

REQUEST FOR RECORDS DISPOSITION AUTHORITY <i>(See Instructions on reverse)</i>		LEAVE BLANK	
TO: GENERAL SERVICES ADMINISTRATION NATIONAL ARCHIVES AND RECORDS SERVICE, WASHINGTON, DC 20408		JOB NO. NCL-142-85-12	DATE RECEIVED 7/25/85
1. FROM (Agency or establishment) TENNESSEE VALLEY AUTHORITY		NOTIFICATION TO AGENCY	
2. MAJOR SUBDIVISION		In accordance with the provisions of 44 U.S.C. 3303a the disposal request, including amendments, is approved except for items that may be marked "disposition not approved" or "withdrawn" in column 10. If no records are proposed for disposal, the signature of the Archivist is not required.	
3. MINOR SUBDIVISION			
4. NAME OF PERSON WITH WHOM TO CONFER	5. TELEPHONE EXT.	DATE 11-28-86	ARCHIVIST OF THE UNITED STATES <i>Frank S. Bunker</i>
6. CERTIFICATE OF AGENCY REPRESENTATIVE			

I hereby certify that I am authorized to act for this agency in matters pertaining to the disposal of the agency's records; that the records proposed for disposal in this Request of _____ page(s) are not now needed for the business of this agency or will not be needed after the retention periods specified; and that written concurrence from the General Accounting Office, if required under the provisions of Title 8 of the GAO Manual for Guidance of Federal Agencies, is attached.

A. GAO concurrence: is attached; or is unnecessary.

B. DATE	C. SIGNATURE OF AGENCY REPRESENTATIVE	D. TITLE		
3-20-86	 RONALD E. BREWER	ASSISTANT TVA ARCHIVIST		
7. ITEM NO.	8. DESCRIPTION OF ITEM <i>(With Inclusive Dates or Retention Periods)</i>		9. GRS OR SUPERSEDED JOB CITATION	10. ACTION TAKEN <i>(NARS USE ONLY)</i>
	Records of Power Program Function (See Attached)			

I. PRE-ARMS (Pre Automated Records Management System)

Pre-ARMS refers to records created prior to January 1, 1979, in the Office of Power. The majority of the records are in hard copy but some are microfilmed. The following Pre-ARMS record series exist:

A. Power Manager's Files

The central files of the Department of Electricity (later to be called Office of Power) were established in 1934 and designated as the official file of the Authority. In 1938 the central files became known as the Power Manager's Files. During 1956 a review of this system was done. Growth trends and organizational requirements resulting from the reorganization in Power offices and the re-location of offices determined that some segments of the central files should be relocated as new file stations. Effective June 1, 1961, a decentralization of files took place. Official files were established in certain organizations where they could be of maximum service.

- o Official files were established in the Division of Power Systems Operations (See Item C), and the Division of Power Production (See Item D). Reference copies had been retained by these organizations and at the point of decentralization no material was relocated. Other file materials remained in Manager's Files as a general and informational file for the entire Office of Power.
- o The Power Manager's Files served as the official file for the Division of Power Marketing (See Item F), Division of Power Planning and Engineering (See Item B), and Power Manager's Office, including all staffs. Then on January 1, 1972, the Division of Transmission Planning and Engineering (formerly the Division of Power Planning and Engineering) files which were located in Manager's Files were decentralized and became an official file.
- o Power Research Staff Files (See Item E) were located in Manager's Files until April 1, 1976, when an official Branch file was established. This organization became the Division of Energy Demonstration and Technology in 1979.
- o Energy Conservation and Rates (See Item G) was organized in the fall of 1978. Its records were kept in Manager's Files.

The Manager's Files was closed as of May 1985. These records date from 1934 through 1978. Approximately 1,068 cubic feet of records were stored, of which 850 cubic feet are in the Chattanooga Records Center and 218 cubic feet are stored in the Muscle Shoals Records Center. All records are coded using the alpha-numeric system. (See attachment 1)

Disposition: (1) Offer to NARA at the end of CY 2000.
(2) File Manual - Offer to NARA at end of CY 2000.

B. Division of Transmission Planning and Engineering Files

This division performed planning and engineering for the transmission and communication systems required to deliver power to the customers. In 1972 Transmission Planning and Engineering (TP&E) began their own official file and in 1981 was renamed Transmission System Engineering and Construction. After being reorganized in 1984, it became Transmission System Engineering Project (TSEP).

A total of 147 cubic feet of hard copy records are maintained by TSEP dated from 1934 through 1978 of which 18 cubic feet are stored in the Chattanooga Records Center. All records are coded using the alpha-numeric system. (See attachment 2).

Disposition: Destroy when no longer needed for administrative use.

C. Division of Power System Operations Files

Division of Power System Operations (PSO) operated the transmission and communication system network to deliver power from sources of supply to delivery points serving power contractors. It determined system loading; performed dispatching; and provided relaying, protection, test, and maintenance services. It performed its field work through a district operating and maintenance organization.

PSO maintains 199 cubic feet of hard copy records of which 4 cubic feet are stored in the Muscle Shoals Record Center. These records date from 1960 through 1978. All records are coded using the alpha-numeric system. (See attachment 3).

Disposition: Destroy when no longer needed for administrative use.

D. Division of Power Production Files

This division operated and maintained all TVA hydro-electric, fossil- and nuclear-fuel, and steam-electric generating plants and appurtenant facilities.

In 1979 Power Production split forming the Division of Nuclear Power and the Division of Fossil and Hydro. The correspondence files (See attachment 4) were separated with each division taking the records pertinent to their designated function. Most of this correspondence was microfilmed with the remaining records being sent to the Chattanooga Records Center for storage.

D. Division of Power Production Files (Continued)

1. Nuclear Power maintains 93 microfilm cartridges of records. Sixteen cubic feet of hard copy records are stored in the Chattanooga Records Center. These records date from 1950 through 1978. All records are coded using the alpha-numeric system.

Disposition: a. Microfilm

1. Silver halide original. Permanent offer to NARA at end of CY 2000. Transfer to FRC immediately upon approval of schedule.
 2. Silver halide original - Maintain in Agency. Transfer to NARA at end of CY 2000.
- b. Paper records - Offer to NARA at end of CY 2000.
c. File Manual - Offer of NARA at end of CY 2000.
2. Fossil and Hydro maintains 112 microfilm cartridges of records. Two hundred and sixty-six cubic feet of hard copy records are stored in the Chattanooga Records Center. These records date from 1933 through 1978. All records are coded using the alpha-numeric system.

Disposition: a. Microfilm

1. Silver halide original. Permanent offer to NARA at end of CY 2000. Transfer to FRC immediately upon approval of schedule.
 2. Silver halide original - Maintain in Agency. Transfer to NARA at end of CY 2000.
- b. Paper records - Offer to NARA at end of CY 2000.
c. File Manual - Offer to NARA at end of CY 2000.

This certifies that the records described on this form will be microfilmed in accordance with the standards set forth in 36 CFR Part 1230

E. Energy Research Files

Coordinates research activities for the Office of Power. Keeps informed of and evaluates new developments and improvements in methods and facilities relevant to the broad field of electric power supply. Initiates research projects and formulates and recommends policies to encourage and facilitate power research activities. It assists in the management of major experimental developmental or demonstration projects.

E. Energy Research Files (Continued)

The Power Manager's Files served this organization as an official file until 1976 when an official file (See attachment 5) was established for the staff. This staff became known as the Division of Energy Demonstration and Technology in 1979. In 1984 it was decided to close the files as the division had been using ARMS as an official file since 1979. All correspondence files were inventoried, boxed, and 266 cubic feet were transferred to the Chattanooga Records Center. All records are coded using the alpha-numeric system.

- Disposition: 1. Offer to NARA at end of CY 2000.
2. File Manual - Offer to NARA at end of CY 2000.

F. Division of Power Utilization Files

Power Marketing became Power Utilization in 1975 (See Item A). The Division of Power Utilization markets TVA power in accordance with power program objectives. It initiates and carries out programs to encourage the efficient use of electricity at the lowest feasible cost and encourages use of power as a tool in the regional development. It develops and maintains systems and procedures for analysis of the power market and for forecasting the future power requirements and expected revenue from power sales in TVA service area. It initiates, negotiates, and administers all contracts relating to the sale, resale, and interchange of TVA power with power customers including distributors of TVA power, directly served industries, Federal agencies, and other TVA division using TVA power, and also with neighboring utilities; and arranges for and coordinates the participation of other Power divisions and offices of TVA and of outside agencies in matters affecting the marketing of power.

The Power Manager's Files served this organization as an official file.

G. Energy Conservation and Rates Files

The Division of Conservation and Energy Management designs, develops, tests, demonstrates, evaluates, and provides training and education on a wide variety of conservation and energy management programs and activities for implementation through TVA, national, and State organizations to promote the efficient, effective use of electric energy and fuel resources by ultimate consumers. In the development and evaluation of major programs, working closely with other division and organizations to achieve improved power supply and system integrity through the efficient use of electric and economy loading.

The Power Manager's Files served this organization as an official file.

II. ARMS (Automated Records Management System)

~~On January 1, 1979, the Automated Records Management System (ARMS) was established and became the official record system for the Office of Power and all record copies were microfilmed under the system.~~

Documents submitted by the Office of Power (POWER) to the Automated Records Management System (ARMS) are evaluated, microfilmed, and indexed into the central site computer. The permanent record may be stored on 16mm roll microfilm or 105mm microfiche and/or hard copy. The microfilming may be done randomly or as a unit (batch) depending on organizational requirements. The computerized index provides multiple access points to the location of the record on microfilm.

TVA's Office of Power has the responsibility of providing an ample supply of reliable energy at the lowest possible cost to over 2.8 million consumers in parts of seven states. POWER records reflect the development of plans, policies, and programs which are necessary to meet the current demands for power as well as for the forecasting and plans for meeting future power needs in the 7-state Valley Region.

ARMS's records relate to the following functions or programs for which POWER is responsible:

- o ADMINISTRATION, personnel, information services, legal policies, health and safety, contracts, computer programs and systems development, training policies, and activities.
- o CONSERVATION & ENERGY MANAGEMENT, home insulation, heat pump financing, low-income initiatives, Commercial & Industrial program, thermal storage, cycling programs, solar energy, solar buildings, solar water heaters, wood heaters, biomass, etc.
- o ENERGY DEMONSTRATIONS & TECHNOLOGY, identification of research, development and demonstration programs/projects in environmental science and technology, fossil power generation, nuclear power generation, electric power transmission systems, efficient electricity, and use technologies.

- ~~o ENERGY SUPPLY - Operations Support, development of systems to provide centralized materials management, engineering laboratory services, engineering and project review, storeroom operations and repair, and maintenance services in support of the TVA power system.~~
- ~~- Transmission System Engineering, planning, design, and construction of all new transmission lines, communication facilities, substations, and related facilities of the TVA power system. Provisions for initial clearing of rights-of-way for new transmission lines and communication facilities. Alterations and maintenance services to structures and utilities throughout the power system.~~
- o ENERGY USE AND DISTRIBUTOR RELATIONS, formulation of policies and programs for the contractual distribution of TVA power and implementation of conservation and utility rate policies. Application of rates and development of power supply arrangements while ensuring efficient use of electric energy in power supply. Administration of all contracts relating to the sale, resale, purchase, and interchange of TVA power with power customers, including distributors of TVA power, directly served industries, Federal agencies, and other TVA divisions and neighboring utilities using TVA power.
- o FINANCIAL MANAGEMENT, financial planning and budgeting for power programs, cost and accounting activities, bonds, funds, rates, and taxes.
- o FUELS AND FUEL HANDLING - Fossil Fuels, coal reserves and receiving procedures, limestone supply and demand, oil purchase programs, adequacy of fossil fuel resources, technological studies of factors affecting costs of fuel production and transportation, provisions necessary for compliance with air quality standards.

 - Nuclear Fuels, nuclear fuel cycle design and supply activities, nuclear unit refueling, fuel cycle services, such as conversion, enrichment, fabrication, transportation, and spent fuel storage.
 - Uranium Concentrates, processing and procuring uranium, uranium reserve acquisition, environmental evaluation reports and impact statements for mineral rights, ~~mining and milling operations, and~~ contractor activities.

~~o POWER OPERATIONS - Fossil and Hydro Power, operation and maintenance~~

~~of all TVA hydro-electric, fossil-fuel and steam-electric generating plants and appurtenant facilities. The objective is safe, efficient, and environmentally sound operations of the plants.~~

- ~~- Nuclear Power, operation and maintenance of TVA nuclear generating plants and appurtenant facilities. Ensuring that nuclear production activities comply with Nuclear Regulatory Commission operating license and established standards and requirements. Development of programs in the areas of quality assurance and compliance, health physics, emergency preparedness and protection, industrial safety, and training.~~
- ~~- Power System Operations, operation and maintenance of the transmission and communication system network to deliver power from sources of supply to delivery points serving power contractors. Determination of system loading dispatching performance, provision of relaying protection and field test, and maintenance services.~~

Office of Coal Gasification records began to be accumulated in October 1979 in the Office of Power with the inception of the Fuel Cells Unit in the Division of Energy Demonstration and Technology. Records previous to October 1979 relating to the Coal Gasification were handled by the Division of Energy Demonstration and Technology. (See Item E in Pre ARMS). Beginning January 1, 1979 all material was filmed under the ARMS system. Prior to January 1, 1979 all copies were filed in the division file of the Division of Energy Demonstration and Technology.

