REQUIRED BY TVA  
TO BE SUBMITTED FOR RETENTION

- Ferrite Test Procedures
- Vendor Heat Treatment Procedures
- Magnetic Particle Examination Procedures
- Liquid Penetrant Examination Procedures
- Radiography Procedures
- Ultrasonic Examination Procedures
- Packaging, Receiving and Storage Procedures
- Welding Material Control Procedures
- Cleaning Procedures
- Pressure Test Procedures
- Supplier's QA Program Manual
- QA Manuals, Procedures and Instructions
- Certificate of Inspection and Test Personnel
- Welding Personnel Qualification
- Welding Procedures, Qualification & Data Report
- Vendors Work Processing and Sequencing Documents
- Electrical Control Verification Test Results
- Vendor's QA Audit Program