Because of retrieval convenience and oversize document format, certain voluminous records of long-term value and attachments to records are indexed in the computer but are not microfilmed as part of the system and will be retained in hard copy.

Certain records, mostly quality assurance documents, created prior to January 1, 1979 documenting functions or programs of POWER are microfilmed and indexed as part of the ARMS system. (NCI-142-82-13)

o POWER OPERATIONS (Continued)Disposition:

- A. Paper Copies - Destroy in Agency when acceptable microfilm is obtained.
- B. Microfilm (Documents are arranged by chronologically on film; film is arranged by roll number approximate annual accumulation 100 rolls/yr.)
1. Record Copy Permanent. Transfer quarterly to Federal Records Center, East Point, Georgia.
 - a. (silver original) and
 - b. 1 duplicate copy (silver duplicate)
 Offer to NARA at end of CY when 25 years old.
 2. All other copies - Destroy in Agency when no longer needed for reference
- C. Computer Output Microfiche Index (Cumulative)
1. TVA copy - Destroy in Agency when superseded.
 2. NARA copy - Transfer latest copy annually (when 25 years old) to NARA with related film. NARA will retain as finding aid until superseded, then destroy.
- D. Computerized Index (Cumulative)
1. TVA copy - Destroy in Agency when superseded.
 2. Record copy - Permanent. Transfer annually (when 25 years old) from disc to magnetic tape and send to NARA along with related film.
- E. All manuals, procedural indexes, guides, documentation and any necessary information retrieval routines--Transfer to NARA the current version with related film. NARA to destroy when superseded.

(This certifies that the records described on this form will be microfilmed in accordance with the standards set forth in 41 CFR 101-11-506.)

III. Short Term Records

Beginning January 1, 1984 certain records previously microfilmed in ARMS have been determined to have a short-term value to the agency as they do not document official functions or programs of Power. These records should be downgraded from permanent value to temporary and will not be microfilmed with a computerized index. (See Temporary List).

Disposition: Destroy when no longer needed for reference, not to exceed two years.

TEMPORARY LISTOFFICE OF POWER

Documents Identified for Temporary Retention (Not to Exceed Two Years)

(Does Not Include Any Policy or Procedural Documentation)

1. Administration

- a. Construction and Maintenance Damage Claim, Investigation and Release (form TVA 2079 or equivalent) and related correspondence.
- b. Documents concerning visits and tours of TVA facilities (Includes Office of Power Current Visitors' Schedule, correspondence regarding Visitors' Slide Presentation).
- c. Documents concerning requests for and approval of hospitality funds.
- d. Documents concerning requests for and approval of expenditures of recognition award and/or safety award funds.
- e. Informational copies of speeches by non-POWER personnel, drafts of all speeches (if final copy received) and Power Information Office speech reports.
- f. Routine requests for and transmittals of advertising and promotional materials, informational copies of brochures, pamphlets, reports, various types of printed publications available for widespread distribution, and correspondence regarding subscriptions to various publications.
- g. Documents concerning vacancies, recruitment, terminations (excludes correspondence regarding outplacement assistance).
- h. Documents concerning change of official duty station, employee work schedules (overtime requests), Power Information Staff duty roster.
- i. Documents concerning gratuities, charities, United Fund campaign, Blood Assurance, U. S. Savings Bond drives, and similar campaigns.
- j. Layoff Record-Trades and Labor Temporary Construction Hourly Employees (form TVA 3824L or equivalent).
- k. Documents concerning merit pay plan monitoring, within grade increases and lists of employees eligible for either.
- l. Documents concerning appointment of job stewards, crew stewards, and other union representatives.

1. Administration (continued)

- m. Retention Register forms.
- n. Directory of distributors of TVA power and other documents concerning distributors' governing boards and personnel, and directories from outside organizations.
- o. Correspondence concerning commendations and awards for outstanding job performance and participation in various programs.
- p. Announcements and schedules of various training courses, seminars, workshops and conferences, and correspondence concerning participation (includes Employee Training and Development forms TVA 7719, 7719A or equivalent).
- q. Requests for and approval of audio visual materials, office furniture and equipment.
- r. Common courtesy letters (routine correspondence expressing appreciation, gratitude, etc.)
- s. Questions and responses to Citizen Action Line, Knoxville 4000, and Feedback (Information Office programs).
- t. Documents concerning dedications, open house ceremonies, and various promotional programs for the general public.
- u. News clippings, news releases, excerpts from magazines, etc. and letters to the news media.
- v. Approval of publications by Power Information Office.
- w. Articles for and distribution of TVA employee publications, Power Dispatch, Inside TVA, System Wide, etc.
- x. Surveys and questionnaires from outside utilities and companies submitted to TVA for completion (completed copies should be retained).
- y. TVA Log-Items of interest to television news organizations.

2. Contract Administration

- a. Spot coal contracts (includes contract, invitation to bid, all correspondence and reports concerning spot coal).
- b. Drafts of power contracts should be retained two full years after execution of contract (excludes contracts with Federal customers and private utilities; original draft of these is permanent).

3. Financial Management

- a. Cash Account Summary (form TVA 151A or equivalent).
- b. Documents concerning changes in line location account numbers, changes to listing of operating location numbers and/or names of substations.
- c. Documents concerning charges for engraving work.
- d. Requests for and transmittals of information regarding ownership of TVA power bonds.
- e. Documents concerning agent officer funds and accounts.
- f. Documents concerning fiscal year closing of accounts.
- g. Authorization for reimbursement of professional fees (form TVA 8280 or equivalent).
- h. Monthly summary of energy transactions with interchange customers. (Power Accounting retains 25 years.)

4. Manuals, Standards, Specifications and Reports

- a. Informational copies of annual reports from outside companies and organizations and various other reports which have no record value to the TVA power program (submitting organizations should be contacted regarding their need to retain any of these reports).
- b. Requests for and transmittals of various TVA reports which are available for outside distribution.
- c. TVA Paid Advertising Report.
- d. Data for and distribution of TVA Handbook.
- e. Inventory Report-Power Storeroom (form TVA 7240).
- f. Report of Peak Loads-Median Conditions and Margin of Capability over Peak Loads.
- g. Inspection and Construction Status Report.
- h. Daily Status Report-Boiler and Equipment Group.
- i. Status Report-Major Electrical Work.

5. Lands, Buildings, Structures and Security

- a. Correspondence concerning requests and arrangements for office space.
- b. Correspondence concerning landscaping plans for TVA facilities.
- c. Correspondence concerning fire drills in various buildings.

6. Power Planning, Construction and Operation

- a. Transmittals (only) of schedule data on current and planned TVA construction projects.
- b. Requests for and transmittals of drawings, charts and maps.

7. Transportation and Travel

- a. Documents concerning travel arrangements, passports, visas, and motel/hotel reservations.

8. Committees, Organizations and Meetings

- a. Agenda, schedules and routine correspondence concerning meetings and conferences (excludes minutes and summaries).
- b. TVA Board agenda and list of action items (does not include list of items formally approved by Board).
- c. Routine correspondence concerning appointments to various committees and professional groups.

IV. RECORDS SCHEDULE OF THE OFFICE OF ENGINEERING DESIGN AND CONSTRUCTION,
 THE NUCLEAR SAFETY REVIEW STAFF, AND THE
 OFFICE OF QUALITY ASSURANCE

TABLE OF RECORD SERIES

Item Number	Record Series
1	Chief Engineer/Office Manager's Records
2	OEDC, NSRS, and OQA Engineering, Construction, and Administrative Records, 1933 to date
3	Engineering Report File (Engineering Projects Histories)
4	Design and Construction Drawings
5	Photographs Documenting Construction of Projects
6	Nuclear Plant Preoperational Test Full-Length Rod Control Timing Tracings
7	Grievance Case Records
8	Geologic Drawings
9	Measuring and Test Equipment Calibration Record
10	Construction (Temporary) Equipment Records
11	Highway and Railroad Drawings
12	Construction Records Not Covered By Other Items
13	Originals (Paper Copy) of EN DES Calculations and CEB Reports
14	Supplier Quality Assurance Program Manuals
15	Quality Assurance Audits Support Documentation
16	Budget Support Documentation
17	Support Documentation for Cost Estimates and Special Cost Studies

RECORDS SCHEDULE OF THE OFFICE OF ENGINEERING DESIGN AND CONSTRUCTION,
THE NUCLEAR SAFETY REVIEW STAFF, AND THE
OFFICE OF QUALITY ASSURANCE

TABLE OF RECORD SERIES

<u>Item Number</u>	<u>Record Series</u>
18	Supplier Radiographs
19	Site - Originated Radiographs
20	Vacancy Position Announcement Records
21	Equipment Operating Manuals for Measuring Devices Used by Geology and Geotechnical Engineering Group of CEB
22	Training, Orientation, and Public Relation Materials
23	Inspection and Testing Cost and Manhours Documentation
24	Nonrecord and Temporary Material
25	EN DES General Activities Photographs
26	Three-Dimensional Design Models
27	Apprentice Training Records
28	ADP Records and Related Documentation

LIST OF APPENDICES

- APPENDIX A - OFFICE OF ENGINEERING DESIGN AND CONSTRUCTION; ORGANIZATION AND RESPONSIBILITIES
- APPENDIX B - MANAGEMENT AND ENGINEERING DATA SYSTEMS BRANCH
- APPENDIX C - SUPPLEMENTAL DESCRIPTION OF RECORD SERIES FOR ITEMS 1 THROUGH 4
- APPENDIX D - PROCEDURES
- APPENDIX E - NUCLEAR SAFETY REVIEW STAFF; OFFICE OF THE GENERAL MANAGER
- APPENDIX F - PREVIOUSLY APPROVED SCHEDULES SUPERSEDED BY THIS SCHEDULE
- APPENDIX G - OEDC ADP SYSTEMS
- APPENDIX H - OFFICE OF QUALITY ASSURANCE; OFFICE OF THE GENERAL MANAGER

RECORDS SCHEDULE FOR THE OFFICE OF ENGINEERING DESIGN AND CONSTRUCTION
THE NUCLEAR SAFETY REVIEW STAFF, AND THE OFFICE
OF QUALITY ASSURANCE AND SUCCESSOR UNITS

PREFACE

1. The majority of records created and received by the Office of Engineering Design and Construction document the design and construction of engineering works and permanent structures authorized to be built in the overall TVA program. This includes administrative correspondence and reports required to accomplish these objectives.
2. The records of the Nuclear Safety Review Staff, Office of the General Manager, are described in appendix E of this schedule.
3. The following abbreviations will be used throughout this schedule:

CONST - Division of Construction

EN DES - Division of Engineering Design

NARA - National Archives and Records Administration

MEDS - Management and Engineering Data System Branch

NSRA - Nuclear Safety Review Staff, Office of the General Manager

OC - Office of Construction

OE - Office of Engineering

OEDC - Office of Engineering Design and Construction

OQA - Office of Quality Assurance, Office of the General Manager
4. Record series not currently a part of the schedule will be added as they are identified and new items will be approved by the Records Administration Section.
5. After approval of this schedule, MEDS will not allow organizations outside OEDC to input their records into the Computer Indexed System without prior coordination with NARA.
6. Microfilming will be done in accordance with the Federal Property Management Regulations, 41 CFR 101-11.5.
7. Detailed descriptions of items 1 through 4 are included in appendix C.
8. Quality Assurance (QA) documentation has been addressed from the content and function of the records rather than including an item in the schedule for QA records.

PREFACE (Continued)

9. Previously approved schedules (TVA Records Control Authorizations) for OEDC which cover records described in this schedule will be superseded by this schedule. (See appendix F.) Records Control Authorizations approved for agency-wide disposition will not be superseded by this schedule.
10. In this schedule, "project" is used to designate a power plant, flood control facility, highway, railroad, bridge, or any other facility which has been designed and/or constructed by TVA and which is under TVA's control. For nuclear plants, "life of project" means until the plant is decommissioned (i.e. dismantled). For any other type of project, "life of project" means until the project ceases to exist, is dismantled, or TVA no longer maintains control of the facility, road, railroad, bridge, etc.
11. Personal files are not "records" within the definition of 44 USC 3301 (Federal Records Disposal Act of 1943). Therefore, papers, reference materials, etc. which are the personal property of employees are not included in this schedule.
12. As defined in 41 CFR 101-11.405-2, a "permanent" record is any record that has been determined by NARA to have sufficient value to warrant its preservation by the National Archives and Records Administration. This preservation will continue after the Tennessee Valley Authority ceases to exist as an agency.
13. A "temporary" record is any record that has been determined not to warrant "permanent" preservation by NARA. Most "life of project" records (see 7 above) are "temporary" records by this definition (41 CFR 101-11.406-2).
14. In this schedule "completion of construction" refers to the completion of primary construction activities for a given project. For capital projects such as nuclear plants, dam and lock construction, and additions and improvements to existing facilities, this would correspond to the closure of accounts. For non-capital projects, completion of construction would normally correspond to withdrawal of the work forces.
15. The retention periods stated in this schedule will not apply to records necessary to resolve litigation that is outstanding at the time destruction of the records would normally be required. Records required to resolve unsettled litigation will be retained until close of litigation.
16. The records of the Office of Quality Assurance, Office of the General Manager, are described in Appendix H of this schedule.
17. Records on deferred nuclear plants may need a larger retention period due to their nature. Future items in the schedule will reflect decisions made on those impacted.

ITEM 1 - CHIEF ENGINEER/OFFICE MANAGER'S RECORDS (1933 - 1984)I. DESCRIPTION

Chief Engineer/Office Manager's Records include the administrative decision-making and policy-making records created within OEDC, program records created and received at the office level, and general housekeeping and administrative records.

(These records are described more fully in appendix A and appendix C, item 1.)

II. RETENTION PERIODA. Paper records

1. Records dated 1933 through 1980 except 1936-1943 records on microfilm (see B.1) - Permanent. Offer to NARA when schedule approved. Records are filed alphabetically by subject or project. Volume is approximately 100 cubic feet total. No further accumulation expected.
2. Records dated 1981 through June 1984 - Permanent. Offer to NARA after schedule approved. Annual accumulation is approximately 100 cubic feet.

B. Microfilm

1. Chief Engineer's file dated 1936 through 1943 (111 rolls of microfilm for which no paper records now exist) - Permanent. Offer to NARA when schedule approved.
2. Chief Engineer/Office Manager's file dated 1933 to 1980.
 - a. Security copy - In National Underground Storage, Boyers, Pennsylvania - Permanent. Offer to NARA when no longer needed for reference. Second security copy stored in the Technical Information Center. Destroy when no longer needed for reference.
 - b. All other copies - Destroy as nonrecord when no longer needed for reference.

ITEM 1 - CHIEF ENGINEER/OFFICE MANAGER'S RECORDS (1933 - 1984)
(Continued)

C. Finding Aids

1. Folder label index for Office Manager's file 1933 through 1980 - Offer to NARA with paper records.
2. Computer-generated index for Office Manager's file 1981 to ^{June} 1984 - Offer to NARA annually with paper records.

~~ITEM 2 -- OEDC, NSRS, AND OOA ENGINEERING, CONSTRUCTION, AND ADMINISTRATIVE RECORDS, 1933 THROUGH 1985. (MEDS AND SUCCESSOR UNITS)~~

I. INTRODUCTION

Since September 1, 1976, the records in this series have been entered into the various files of the Computer Indexed System of MEDS. Older records in the series have primarily been microfilmed as part of the MEDS Manually Indexed System. See appendix C, item 2, and appendix B for more information.

The retention period for item 2 follows the description of records in the series.

II. DESCRIPTION OF RECORDS IN ITEM 2

- A. Administrative records of long-term value and duplicate copies of TVA-wide and non-OEDC office and division administrative records. Examples: policy statements, directives, organization changes; management planning and program documents including technical papers, speeches, and articles prepared by OEDC personnel; accounting records including audits, cost analyses and reports, general overtime approval requests, etc.; budget records; cost estimates; contracts with counties, states, and municipalities; personnel records not relating to individuals such as records on manpower, overtime, retirement, training, employee conduct, Equal Employment Opportunity, etc.; records relating to routine security matters such as thefts, building security, visitor's badges, etc.; safety and health records such as the TVA Occupational Health and Safety Program, TVA safety program and reports, safety reports and correspondence to and from OSHA, records of bomb threats; public safety programs such as water safety, fire protection, building audits, inspections, emergency plans, safety instructions, eyewear and footwear, safety meetings, etc.; general administrative records including Board actions and agendas for Board Meetings, requests for office space, space alterations, office equipment, supplies, and furniture; requests for approval to attend internal TVA meetings and meetings outside TVA; formal training and professional activities; monthly progress items reports; Quality Assurance audits, and right-of-way transfer documents for highways and railroads, etc.

ITEM 2 - DESCRIPTION (Continued)

~~(Permanent OEDC administrative documentation is described in item 1 of this schedule.)~~

- B. OEDC procedures including Quality Assurance Program Requirements Manual for Design, Procurement, and Construction (PRM); Interdivisional Quality Assurance Procedure Manual for Nuclear Power Plants; Quality Assurance Procedures Manual for the Manager's Office; division-level procedures, such as engineering procedures, administrative instructions, construction specifications, design guides and standards, design criteria documents, QA program procedures, OQA procedures, nuclear services construction procedures, quality control instructions, QA training program plan, construction engineering procedures, and receiving, storage, preventive maintenance, and inspection instructions (RSPMI's); and laboratory and construction site procedures, such as construction procedures, inspection and testing instructions, quality control procedures, and standard operating procedures.

(OEDC procedures are more fully described in appendix D.)

- C. Architectural-Engineering contracts and accompanying agreements, status reports, and invoices, including copies of correspondence related to consultants' meetings, personal services contracts, and architectural-engineering functions.
- D. Site explorations and generating capacity data, including planning and site evaluations (advantages and disadvantages of each site under consideration) for future sites; general information on future sites; site investigations of soils and foundation rocks; core drill holes, data and logs; geologic logs; preliminary plans for design, construction, and cost comparisons between alternative generating plant sites; and summaries prepared for use in recommendations to the Office of Power on precise location of facilities.
- E. Research and development data, including background data, studies and evaluations. Examples include studies of snow melting on roadway bridges; tests on disconnecting switches under laboratory ice conditions; studies of flash temperature--probability of flame in control cables and small 600-V power cables; and programs to meet air pollution standards, such as development of taller stacks.

ITEM 2 - DESCRIPTION (Continued)

~~(Record copies of final studies and reports are published and maintained in the engineering reports file. They are more fully described in item 3 of this schedule, former NARA NC-142-75-4).~~

- F. Documentation compiled by committees and task forces on technical and program areas, including correspondence, minutes, agenda, and final reports on subjects such as fire protection and prevention, site investigations, coal mining, standardization of procurement specifications, quality assurance, environmental education, etc.
- G. General engineering design and construction records created or received in connection with planning and constructing specific projects, including project authorizations and supporting papers; documents related to licenses or permits for facilities; preoperational tests; post-modification tests; noncritical systems tests; field change requests; deviation requests; nonconformance reports; engineering change notices; design philosophy improvement requests; design change requests; cost and estimating studies; studies and analyses of projects; studies and reports pertaining to the dam safety program; and relocation of existing structure such as highways, railroads, and bridges.
- H. Engineering design records, including architectural design records; electrical design records; mechanical design records; civil design and analysis records; design computations; design calculations and analyses; design specifications; structural steel and bridge design records; and codes, standards, and other documents referenced or used as a basis in the design and construction of projects.

(See item 13 for evaluation of original paper copies of EN DES calculations and the Civil Engineering Support Branch's CEB reports, and non-nuclear calculations.)

- I. Construction project records of long-term value not otherwise included in this item, such as certification and training records for plant employees; dredging reports; startup records; weld data sheets and reports; excavation records; pile driving records; reports of NRC inspection visits; force reports; environmental monitoring station records; project integrity records; reactor vessel installation documentation; drilling records; grouting documentation; stress relieving charts on steam generating equipment, turbogenerators, and principal piping; calibration records for measuring and test equipment; surface preparation records; reports of earthfill and

ITEM 2 - DESCRIPTION (Continued)

~~rockfill replacement; fuel pool records; records covering repairs and maintenance; records relating to permanent material used during construction including equipment transfer records, installation records, test results and reports; verification records; checklists or logs documenting that material is acceptable; inspection and examination records; production estimates; final classification of accounts; warehouse annual inventory reports; daily, weekly, monthly and annual progress reports.~~

- J. Concrete records, including concrete reports as documentary evidence of concrete integrity; analysis of concrete form distribution and function; analysis of concrete aggregates; concrete mix compressive test strength; reports of concrete operations; concrete research records; concrete specifications; concrete cylinder data sheets; shift concrete reports documenting amount of concrete poured on each shift; monthly concrete estimates; and screen analysis of concrete aggregate.
- K. Inspecting and testing or quality control records, including manufacturer's data sheets and equipment testing data; TVA inspection reports of manufacturing plant inspections; plant surveys considered to be QA audits of manufacturing plants; results of tests on equipment; specifications; test reports and related correspondence; documentation verifying that vendors have met contractual QA requirements; test reports on welding and other welding documentation; sequence control charts; concrete and soils laboratory test sheets and tabulations; concrete test specimen data; field mixed concrete test specimen data; soil investigations; rock testing information; certifications on critical structures, features, systems, and equipment; and quality control records on conduit, cables, cable insulation, and cable trays.
- L. Procurement documents or contract records on (a) permanent material, or (b) construction temporary equipment used in meeting QA requirements for nuclear plants (e.g. calibration and testing equipment), including requisitions, price schedules, contracts, bid receipts, inspection reports, reply memorandums, addenda, receiving reports, indefinite quantity term contracts, shipping tickets, interproject transfer orders, memoranda, vendor letters and specifications, requests for delivery, recommendations for award of contract, and ~~changes of contract.~~

ITEM 2 - DESCRIPTION (Continued)

~~M. Nuclear Safety Review Staff (NSRS), Office of the General Manager, records relating to design, construction, operation, and support of nuclear plants including investigations of nuclear incidents or accidents; periodic reviews and inspections; and nonconformance reports made by the Nuclear Regulatory Commission (NRC).~~

~~(The NSRS is more fully described in appendix E.)~~

~~N. Office of Quality Assurance (OQA), Office of the General Manager, records identifying quality problems and initiating, recommending, or providing solutions; verifying implementation of solutions, determining the adequacy of facilities and equipment to carry out approved procedures and instructions; issuing special instructions and executing responsibilities; notifying responsible management of unsatisfactory work or unapproved practices and stopping unsatisfactory work or controlling further processing, delivery, installation, or operation of nonconforming items or services.~~

~~(OQA is more fully described in appendix F.)~~

III. RETENTION PERIOD FOR RECORDS DESCRIBED IN ITEM 2

A. Paper Copies

1. Records input into the Computer Indexed System or the microfilmed portion of the Manually Indexed System of MEDS - Destroy when acceptable microfilm copy is obtained.

Note: In rare cases, the original records will be returned to the submitting organization to be used as a working file. In these cases, the original records will be destroyed as nonrecord when no longer needed. See appendix B for more information.

2. Duplicate paper copies of filmed records - Destroy as nonrecord when no longer needed for reference, normally not to exceed 6 months.
3. Illegible documents - Maintain in folders by MEDS number or roll number. Destroy when related film destroyed. See appendix B for more information.
4. Vendor manuals subject to revision - Retain for refilming until no longer subject to change. See appendix B for more information.

ITEM 2 - RETENTION (Continued)

~~5. Non-nuclear calculations stored at the discretion of the OEDC records manager - Destroy when no longer required for reference, not to exceed end of life of project.~~

6. Non-nuclear inspection and testing records denoting contract requirements of the manufacturer, such as specifications and inspection test requirements - Destroy after 10 years.

B. Microfilm

1. Record copy stored in National Underground Storage, Boyers, Pennsylvania - Destroy 75 years from date of filming.

Exception

Project-related records in the Manually Indexed System will be destroyed at end of life of project.

2. All other copies - Destroy as nonrecord when no longer needed for reference.

C. Finding Aids

1. Computer-output-microfilm indexes for the OEDC General File of the Computer Indexed System.

(a) Copy in National Underground Storage - Destroy when related microfilm destroyed.

(b) All other copies - Destroy as nonrecord when no longer needed for reference.

2. Indexes to Manually Indexed System microfilm.

(a) Paper index - Destroy when no longer needed for updating the microfiche index.

(b) Microfiche indexes

(1) Record copy in MEDS Service Center - Destroy when superseded or related records destroyed, whichever is later.

(2) All other copies - Destroy as nonrecord when no longer needed for reference.

ITEM 2 - RETENTION (Continued)

~~3. Index to Computer Indexed System - Purge, correct, or update as necessary or when superseded; purge completely when related records destroyed.~~

Note: See also item 28. Data base mass storage included in item 28, section III.B.3.a. Support programs and system documentation ~~evaluated in item 28, section IV.~~
(NC1-142-77-8)

~~ITEM 3 - ENGINEERING REPORT FILE (ENGINEERING PROJECTS HISTORIES)~~

I. DESCRIPTION

The engineering report file maintained by the Planning, Reports, and Information Staff includes technical reports covering the planning, design, and construction of TVA plants and projects; reports of special technical projects; and engineering reports from non-TVA sources, some of which predate TVA. 1904 to date.

(More fully described in appendix C, item 3.)

II. RETENTION PERIOD

A. Paper records - Permanent. Offer to NARA when microfilm verified. (NC-142-75-4)

B. Microfilm copies

1. Security copy - Stored in National Underground Storage - Permanent. Offer to NARA when no longer needed for reference. Second security copy stored in the Technical Information Center. Destroy when no longer needed for reference. (NC-142-75-4)

2. All other copies - Destroy when no longer needed for reference.

C. Finding aid - TVA 1271, Report File Card.

1. Paper copy - Permanent. Offer to NARA when microfilm verified.

2. Microfilm copies - Destroy when related film destroyed.

(See NC-142-75-4)

ITEM 4 - DESIGN AND CONSTRUCTION DRAWINGSI. DESCRIPTION

The design and construction drawings include sketches and manufacturers drawings as described in appendix C, item 4.

II. RETENTION PERIODA. Originals (linen, mylar, vellum, etc.)

1. Drawings suitable for microfilming.
2. Approved vendor drawings¹ suitable for microfilming.
3. As-constructed drawings suitable for microfilming.

Note: Original marked reproducibles for nuclear plants are maintained by Office of Power at the plant site and are not evaluated or scheduled by OEDC. As-constructed originals for other projects are maintained in the Technical Information Center.

After acceptable microfilm is obtained, destroy when no longer needed for reference, normally not to exceed life of project.

4. Drawings not suitable for microfilming due to special format, illegibility, color-coding, etc.

Note: Drawings unsuitable for microfilming that are quality assurance records must be stored in approved facilities for the life of the project.

- a. Drawings selected by TVA and NARA for transfer to archives - Permanent. Offer to NARA when no longer needed for reference, normally at end of life of project. Final selection to be made at time of transfer.
- b. Other drawings - Destroy in agency when no longer required for reference or for issuance of revised drawings, normally not to exceed life of project.

¹Approved vendor drawings are those marked "A" (Approved), "AU" (Accepted for Use), or "IO" (Information Only).

ITEM 4 - DESIGN AND CONSTRUCTION DRAWINGS (Continued)

5. Nonaccount and general project drawings issued before aperture card system was established. These drawings were not backfitted into the aperture card system because they concern minor projects without capital accounts. These drawings are located in the Technical Information Center.

Destroy when no longer needed for reference, not to exceed life of project.

B. Microfilm

1. Drawings, as outlined by Appendix C, Item 4.
 - a. Record copy mounted on aperture cards and filed in Technical Information Center.
 - (1) Drawings selected by TVA and NARA for transfer to archives - Permanent. Offer to NARA when no longer needed for reference, normally at end of life of project. Final selection to be made at time of transfer.
 - (2) Other drawings - Destroy in agency when no longer needed for reference, normally at end of life of project.
 - b. Security copy stored in National Underground Storage - Destroy when no longer needed for reference, normally at end of life of project. Second security copy stored in the Technical Information Center. Destroy when no longer needed for reference.
 - c. All other copies - Destroy as nonrecord when no longer needed for reference.
2. Site originated drawings including nonaccount and general project drawings (drawings of minor projects without capital accounts) microfilmed on 16-mm or 35-mm film before aperture card system was established.

Destroy when no longer required for reference, not to exceed life of project.

C. Prints (made from microfilm or originals)

Destroy as nonrecord when no longer needed for reference.

ITEM 4 - DESIGN AND CONSTRUCTION DRAWINGS (Continued)D. Drawing Lists, Logs, and Finding Aids

*Permanent. Transfer to NARA with related drawings.

Note: For computerized aids, see also item 28.

~~ITEM 5 - PHOTOGRAPHS DOCUMENTING THE CONSTRUCTION OF PROJECTS~~Withdrawn
6/17/86~~I. BIMONTHLY CONSTRUCTION PROGRESS PHOTOGRAPHS~~A. Description

A comprehensive photographic records program is maintained on every TVA construction project. The coverage records almost every detail of construction until the project is complete.

Normally photographers in EN DES take black and white photographs every 2 months using large format (8" x 10") cameras. The film is developed by the Photographic Services Unit of the Engineering Services Branch of EN DES. (Prior to October 1981, photographic groups in Chattanooga and Muscle Shoals were also used.) The original negatives are stored and maintained in the Technical Information Center (TIC). Descriptive information--usually the name of the equipment or structure and the relative orientation of camera viewpoint--is included on the negative and a number is assigned by the photographer. In recent years the number consists of the project designation number as a prefix, the letter "P" indicating "progress," and a series of chronological numbers beginning with "1" and continuing until the project is completed. The numbering schemes of construction progress photographs of earlier projects may vary from this format.

The TIC receives the original negative and sets of contact prints. Each month the TIC assembles seven sets of the latest prints and routes the "picture books" through the various organizations in EN DES and the Office of the General Manager. Anyone needing a print can note the photograph number and place an order with the TIC. When the photographs are returned and 2500 are accumulated, they are recorded on 16-mm microfilm and the contact prints are destroyed. The 16-mm film cartridges are located in the VSMF area of the MEDS Service Center. Sets of prints are also routed to the Planning, Reports, and Information Staff to be used in producing the technical report for the project, and to the project site for use in various reports including the final construction report. A computer printout of construction progress photographs is available in the TIC enabling the user to find a photograph by subject. This printout is arranged by project and by photograph number within a project. A brief description of the photograph and the date taken are included.

~~ITEM 5 PHOTOGRAPHS DOCUMENTING THE CONSTRUCTION OF PROJECTS (Continued)~~B. Retention Period

1. Negatives - Arranged chronologically. Can be retrieved by Project.
 - a. Records of projects of historic significance - Permanent. Transfer to NARA 100 years from project becoming operational or end of project or when no longer needed for Administrative use; whichever is sooner. Final selection is to be made by TVA/NARA at the time of transfer.
 - b. Other projects - Destroy when no longer needed for reference, normally not to exceed life of project.
2. Prints
 - a. Prints distributed to TIC - Destroy when acceptable microfilm obtained.
 - b. Other copies - Destroy when no longer needed for reference, not to exceed 1 year after issuance of final technical report. (One complete set may be transferred from the site to the Planning, Reports, and Information Staff at the close of construction. This is for the convenience of the Staff in producing the final technical report and does not alter the maximum retention period.)
3. Microfilm
 - a. Film dated 1933 to 1980 - Permanent. Offer one set to NARA upon approval of the schedule.
 - b. Film dated 1981 and continuing - Permanent. Offer one set to NARA when film is 5 years old.
 - c. All other copies - Destroy in agency when no longer needed for administrative purpose.
4. Finding Aids
 - a. Finding aids relating to photographic negatives and microfilm retained under 1.a, 3.a, and 3.b. - Permanent. Offer one copy to NARA at the same time as items which they describe.
 - b. All other copies - Destroy when related records are destroyed.

II. CONSTRUCTION PROGRESS COLOR SLIDESA. Description

Color transparencies are made by OE photographers usually at the same time as the large format, black and white construction progress photographs. The transparencies/negatives are developed and mounted on aperture boards. The numbering system often parallels the black and white system: the project designation number is the prefix; "TCS" indicates color transparency; a chronological number follows. If there is an identifying title, it is hand-lettered.

The record copy of the slides is sent to the Technical Information Center (TIC); additional copies are normally sent to the technical report writer at the project site.

B. Retention Period

1. Transparency in TIC (record copy mid-1960s - date)

- a. Records documenting projects selected under criteria in Item 5-I-B-1-a. Permanent. Transfer to NARA 100 years from project becoming operational or end of project or when no longer needed for Administrative use; whichever is sooner. Final selection is to be made by TVA/NARA at the time of the transfer.
- b. Other projects. Destroy when no longer needed for reference, normally not to exceed life of project.

2. Other copies not retained in TIC. Destroy at option in agency. (Normally not to exceed 1 year after issuance of final technical report.)

~~III. 35 MM PHOTOGRAPHS TAKEN BY SITE PERSONNEL~~~~A. Description~~

These photographs of construction in progress are taken at the discretion of site personnel, usually by the CONST technical reports writer. They are mounted as slides and are used for special presentations and various reports. The slides are not numbered.

The record copy of these slides is maintained in the Technical Information Center (TIC). The site's copy is transferred to the TIC at the completion of construction. The TIC verifies that it has a complete set and then destroys the duplicates.

~~B. Retention Period~~~~1. Transparency in TIC (record copy)~~

a. Records documenting projects selected under criteria in 5-I-B-1-a. Permanent. Transfer to NARA 100 years from project becoming operational or end of project or when no longer needed for Administrative use; whichever is sooner. Final selection is to be made by TVA/NARA at the time of the transfer.

b. Other projects. Destroy when no longer needed for reference, normally not to exceed life of project.

2. Other copies not retained in TIC. Transfer to Technical Information Center at completion of construction. Destroy when no longer needed for reference, normally not to exceed life of project.

ITEM 6 - NUCLEAR PLANT PREOPERATIONAL TEST FULL-LENGTH ROD CONTROL TIMING TRACINGS

I. DESCRIPTION

These oscillograph tracings are photocopies of the preop tests run by the Division of Nuclear Power, Office of Power. A duplicate copy is sent to the Nuclear Engineering Branch, EN DES, where it is retained for reference use only. The tracings are rolled into tubular rolls (18" x .144") and are identified alpha-numerically by rod and test number.

II. RETENTION PERIOD

Transfer to Knoxville Records Center when 1 cubic foot has accumulated.

Destroy 10 years after creation of record.

ITEM 7 - GRIEVANCE CASE RECORDSI. DESCRIPTION

Employee grievances¹ that have been settled at the branch or division level or equivalent.

Management Services Staff has EN DES record copy.

Personnel and Labor Relations Staff holds CONST record copy.

Personnel and EEO Section maintains record copy for OEDC Manager's Office.

Title 29, Code of Federal Regulations, requires records concerning apprentices to be maintained for 5 years.

II. RETENTION PERIODA. Salary Policy and Trades and Labor

1. Record copy - Destroy 3 years after grievance is settled.
2. All other copies - Destroy when no longer needed for administrative purposes, not to exceed 3 years.

B. Apprentices

1. Record copy - Destroy 5 years after grievance is settled.
2. All other copies - Destroy when no longer needed for administrative purposes, not to exceed 5 years.

¹Does not include EEO complaints.

ITEM 8 - GEOLOGIC DRAWINGSI. DESCRIPTION

Geologic drawings are produced by the Geology and Geotechnical Engineering Group, Civil Engineering Support Branch, EN DES, and by the Singleton Materials Laboratory, Construction Services Branch, Construction. These drawings are processed in the same way as the design and construction drawings evaluated in item 4 of this schedule. They are microfilmed on 35-mm film which is mounted on aperture cards; the record copy of the aperture cards is in the Technical Information Center. The geologic drawings may also be included in the geologic drill hole reports which are filmed as part of the OEDC General File described in item 2.

The aperture cards in the Technical Information Center are filed by project in manual filing equipment; the cards are filed in a separate subsection behind the design and construction drawings for the project. The numbering system for geologic drawings includes a code designation "GE" for the geologic group. An example of the numbering system is: 67 GE 822K1020.

67 - Project Designation Code

GE - Discipline/Group Code

822 - Subject Description

K - Size

1020 - Sequential Number

Approximately 8,000 geologic drawings were stored in the Technical Information Center as of July, 1982. Negligible annual accumulation was anticipated.

There are five basic categories of geologic drawings as described below:

1. Geologic logs of drill holes - records of all core or geophysically logged manmade drill holes at a specific site location. Geologic logs are the graphic description of what is seen visually and/or gathered electronically at the hole site. Electronic interpretation of the hole can include caliper (hole diameter), sonic (velocity of material), gamma (natural radiation of the material), and gamma ray (induced radiation of the material), sondes. This data is used to provide a geologic evaluation of site suitability for construction. Graphic logs are also created from written logs based on visual interpretation.

ITEM 8 - GEOLOGIC DRAWINGS (Continued)

2. Contour drawings - computer generated drawing of key features for a specific site. The drawings are based on elevation and are used in the economic evaluation of construction site foundation.
3. Geologic maps - identify rock types associated with the structural features at a given site. Built from a topographic map base; these maps generally include the site and a 5 to 25-mile surrounding radius.
4. Geologic sections - cross-section compilations of the geologic logs for a given site. Sections are used for interpretation of structural and geologic features and their relationship to a specific construction site.
5. Layout drawings - compilation of geologic logs. Provide a general plan view of the total log area.

II. RETENTION PERIOD

- A. Originals - Destroy when acceptable microfilm copy (for aperture card) and reproduction negative are obtained.
- B. Aperture Cards
 1. Record copy stored in Technical Information Center, and security copy in National Underground Storage - Destroy when TVA no longer maintains control of site.
 2. Other copies - Destroy when no longer needed for reference.
- C. Reproduction Negatives - Destroy when no longer needed for reproduction purposes.

ITEM 9 - MEASURING AND TEST EQUIPMENT CALIBRATION RECORDI. DESCRIPTION

The measuring and test equipment used at construction sites must be recalibrated regularly. The instruments used to calibrate this test equipment must themselves be recalibrated at least once a year. The recalibration of the calibration equipment is recorded in logs which are retained for 2 years. These records are principally generated by the Singleton Materials Engineering Laboratory.

II. RETENTION PERIOD

Maintain in originating office in 2 hour fire-rated filing equipment for 1 year. Transfer annually to inactive fire-rated storage for 1 year.

Destroy when 2 years old.

ITEM 10 - CONSTRUCTION (TEMPORARY) EQUIPMENT RECORDSI. DESCRIPTION

This series includes records on construction equipment other than calibration and testing instruments. It includes valuation data, identification number lists, and transfer information.

Records relating to Bellefonte Nuclear Plant and earlier nuclear plants and most nonnuclear projects are in manual files. Computerized files are maintained for Hartsville Nuclear Plant and later nuclear plants and selected nonnuclear projects. An historical floppy disc may be developed at a later date. It will be added to the schedule when developed.

II. RETENTION PERIOD

A. Manual files (records relating to Bellefonte and earlier nuclear plants and most nonnuclear projects).

1. Project file - Destroy when no longer needed or within 1 year after completion of construction, whichever is shorter.
2. Type of equipment file - As equipment is retired, destroy related records. If equipment is sold, destroy records 1 year after sale.
3. Numerical file
 - a. Paper copy - Destroy after acceptable microfilm obtained.
 - b. Microfilm - Destroy 60 years from date of filming.

B. Computerized files (records for Hartsville and later nuclear plants and selected nonnuclear projects).

1. Paper printouts - Destroy when no longer needed for reference.
2. Disc storage (record copy) - As equipment is retired, purge related records. If equipment is sold, purge records 1 year after sale.

Note: See also item 28, section III.B.3.b, and appendix G, system Z18.

ITEM 11 - HIGHWAY AND RAILROAD DRAWINGSI. DESCRIPTION

The highway and railroad drawings include plan and profile drawings, right-of-way strip maps, and structures drawings (box culverts, pipe culverts, bridges, etc.). Certain categories of these records, as noted below, are microfilmed in the same manner as the design and construction drawings evaluated in item 4 of this schedule. The film is mounted on aperture cards which are stored in the drawing file in the Technical Information Center.

Approximately 30,000 highway and railroad aperture cards are stored in the Technical Information Center. Negligible annual accumulation is currently anticipated. The cards for projects prior to the Bellefonte Nuclear Plant are filed in manual filing equipment in a separate subsection behind the design and construction drawings for the project. The aperture cards for Bellefonte and later projects are interfiled with other types of drawings in the Access M filing equipment. (See appendix C, item 4, for further description of the Access M arrangement.) The numbering systems for the highway and railroad drawings are described in appendix C, item 4.

Most highway and railroad drawings are of roads not within the boundaries of the federal reservations. These roads¹ are turned over to the government, railroad, etc., originally controlling them after TVA construction or reconstruction is completed. The drawing originals are transferred to the owners with the roads in these cases. If TVA retains ownership of a road, the drawing originals are generally stored in the Technical Information Center.

II. RETENTION PERIOD

- A. Highway, railroad, and bridge drawings, except cross section sheets.

¹The term road will be used to refer to both roads and railroads in this item.

ITEM 11 - HIGHWAY AND RAILROAD DRAWINGS (Continued)

1. If the road¹ is turned over to a government, railroad, company, etc.:
 - a. Original drawing - After obtaining suitable microfilm, transfer originals to the government, railroad, company, etc., acquiring the road.
 - b. Microfilm
 - (1) Record copy stored in Technical Information Center and security copy in National Underground Storage - Destroy when road has been abandoned.
 - (2) Other copies - Destroy when no longer required for reference.
2. If the road is retained by TVA:
 - a. Original drawing - Destroy when road has been abandoned.
 - b. Microfilm
 - (1) Record copy stored in Technical Information Center and security copy in National Underground Storage - Destroy when road has been abandoned.
 - (2) Other copies - Destroy when no longer required for reference.

¹The term road will be used to refer to both roads and railroads in this item.

ITEM 11 - HIGHWAY AND RAILROAD DRAWINGS (Continued)

B. Cross-Section Sheets

1. If the road is turned over to a government, railroad, company, etc.:

a. Original drawing - Transfer originals to the government, railroad, etc., acquiring the road. Do not microfilm.

2. If the road is retained by TVA:

a. Original drawing - Destroy 5 years after completion of road. Do not microfilm.

C. Preliminary papers, including location studies, preliminary line sheets, and preliminary profile sheets.

Destroy at close of road construction.

ITEM 12 - CONSTRUCTION RECORDS NOT COVERED BY OTHER ITEMS ON THIS SCHEDULE

I. CONSTRUCTION WORKING RECORDS

A. Description

Construction records of short-term value not otherwise scheduled which are not input into one of the MEDS records systems.

Examples of these records are: engineering calculations for temporary features; requisitions, contracts, requests for delivery, bills of lading, packing lists, shipping tickets, transfer orders, and other shipping papers on temporary construction equipment and material; documentation of temporary features; routine control records including status logs, usage logs, etc; concrete delivery tickets; field notebooks, logs, and diaries that do not document the structural integrity of the project; concrete records not required for life of plant; logic diagrams used to plot paths of construction and activities; drawings and sketches solely for site use (all official drawings will be included in the aperture card system in the Technical Information Center; see item 4); and general correspondence and transmittals.

B. Retention Period

Destroy when no longer needed for reference.

Exception: If any litigation is outstanding one year after completion of construction, records required to resolve the dispute will be retained until close of litigation.

II. FIELD NOTEBOOKS AND DIARIES DOCUMENTING STRUCTURAL INTEGRITY OF THE PROJECT

A. Description

Field notebooks, field books, field engineer's diary, resident engineer's diary, field engineer's log book, etc are daily logs kept by an engineer or unit onsite. This item schedules only those logs documenting the structural integrity of a project. These logs will be required by investigators in the event a structure fails. Specific examples are field notebooks on concrete pours, earthfill, grouting, structural steel, etc. (Note: Field books and logs that do not document the structural integrity of the project are described in Section I above.)

ITEM 12 - CONSTRUCTION RECORDS NOT COVERED BY OTHER ITEMS ON THIS SCHEDULE (Continued)

B. Retention Period

Destroy at end of life of project.

III. DOCUMENTATION OF FEATURES CONSTRUCTED BY NON-TVA WORK FORCES

A. Description

Documentation of installation and construction work done by private contractors (non-force account work) is required for a short period of time after the close of construction while a determination is made whether litigation over poor quality work will be necessary. This documentation is contained in logs, diaries, notebooks, logic diagrams, etc.

B. Retention Period

1. If no litigation results - Destroy when no longer needed for reference, not to exceed 2 years after completion of construction.
2. If litigation results - Destroy at close of litigation.

IV. MISCELLANEOUS SITE RECORDS TRANSFERRED TO THE ORGANIZATION THAT WILL OPERATE THE FACILITY

A. Description

Construction site records not specified elsewhere that are transferred at the close of construction to the organization operating the facility (usually the Office of Power). These records will be scheduled by the operating organization. Short-term reference copies, if any, retained by OEDC are nonrecord and are covered in section 1 of this item or in item 24, part IX of this schedule.

B. Retention Period

Since physical ownership of these records is transferred to another TVA organization, OEDC disposition schedules are not required.

ITEM 13 - ORIGINAL (PAPER) CEB REPORTS FROM THE CIVIL ENGINEERING SUPPORT BRANCH, EN DES, AND ORIGINAL CALCULATIONS FROM ALL EN DES ORGANIZATIONS

I. DESCRIPTION

Engineering calculations are created during the design process to verify correctness of design. A typical calculation documents the assumptions made for the design, lists the sources of design information, records the mathematical computations made, presents supporting graphics, and lists the conclusions reached. Common types of calculations include piping stress analyses, analyses of structural strength particularly in the case of seismic events, models of behavior of electrical systems, and pressure drop calculations for fluid systems. Non-nuclear calculations may be microfilmed or stored at the discretion of the OEDC records manager.

CEB Reports are prepared by the Civil Engineering Support Branch. They summarize the assumptions and background references for a group of calculations prepared during a given civil engineering analytical task. The reports generally document work done to meet nuclear regulatory or other requirements.

The original CEB Reports and EN DES calculations are microfilmed as part of item 1 (Section H), OEDC Engineering, Construction, and Administrative Records. The originals are retained after microfilming in order to revise and refile them as necessary. The paper originals are stored by project in the MEDS Service Center or in the originating organization at the option of the originating organization.

II. RETENTION PERIOD

Destroy when no longer required for reference, not to exceed end of life of project.

ITEM 14 - SUPPLIER QUALITY ASSURANCE PROGRAM MANUALSI. DESCRIPTION

Manuals describing a suppliers quality assurance program must be reviewed and accepted by TVA quality assurance personnel as part of the contractual requirements for purchases involving nuclear power plants. These manuals describe the procedures, such as tests and inspections, by which the supplier controls and assures the quality of this product. Controlled copies are issued to TVA; these copies are updated and revised as the vendors quality assurance program changes. ANSI N45.2.9-1974 assigned to these manuals a retention period of 2 years after the start of commercial operation of the applicable nuclear facility.

II. RETENTION PERIOD

Revise as needed. Destroy 2 years after start of commercial operation of applicable nuclear plant. Do not microfilm.

ITEM 15 - QUALITY ASSURANCE AUDITS SUPPORT DOCUMENTATION¹

I. DESCRIPTION

This series includes significant background material and supporting documentation created in the course of a quality assurance audit. These materials may include notes, tape recordings, drafts, etc.

The record copy of the formal QA audit report is evaluated in item 1 - OEDC Engineering, Construction, and Administrative Records.

II. RETENTION PERIOD

Destroy at option not to exceed 6 years from start of commercial operation of applicable facility.

¹QA audits were the responsibility of the Office of Quality Assurance from November 1982 to October 1984.

ITEM 16 - BUDGET SUPPORT DOCUMENTATIONI. DESCRIPTION

This series includes the support documents such as notes and calculations created in the course of developing the annual budget. The record copy of the actual budget is scheduled under item 2 - OEDC Engineering, Construction, and Administrative Records.

The Cost Planning and Control Staff develops and distributes the budget for the OEDC Manager's Office and for CONST. Planning and Budget Branch develops the EN DES budget, but it is distributed by the Cost Planning and Control Staff.

These support documents must be retained for an extended period of time in order to meet the following needs:

1. To answer inquiries by the Board or by Congressional oversight committees concerning costs and cost overruns.
2. To document original delivery and payment schedules in case of litigation.
3. To supply historical cost data to utilities as aids in anticipating costs and cash flow.
4. To supply information requested by the Office of Management and Budget and the General Accounting Office.

II. RETENTION PERIOD

Destroy in agency when no longer needed for reference, not to exceed 30 years. Should be transferred to inactive storage when frequency of reference use declines. Transfer does not alter maximum retention of 30 years. Not authorized to be transferred to FRC.

ITEM 17 - SUPPORT DOCUMENTATION FOR COST ESTIMATES AND SPECIAL COST STUDIES

I. DESCRIPTION

These documents include valuable notes, calculations, computation sheets, computer printouts, sketches, related correspondence, and other background material for cost estimates and special cost studies. Most final cost estimates are issued by the OEDC Cost Planning and Control Staff after receiving input from organizations in the divisions. For specialized types of cost estimates, such as those for communication equipment and certain switchyard items, organizations in the divisions may prepare the final cost estimates. The record copies of the final cost estimates as well as the official input from the divisions are evaluated in item 2 - OEDC Engineering, Construction, and Administrative Records. The record copies of special cost studies issued by the OEDC Cost Planning and Control Staff are also evaluated in item 2.

The support documentation evaluated in this item has reference value for General Accounting Office audits as well as future cost estimates and studies. The documentation is used in substantiating man-hour requirements, cost requirements, completion of engineering work, or in determining reasons for cost over runs. It is also useful in documenting the estimating procedures used on particular projects and in preparing estimates for projected work which is similar to work done on earlier projects.

II. RETENTION PERIOD

- A. Support documentation held by OEDC Cost Planning and Control Staff - Destroy when no longer needed for reference, not to exceed 20 years after completion of cost estimate or special study. Transfer to inactive storage 5 years after cost estimate or study is completed. Do not microfilm. Not authorized for transfer to FRC.
- B. Support documentation held by the lead organization for specialized final cost estimates prepared entirely by organizations in the divisions - Destroy when no longer needed for reference, not to exceed 10 years after completion of cost estimate. Not authorized for transfer to FRC.

ITEM 17 - SUPPORT DOCUMENTATION FOR COST ESTIMATES AND SPECIAL COST STUDIES (Continued)

- C. Support documentation for partial cost estimates used as input to final cost estimates - Destroy when no longer needed for reference, not to exceed 5 years.

Exception: Support documentation for cost estimates on deferred nuclear units may be retained at option of originating organization until 1 year after a decision is made to cancel or restart construction of the unit.

ITEM 18 - SUPPLIER RADIOGRAPHSI. DESCRIPTION

Radiographs are produced from the use of radiant energy in the form of neutrons, X-rays, or gamma rays for nondestructive examination of opaque objects. These graphical records on sensitized films (radiographs) indicate the comparative soundness of the object being tested.

This nondestructive method of examination to verify soundness of materials or components or verify that discontinuities are present in materials or components is not limited to nuclear plants. This procedure has been used for steam and hydroelectric plants as well.

The evaluation as to the acceptability or rejectability of the material or component is based upon the judicious application of the radiographic specifications and standards governing the material or component.

Information on the radiographs contains the manufacturer's name and further identification as appropriate to provide traceability to the component, weld, weld seam, or part number represented in the radiograph.

These records serve as proof of the contractor's performance and have reference value if a weld failure or component failure occurs. The radiograph would be used to determine the original quality at the point of the failure.

The length of retention is needed to prove plant integrity as well as for compliance with Nuclear Regulatory Commission requirements.

II. RETENTION PERIOD

Destroy when facility is retired. Transfer to Federal Records Center when no longer needed for on-site reference.

In order to determine when contingent disposition may be applied and these records destroyed, TVA will review the records 40 years after this transfer to FRC and every 5 years thereafter until destroyed.

(NCl-142-77-2 agency-wide)

~~ITEM 19 - SITE-ORIGINATED RADIOGRAPHS~~~~I. DESCRIPTION~~

Radiographs are produced from the use of radiant energy in the form of neutrons, X-rays, or gamma rays for nondestructive examination of opaque objects. These graphical records on sensitized films (radiographs) indicate the comparative soundness of the object being tested.

This nondestructive method of examination to verify soundness of materials or components or verify that discontinuities are present in materials or components is not limited to nuclear plants. This procedure has been used for steam and hydroelectric plants as well.

The evaluation as to the acceptability or rejectability of the material or component is based upon the judicious application of the radiograph specifications and standards governing the material or component.

The length of retention is needed to prove plant integrity as well as for compliance with Nuclear Regulatory Commission requirements.

~~II. RETENTION PERIOD~~

Destroy when facility is retired. Transfer to Federal Records Center when no longer needed for onsite reference. In order to determine when contingent disposition may be applied and these records destroyed, TVA will review the records 40 years after this transfer to FRC and every 5 years thereafter until destroyed.

(See NCI-142-77-2)

~~ITEM 20 - VACANCY POSITION ANNOUNCEMENT RECORDS~~~~I. DESCRIPTION~~

This series includes the various forms and related papers which accumulate in the selection of candidates for vacancies. These papers include vacancy announcements, employee applications, applications by nonemployees, submission of candidates, and analyses of applicants' qualifications.

The record copy of these papers is held in Management Services Branch for EN DES, Personnel and Labor Relations Staff for CONST, and the Personnel and EEO Section for the OEDC Manager's Office.

~~II. RETENTION PERIOD~~

- ~~A. Salary Policy and Trades and Labor - Destroy at option after position is filled or cancelled, not to exceed 2 years.~~
- ~~B. Apprentice - Destroy 5 years after position is filled or cancelled. (Papers may be transferred to inactive storage within the 5-year retention period if space requires.)~~

(Does not supersede NCI-142-81-20)

ITEM 21 - EQUIPMENT OPERATING MANUALS FOR MEASURING DEVICES USED BY
GEOLOGY AND GEOTECHNICAL ENGINEERING GROUP OF CIVIL ENGINEERING
SUPPORT BRANCH, EN DES

I. DESCRIPTION

The manuals in this series are operating manuals for the various measuring and data collection devices used by the Geology and Geotechnical Engineering Group of the Civil Engineering Support Branch, EN DES, while performing work on drill holes. Quality assurance requirements necessitate microfilming these manuals to meet the remote storage requirements of ANSI N45.2.9. The original manual is returned to CEB for normal use after microfilming. The manuals are destroyed when the applicable devices are retired. The life of a device is currently estimated as 10 years.

II. RETENTION PERIOD

- A. Original paper records - Microfilm for security purposes. Destroy original at end of life of applicable device.
- B. Microfilm - Camera master and microfilm copies - Destroy at end of life of applicable device.
- C. Other microfilm copies - Destroy when no longer needed for reference.

ITEM 22 - TRAINING, ORIENTATION, AND PUBLIC RELATION MATERIALS

I. DESCRIPTION

Orientation materials for internal or limited external use that do not have quality assurance or historical importance. "Limited external use" includes use with tours of retirees, career day visits by students, etc.

This item includes only overview training materials for activities that do not reflect the mission of the agency. It does not include manuals, textbooks, etc., developed for core training of employees. Substantive training materials that reflect the mission of the agency and that are essential to employee development and functioning will be evaluated in items of this schedule as identified.

This series includes filmstrips, slides, transparencies, booklets, "handouts", video cassettes, test forms, lists of available training and/or materials, and related materials.

II. RETENTION PERIOD

Destroy when superseded or obsolete, not to exceed 10 years.

ITEM 23 - INSPECTION AND TESTING COST AND MAN-HOURS DOCUMENTATION

I. DESCRIPTION

The Quality Engineering Branch, EN DES, conducts quality control inspections of the production facilities of vendors holding EN DES contracts. The man-hours expended by the inspectors on each contract are entered on the inspectors time sheets. These time sheets and any allowance vouchers, travel vouchers, etc., for inspectors outside the United States are used as input data into a computer program on Inspection and Testing (Y 96). The program accumulates the costs and man-hours for each contract and runs a monthly report and a cumulative report. The data is not massaged in any way by the program. As a monthly report is generated from the time sheet data, the previous month is added to the cumulative report total. Reconstruction of a previous monthly report is not possible from the computer program.

The Quality Engineering Branch is subject to annual audit by the Division of Finance for the most recent 18 monthly reports (printouts) and the last 12 months of time sheets. The Office of the General Counsel (OGC) considers all three types of documentation (monthly printouts, cumulative printouts, and time sheets) useful as evidence. Disposal of the hardcopy documentation can be made only with the approval of OGC.

II. RETENTION PERIOD

- a. Timesheets, monthly computer reports, and cumulative computer printouts - Destroy on annual basis 3 years after creation of record with concurrence of Office of the General Counsel.
- b. Data base - Nonrecord. May be purged as necessary through working stage. Purge completely within 1 year after job is retired.

ITEM 24 - NONRECORD AND TEMPORARY MATERIALI. ADMINISTRATIVE MATERIAL OF SHORT-TERM VALUEA. Description

Temporary material that is useful but not essential to record the program activity of the organization holding it. Examples include informal communications carrying nonrecord information and materials documenting fringe activities such as employee welfare activities, charitable fund drives, and publications.

B. Retention Period

Destroy when no longer needed for reference, normally not to exceed 1 year.

II. HOUSEKEEPING MATERIALA. Description

Housekeeping records of short-term value that do not document the program activity of the organization holding it. Ideally this material should be destroyed without filing. Examples are bulletin board notices; changes of address; routing slips; requests for supplies and reproduction orders.

B. Retention Period

Destroy when no longer needed for reference, normally not to exceed 6 months.

III. CONVENIENCE OR READING FILESA. Description

Duplicate copies of records maintained solely as a reading or reference file for the convenience of personnel. This includes tickler, follow-up or suspense files.

B. Retention Period

Destroy when no longer needed for reference, normally not to exceed 6 months.

Exception: Convenience files of administratively confidential material for which a TVA office other than OEDC holds the record copy may be retained until no longer needed for administrative purposes. This material is not entered into one of the MEDS systems.

ITEM 24 - NONRECORD AND TEMPORARY MATERIAL (Continued)IV. SUPPLIES AND PRELIMINARY MATERIALS AND DRAFTS USED IN CREATING RECORDSA. Description

This series includes preliminary materials used in the creation of records; the record information is included in the final record. Examples are blank forms; reproduction materials such as stencils, hectograph masters, negatives, and offset plates; "forms" stored on word processing equipment; stenographic notebooks and stenotype tapes; preliminary and intermediate drafts.

B. Retention Period

Destroy when obsolete, superseded, or no longer needed.

V. WORKING PAPERSA. Description

This series includes the working papers, drawing prints (including those annotated or color coded to aid daily work), informal notes, and background material including photographs and other A-V items used in the creation of an official record or during the course of a specific task or activity that will be documented in official records.

This does not include supporting documentation that, due to informational content or evidential use, requires retention beyond the issuance of the final document or the completion of the task. Supporting documentation of this type will be described as individual items in this schedule.

B. Retention Period

Destroy when no longer needed for reference, normally within 1 year after final documents are issued or task is completed.

ITEM 24 - NONRECORD AND TEMPORARY MATERIAL (Continued)VI. DOCUMENTATION PERTAINING TO WORK BY EMPLOYEES FOR PROFESSIONAL COMMITTEES OR SOCIETIESA. Description

Material created during work with professional committees, societies, etc., is nonrecord if the employee is acting primarily as a professional individual and not as a representative of TVA's corporate opinion.

B. Retention Period

Destroy when no longer needed for reference.

Note: Material created during work with professional committees, societies, etc., is record material if the employee acts as a representative of TVA with authority to make corporate commitments for the agency. Final reports of professional organizations or societies employed by TVA or sponsored by TVA for a specific task or project are also normally record material. This record material should be retained for the period specified by the applicable items in this schedule, generally item 2.

VII. REFERENCE MATERIALA. Description

1. Reference copies of TVA publications including reports, manuals, circulars, public relations material, and other printed or processed documents. (Preservation of record copies is the responsibility of the issuing or controlling office.)
2. Outside publications of other government agencies, commercial firms, or private institutions including industry and governmental standards; vendor catalogs, price lists, and similar publications; maps; scholarly and historical publications; and compilations of reports, transactions, etc. These publications may be in print, computer output, microform, or other formats.

Note: Codes, standards, and other non-TVA documents that are referenced or used as a basis in the design and construction of TVA projects and must be retained for quality assurance purposes are evaluated in item 2, section H.

ITEM 24 - NONRECORD AND TEMPORARY MATERIAL (Continued)B. Retention Period

Destroy when obsolete or no longer needed for reference.

VIII. ROUTINE CONTROL FILESA. Description

This series includes routine papers used to facilitate or control work in progress that are not specifically authorized for other disposal. Examples are status cards and logs, specification control records, and records such as job books which control work flow and document actions taken.

B. Retention Period

Destroy when no longer needed for reference or when the work in progress is completed.

Note: Correspondence registers are scheduled under RCA 2682 for all TVA offices and divisions. These registers are to be destroyed at option, not to exceed 1 year.

IX. DUPLICATE COPIESA. Description

Extra copies of records or duplicate copies that are routed for informational purposes. The record copy may be held by another organization within OEDC or by another TVA office. If the record copy is held within OEDC, it is evaluated in the applicable item in this schedule.

B. Retention Period

Destroy when no longer needed for reference, normally not to exceed 6 months.

ITEM 24 - NONRECORD AND TEMPORARY MATERIAL (Continued)X. ROUTINE OFFICE PROCEDURESA. Description

This series includes routine office procedures of strictly internal, limited value. Examples would be branch specific procedures for work responsibilities, for mail distribution, for operating office equipment, or accomplishing routine tasks, etc.

B. Retention Period

Destroy when superseded or no longer required for reference. [GRS 16, Item 1 (c)]

Withdrawn 6/17/86

~~ITEM 25 EN DES GENERAL ACTIVITIES PHOTOGRAPHS~~I. DESCRIPTION

Photographs taken by EN DES photographers of people, places, and events from 1933 to date including portraits, pictures of ceremonies, presentations, etc. The series is used by the TVA Information Office for publications and presentations.

These records are physically stored with the construction progress photographs (Item 5) in a miscellaneous section. The prints and negatives are filed together in envelopes arranged by sequence numbers assigned by the photography laboratory.

MEDS will evaluate these photographs 5 years after they are created. They will be destroyed at that time unless they document construction or inspections or have historical value. The negatives of those photographs that document construction progress or inspections will be integrated by project into the photographs of construction progress stored in the Technical Information Center. Photographs that do not document construction or inspections but do possess long-term value due to the significance of the event, the position held by the individual photographed, etc., will be evaluated as they are identified. "All photographs (negatives, prints, and slides) more than 30-years old should be evaluated by MEDS as soon as possible, and those selected for permanent retention should be offered directly to NARA."

It is estimated that less than 5% of the photographs will be preserved longer than 5 years. The majority are photographs of routine award ceremonies, visiting student groups, or activities not related to the mission of the agency.

II. RETENTION PERIOD

- A. Photographs with-short-term value (i.e., do not document construction or inspection nor have historical value) - Destroy negatives and prints 5 years after record is created.
- B. Photographs of long-term value that document construction or inspections. (miscellaneous by TIC)
 1. Negatives -
 - a. Projects selected by TVA and NARA under criteria in Item 5-I-B-1-a. Permanent. Transfer to NARA 100 years from project becoming operational or end of project or when no longer needed for Administrative use; whichever is sooner. Final selection is to be made by TVA/NARA at the time of the transfer.

~~ITEM 25 - EN DES GENERAL ACTIVITIES PHOTOGRAPHS (Continued)~~

b. Projects not selected in "a" - Destroy when no longer needed for reference, normally not to exceed life of the project.

~~1. Prints - Microfilm on 16 mm film as a browsing file.
Destroy when acceptable microfilm obtained,~~

2. Microfilm (all copies) - Destroy when no longer needed for reference, normally not to exceed life of project.

C. Photographs of long-term value that do not document construction or inspections - Negatives will be evaluated according to the provisions of General Records Schedule 21 and other parts of this records schedule as they are identified. Offer negatives of historic value to NARA when 25 years old.

ITEM 26 - THREE-DIMENSIONAL DESIGN MODELSI. DESCRIPTION

Three-dimensional, reduced scale plastic models are created during the design of major projects. These models are of two basic types - the design check model and the primary design model. Design check models are used to verify the correctness of design originally presented in drawings, sketches, etc. Design check models are useful in discovering interferences such as a piping hanger located where another piece of equipment should be installed. Design check models currently exist for portions of the Bellefonte and Hartsville Nuclear Plants. They are transferred to CONST when completed for site use. Here POWER would use them for training, plant maintenance, and as a design tool for future modifications. The models are a useful tool in the event of a radiological emergency.

Primary design models have been built only for the Yellow Creek Nuclear Plant. These models are the primary depository of all design information; the design is implemented and checked on the model before drawings are issued. Notebooks are used to record the actual sizes and types of piping, valves, etc., used for full scale construction of points on the model.

II. RETENTION PERIOD

- A. Project models (and any associated documentation such as specification notebooks) - Destroy when no longer needed for administrative purposes, normally not to exceed life of project.
- B. Other models and associated documentation - Destroy when no longer needed for administrative purposes, normally not to exceed life of project.

ITEM 27 - APPRENTICE TRAINING RECORDSI. DESCRIPTION

Apprentices are enrolled in formal training programs conducted onsite by the resident training office. A file is maintained for each apprentice in the program. This file includes test scores, a record of the hours of training and experience accumulated by the apprentice, and other evaluations of his performance. Title 29, Code of Federal Regulations, requires records concerning apprentices to be maintained for 5 years.

II. RETENTION PERIOD

Destroy 5 years from last activity in the file.

ITEM 28 - ADP RECORDS AND RELATED DOCUMENTATIONI. INTRODUCTION

The computer jobs used in OEDC may be divided into two general types:

1. Those used for discrete tasks or one-time studies
2. Those used to track or manage information on a continuing basis

The two types of jobs are also differentiated by their primary record formats. The primary record for the discrete jobs is the final output; the primary record for continuing information management jobs is the magnetically stored data base. The two types of jobs and the disposition of their components (data entry records, magnetically stored data bases, and output) are evaluated in sections II and III. Support records, such as system documentation and processing files, required for servicing the computer jobs and their component records are evaluated in section IV.

II. DISCRETE TASKS FOR ONE-TIME STUDIESA. Description

These computer jobs are used to produce a final human readable document or report. Magnetically stored machine readable data is equivalent to a working draft and may be purged after issuance of the final document. Preliminary runs of the information are also working drafts and may be destroyed after comments on them have been incorporated into the data base. The final run of one of these finite jobs is evaluated according to its individual characteristics. Examples of this type of computer job are: CONST graphical and statistical report, Annual Salary Policy Merit Pay System, and engineering calculation programs acquired from vendors.

B. Retention period

1. Cards, coding sheets, diskettes, or other data entry mechanisms that are not evaluated in a separate item of this schedule - Destroy or purge after entry into magnetic storage is completed and verified, not to exceed issuance of final document or report or within 1 year after job is retired.

ITEM 28 - ADP RECORDS AND RELATED DOCUMENTATION (Continued)

2. Magnetically stored data base¹ (excluding source programs or processing files; see section IV) - May be purged as necessary through working stage. Purge completely after issuance of final document or report or within 1 year after job is retired.
3. Output - Disposal determined according to characteristics described below.
 - a. Final output which is a final report or end product in itself or which is a working paper used to create another final document but which contains significant backup material. These records are output on paper or microforms and include such records as computerized cable schedules, telephone systems records, computer calculations, and heat cycle calculations - Apply the retention period assigned in relevant item of this schedule to hard copy records serving the same function.
 - b. Final output which is transferred to another format (or medium) for release and which contains no significant comments aside from the transferred information - Destroy after issuance of the final document. (The final document is evaluated elsewhere in this schedule.)
4. Duplicate or backup tapes of stored information - Purge after next tape is run, not to exceed six backup runs.

III. CONTINUING INFORMATION MANAGEMENT OR TRACKING COMPUTER JOBSA. Description

These computer jobs are used to manage information on a continuing basis and final total output reports are never issued. Any output from one of these jobs is an update of information magnetically stored. Backup tapes of the stored information are generally run to protect data from being lost. These jobs may or may not be project-related. Examples of this type of job are: PC III, Engineering Requirements Planning Subsystem (ERPS), and the Electrical Bills of Material System.

¹May include storage on cards when no other complete data base is maintained.

ITEM 28 - ADP RECORDS AND RELATED DOCUMENTATION (Continued)B. Retention Period

1. Cards, coding sheets, diskettes, or other data entry mechanisms that are not evaluated in a separate item of this schedule - Disposal determined according to characteristics described below:
 - a. Data entry mechanisms used solely for data entry purposes - Destroy or purge after entry into magnetic storage is completed and verified, not to exceed three update cycles or within 1 year after job is retired.
 - b. Data entry mechanisms containing information additional to that entered into the data base - Destroy when no longer needed for reference, generally within 1 year after final documents are issued or task is completed.
2. Output not evaluated in a separate item of this schedule - Destroy within three update cycles or within 1 year after job is retired.
3. Magnetically stored data base¹ (excluding source programs or processing files; see section IV) - Information may be purged as necessary through working stage. Disposal of finalized data base determined according to characteristics described below.
 - a. Information which serves the same function as an existing hard copy record series. An example is the data base for the Computer Indexed System which serves the same function as the paper or microfiche indexes to the Manually Indexed System (see item 2) - Apply the retention period assigned in relevant item of this schedule to hard copy records serving the same function.
 - b. Information used as administrative or house-keeping tool but which has no inherent legal or policy-making value (as in the PC III Systems) - Purge as necessary or at retirement of job.

¹May include storage on cards when no other complete data base is maintained.

ITEM 28 - ADP RECORDS AND RELATED DOCUMENTATION (Continued)

- c. Information used as an administrative or housekeeping tool which has inherent legal or administrative value - Evaluated individually by series in attachment A of this item.
- 4. Duplicates or backup tapes of stored information - Purge after next tape is run, not to exceed six backup runs.

IV. SUPPORT RECORDSA. Description

Records required for servicing machine readable records and for converting them from human readable information to encoded data and vice versa. These support records may be stored in human-readable or machine-readable formats. A given support record may pertain to specific jobs or may be generic in application. The main types of support records are described below.

- 1. System documentation - Descriptive documents required to initiate, develop, operate, and maintain ADP activities. Includes user manuals, thesaurus lists, system and file specifications, definitions of logical and physical characteristics of data elements, data entry and retrieval procedures, etc.
- 2. Processing files - Machine-readable files employed to create and use the magnetically stored data base. Includes source programs; service programs to compile, translate, link, sort, merge, etc; and intermediate data input/output, such as rejection lists, rerun files, etc.

B. Retention Period

- 1. Support records applicable to a specific job or set of related jobs
 - a. Master copy--Revise, correct, purge, or update as necessary; retain an updated version with related data file (job/set of jobs).

Note: Some system documentation may be useful as reference material after retirement of applicable job. These records are evaluated in item 24, part VII.

ITEM 28 - ADP RECORDS AND RELATED DOCUMENTATION (Continued)

b. Other copies--Revise, correct, purge, or update as necessary; destroy as nonrecord when no longer needed for reference, not to exceed life of data file (job/set of jobs).

2. Support records of generic application

a. Master copy--Revise, correct, purge, or update as necessary; dispose of when obsolete or no longer needed.

b. Other copies--Revise, correct, purge, or update as necessary; destroy as nonrecord when no longer needed for reference.

V. LISTING OF COMPUTER SYSTEMS BY RETENTION PERIOD

Appendix G of this schedule contains a listing of the computer systems identified and evaluated to date. Systems will be added to the list as identified or created. The "System Type" and "Applicable Section in Item 30" entries indicate the retention period of the primary record produced by the system. (The primary record for discrete task systems is the final output; for continuing information management systems, the primary record is the magnetically stored data base.) For example, the code "Discrete" means the system is used for discrete tasks or one-time studies and the final output is a self-contained final record. According to the retention period assigned in Section II.B.3.a, the report would be retained for the same period as manual records serving the same purpose. This retention period would be determined by consulting the appropriate item in this schedule for the manual records.

ITEM 28 - ADP RECORDS AND RELATED DOCUMENTATION - ATTACHMENT A

RETENTION PERIODS OF MAGNETICALLY STORED DATA BASES OF LONG-TERM VALUE WHICH ARE NEVER CONVERTED TO HARD COPY

- I. The data bases scheduled below are records of long term value which are used to manage information on a continuing basis; they are never completely converted to hard copy records, leaving the data base as the record copy. These data bases are described in section III.B.3.c. The retention periods for the input media and output of these data bases is also stated in Section III. The data bases may be corrected and updated as necessary through working stages. The finalized data bases will be retained for the periods indicated below.
- II. Retention Period
- A. Engineering and technical data bases including architectural design data, electrical design data, mechanical design data, civil design data, structural steel and bridge design data, and schedules. Examples are process computer input/output system, General Cable and Raceway System, Electrical Equipment and Instrumentation System, Auxiliary Power Load Information System, Electrical Bills of Material System, Cable Routing System, ETABS and ITABS Sytem, and ERPS (Engineering Requirements Planning Subsystem). - Purge when project no longer exists.
- B. Information used throughout the design and construction of a project which is used to plan activity completion dates and activity ordering. Examples: Hanger Control System (Z10) and Bellefonte Name Tags (Z27). - Purge at close of construction.¹
- C. Time reporting data bases on salary policy employees including hours and dates worked, overtime data, and leave data. Examples are the Time Reporting Information System and the CONST Cost Accounting, Time, and Attendance Subsystem. - Purge data when 6 fiscal years old.
- D. Geographical data bases used to generate design input documents and generic studies or reports. Examples include the regional fault data base and the regional earthquake data base. - Purge when no longer needed for agency work.

¹Some of these data bases may be requested at the close of construction by the Office of Power. These data bases would be transferred to the Office of Power under item 12, section IV, of this schedule.

APPENDIX A

OFFICE OF ENGINEERING DESIGN AND CONSTRUCTION

ORGANIZATION AND RESPONSIBILITIES

I. HISTORICAL BACKGROUND

The Office of Engineering Design and Construction appeared on the first approved organizational chart for TVA dated October 6, 1933. On this chart it was called the "General Engineering and Geology Division." Organizational changes occurred as follows:

- 10-06-33 - General Engineering and Geology Division
- 9-18-34 - Engineering and Construction Department
- 6-30-37 - Water Control in the River Channel
- 8-01-46 - Office of the Chief Engineer
- 6-01-51 - Office of Engineering
- 9-29-63 - Office of Engineering Design and Construction
- 10-01-84 - Office of Engineering

Its functions and responsibilities have included the following:

Conducting engineering investigations, surveys, and design for the development of a single integrated plan for the control and utilization of water resources; compiling data and reports on basic engineering and geological information, including topographic mapping, compilation and analysis of water resources data, geologic investigations and exploration, test borings, and study of specific projects.

Participating in the planning and providing or obtaining the architectural and engineering design and the construction of all permanent structures and permanent engineering works which are authorized to be built in the TVA program in accordance with the requirements determined by the offices and divisions having program responsibilities for such structures and works.

Exceptions are: power transmission, distribution, and communication facilities and switchhouses at substations not adjacent to generating stations, or as delegated to the Office of Agricultural and Chemical Development. It also provides for modernization, rehabilitation, and major additions to existing plants and for other engineering, architectural, and construction services.

II. OFFICE OF THE MANAGER

The Manager of OEDC directed and coordinated the work of the Office which included the Division of Engineering Design and the Division of Construction. He was assisted by the managers of these divisions; five assistants to the manager who served in technical and administrative capacities and staff chiefs who provided management staff services.

The title of Office Manager was effective September 23, 1963. It had formerly been Chief Engineer. Dr. A. E. Morgan, first TVA Chairman, also served as Chief Engineer until March 23, 1938. Carl A. Bock, Assistant Chief Engineer, apparently did a majority of the work until the first position of Chief Engineer was filled. Those serving as Chief Engineer or Office Manager are listed below:

A. E. Morgan	- 5/33 through 3/38
T. B. Parker	- 5/38 through 6/43
Clarence E. Blee	- 6/43 through 12/56
George K. Leonard	- 12/56 through 8/59
George P. Palo	- 8/59 through 6/69
George H. Kimmons	- 6/69 through 5/84
Robert W. Cantrell	- 5/84 through Present

Records documenting the administrative activities of this Office are further described and evaluated in item 1 of this schedule. Most of the records of the supporting staffs are described in item 2. The records of the Planning, Reports, and Information Staff are described in item 3. Smaller record series are described in items 7, 15, 16, 17, 20, 22, and 24.

NOTE

Effective October 1, 1984, the OEDC staff ceased to exist and the Office of Engineering and the Office of Construction were placed under the Power and Engineering Program.

III. OFFICE OF CONSTRUCTION

The Division of Construction organizational changes have been as follows:

10-06-33	- Construction and Maintenance Division
9-18-34	- Maintenance and Construction Division

III. OFFICE OF CONSTRUCTION (Continued)

6-30-37 - Construction Department

2-06-48 - Division of Construction

10-1-84 - Office of Construction

Its functions and responsibilities have grown from:

Maintains buildings, grounds, and equipment; provides fire and guard protection; furnishes automatic transportation; and does minor construction work.

To:

Carries out or obtains the construction, in accordance with approved designs, of all structures and engineering works coming under the construction responsibilities of the Office of Construction, including all pertinent work connected with the completion of projects for operation for other offices and divisions.

IV. OFFICE OF ENGINEERING

The Office of Engineering organizational changes have been as follows:

10-06-33 - Service Engineering Division

09-18-34 - Engineering Service Division

06-30-37 - Design Department

02-06-48 - Division of Design

09-29-63 - Division of Engineering Design

10-01-84 - Office of Engineering

Its functions and responsibilities have grown from:

Maintains engineering and technical services consisting of: land surveys and mapping; preparation of material and equipment specifications; testing of raw materials; drafting; engineering records, drawings, parts lists, bills of material, etc.; and engineering services of a similar character.

IV. OFFICE OF ENGINEERING (Continued)

To:

Prepares or obtains complete technical designs and specifications for structures and engineering works coming under the responsibilities of the Office of Engineering including site development, architectural treatment, landscape design, materials, machinery, and equipment and their QA inspection and testing, and makes technical evaluation of all procurements sponsored by the division. It investigates and evaluates environmental, architectural, and engineering feasibility factors, including regulatory factors, involving design features in the location of proposed projects to be constructed in the TVA program. It develops primary layouts and designs and identifies design, construction, and cost factors with the assistance of the cost and estimating staff of the manager's office, between alternative generating plant sites and processes, and prepares summaries based on these factors for use in recommendations to the Office of Power on precise location of such facilities and processes. It obtains technical data and services from the program offices, divisions, and others concerned and recommends optimum location in terms of design and construction factors for such structures.

APPENDIX B

MANAGEMENT AND ENGINEERING DATA SYSTEMS BRANCH

Although administratively located within OE, the Management and Engineering Data Systems Branch (MEDS) functions as the records management organization for all of OEDC, the Nuclear Safety Review Staff (NSRS) and the Office of Quality Assurance (OQA) (see appendix E for information on the NSRS and Appendix H for information on OQA.) MEDS currently controls the following records systems:

1. Computer Indexed System

- a. 1976 - 1979 OEDC General File
- b. 1980 - 1982 OEDC General File
- c. 1983 - Present OEDC General File
- d. Hartsville Nuclear Plant Site QA Records File
- e. Bellefonte Nuclear Plant Site QA Records File
- f. Phipps Bend Nuclear Plant Site QA Records File
- g. Watts Bar Nuclear Plant Site QA Records File
- h. Sequoyah Nuclear Plant Site QA Records File

2. Manually Indexed System

- a. Microfilmed Files
- b. Stored Hard Copy Files

3. Drawing System

I. COMPUTER INDEXED SYSTEM

Each file in the Computer Indexed System consists of records on microforms accessed through computer data bases (indexes). The OEDC General File contains the record copy of correspondence and engineering records generated or received by OEDC since September 1, 1976. The Hartsville, Bellefonte, Watts Bar, Sequoyah, and Phipps Bend Nuclear Plants Site QA Records Files consist of those records which must be turned over to the Office of Power at the close of construction of the nuclear plants. These record series are described and evaluated in item 2 of this schedule.

The records entered into the Computer Indexed System are sent to MEDS by the creating or receiving organization. MEDS personnel stamp each document with a control number (MEDSNO) and microfilm them in the order received. (Exception: In rare cases, MEDS receives microforms as the original source document. In these cases, MEDS ensures that an archival silver microform meets all quality standards before accepting the records into the MEDS systems.) The hard copy records are not grouped by subject matter prior to microfilming. After microfilming, the records are individually cataloged into a computer index. The microform becomes the record copy after inspection and verification.

I. COMPUTER INDEXED SYSTEM (Continued)

With a few exceptions, the paper copy of the records is then destroyed. Exceptions include the Office Manager's records (see appendix C, item 2), documents that are illegible on microfilm, vendor documents subject to revisions, design calculations, and CEB reports (see item 5 on schedule). Records designated as exceptions are maintained in hard copy by MEDS or by the originating organization. Illegibles are retained until related film is destroyed; vendor manuals that are subject to change are retained for refilming purposes until they are no longer subject to change. Most other exceptions retained in hard copy are covered in individual items on this schedule. In rare cases, MEDS may return the original documents to the originating organization for use as a working file. This generally occurs only when the submitting organization needs a security copy of the file but wishes to retain the originals for reference purposes. In these cases, the submitting organization destroys the original records as nonrecord when they are no longer needed for reference.

A security copy of the microfilm is deposited with National Underground Storage, Boyers, Pennsylvania. Backup tapes for the computer data base are maintained by the computing support organization. A computer-output-microfilm listing of key elements of the data base is also deposited with National Underground Storage. These listings are currently sorted by accession number and by the organization originating the document.

II. MANUALLY INDEXED SYSTEM

The records in the Manually Indexed System are accessed through "folder level" indexes prepared by the originating organization and verified by MEDS. These "folder level" indexes reflect the original filing arrangement of the hard copy files. This arrangement is generally alphabetic by subject or project name and then chronologically within the folder. (Contract files are filed first by project name, then numerically by contract number, and last chronologically within the contract.) MEDS maintains the master copy of these indexes in hard copy format and distributes microfiche duplicates for access to the records.

Some of the records in the Manually Indexed System are microfilmed and the paper copy is destroyed after verification; illegible documents are removed and retained in hard copy. Other records in the Manually Indexed System are stored in hard copy without microfilming until destroyed at the end of their retention periods. Determination of whether to microfilm depends on length of retention period, requirements for a "security" copy, the need for multiple copies, etc. In rare cases, microforms may be received by OEDC as the original record. MEDS will ensure that these microforms meet archival quality standards.

II. MANUALLY INDEXED SYSTEM (Continued)

Documents in the Manually Indexed System that are of the same record series as documents in the Computer Indexed System will generally be microfilmed. The evaluation of these records is located in item 2 of this schedule. The manually indexed portion of this record series was created prior to September 1, 1976, when the Computer Indexed System was implemented. (See appendix C, item 1, for further description of this series.) Records in the Manually Indexed System that are not a part of the record series covered by item 2 of this schedule are described in individual items on the schedule.

III. DRAWING SYSTEM

Records included in the Drawing System are described and evaluated in item 4 of this schedule.

MEDS is responsible for the orderly scheduling and disposition of all records generated or reviewed by OEDC. The systems described above relate to records submitted to the MEDS Branch for microfilming and/or storage. In addition, MEDS is responsible for evaluating and scheduling OEDC records for which the originating or receiving groups retain physical possession. These records will also be described in items on this schedule.

APPENDIX C

SUPPLEMENTAL DESCRIPTION OF RECORD SERIES FOR ITEMS 1 THROUGH 4

I. ITEM 1 - CHIEF ENGINEER/OFFICE MANAGER'S RECORDS - 1933 THROUGH 1984

The records documenting the activities of the Chief Engineer/Office Manager are maintained in hard copy and microfilm. Records created during A. E. Morgan's tenure as Chairman/Chief Engineer are assumed to be in his papers at Antioch College which have been offered to the archives. Three cubic feet of Carl Bock's records dated 1933 through 1939 were located at Antioch College and returned to TVA. These records are uncodded and filed in subject folders. A large portion of the Chief Engineer's correspondence file from 1936 through 1943 has been microfilmed on 111 rolls of 16-mm roll film. The paper records of this material no longer exist. These microfilmed records are classified by the TVA decimal system and will be offered to NARA when this schedule is approved. A copy of the TVA decimal system master is already in NARA, Archives Branch, East Point, Georgia.

The Chief Engineer/Office Manager's records dating 1938 through 1980 constitute 101 cubic feet of records filed alphabetically by subject or project name. A listing of folder label titles is used as an index for retrieval of information. These records will be filmed by MEDS as part of the Manually Indexed System; the paper records will be offered to the Archives Branch, NARA, when the film has been verified. A hard copy index will be sent with the records. The security copy of the microfilm stored in National Underground Storage, Boyers, Pennsylvania, will be offered to the Archives Branch, when no longer needed for reference.

Records created and received after January 1, 1981, will go into the Computer Indexed System. The paper records will be segregated, after the film is verified, from other documents by the unique accession number assigned to the Office Manager's Office. (Example: EDC 810305 003--EDC is the abbreviation for the Manager's Office; 810305 is the date, 003 is the sequential document number.)

All material created and received by the Office Manager will be stamped with this type accession number. As these records are segregated, they will be filed in cubic foot boxes in MEDS control number sequence. The MEDS control number is stamped on each document at the mail desk. Example: 810305A0003 - 810305 is the date, A is the batch number, 0003 is the sequential document number. When the box becomes full, it will be transferred to the Knoxville Records Center. Anticipated accumulation is 1 to 2 cubic feet per month. The accumulated boxes will be shipped to NARA annually. A computer-generated index sorted by project in MEDS control number sequence will be output annually and shipped with the material.

II. ITEM 2 - OEDC ENGINEERING CONSTRUCTION AND ADMINISTRATIVE RECORDS,
- 1933 through 1985 (MEDS AND SUCCESSOR UNITS)

Item 2 relates to the records created or received by OEDC that are of long-term engineering or administrative value. Since September 1, 1976, these records have primarily been entered into the Computer Indexed System of MEDS. This system presently contains the OEDC General File and the Site QA Records Files for the Hartsville, Bellefonte, Watts Bar, Sequoyah, and Phipps Bend Nuclear Plants. (See appendix B for more information about the records systems controlled by MEDS.) Records in this series created prior to September 1, 1976, are generally processed into the Manually Indexed System. However, records created prior to September 1, 1976, are entered into the Computer Indexed System if the information must be immediately accessible. In other cases material created after September 1, 1976, is microfilmed as part of the Manually Indexed System due to volume, format, or cost considerations. Locator notices from records in the Computer Indexed System to records in the Manually Indexed System may at times be used. The microform generally used will be 16-mm roll film. However, 35-mm aperture cards, 35-mm microfiche, and 105-mm computer-generated microforms will also be utilized. In some cases microforms will be received by OEDC as the original document. In these cases archival silver microforms will be tested or created to ensure standards are met before acceptance into the MEDS systems.

III. ITEM 3 - ENGINEERING REPORTS FILE (ENGINEERING PROJECTS HISTORIES)

The Planning, Reports, and Information Staff developed, coordinated, and issued project technical reports, monographs, and design construction technical data. It also maintained the engineering report file.

This file includes approximately 65 cubic feet of the following types of records:

1. Technical reports on each TVA construction project. (Does not include redesign and modification work at power generating or tributary area development projects.)
2. Project planning reports.
3. Cemetery relocation reports.
4. Highway and railroad relocation and construction reports.
5. Geology reports.
6. Final design reports.
7. Monthly construction progress reports from all projects.
8. Final construction reports.
9. Technical monographs on research and study projects.
10. Outside consultants' reports.
11. OEDC annual reports.
12. Papers and speeches approved by the OEDC Manager and the Planning, Reports, and Information Staff.

Since these reports summarize in detail the planning, design, and construction of all TVA projects, they have been scheduled for "permanent" retention and are being accessioned into the Branch Archives, East Point, Georgia. NARA, the project files and project material going into the MEDS records systems need only "temporary" retention as requested in the schedule.

The technical report on Tellico Dam is currently being prepared.

NOTE

Effective October 1, 1984, the duties of this staff were assumed by the Power and Engineering Information Staff.

IV. ITEM 4 - DESIGN AND CONSTRUCTION DRAWINGS

A. Introduction

Drawings for TVA projects are prepared by Engineering Design organizations, architectural firms that provide engineering and architectural work, personal services contractors who work as an extension of a TVA design organization, other TVA divisions, and turnkey contractors who are responsible for the design, procurement, installation, and efficiency of a facility, system, or item of equipment.

Regardless of who prepares the drawing, official drawings are issued only after approval has been obtained from the lead branch chief or project manager, and in some instances the Manager of Engineering Design. Approved drawings are submitted to the Technical Information Center (TIC) for microfilming. The microfilm becomes the record copy of the drawing, but the original of OEDC-originated drawings is maintained as a vehicle for revising and reissuing the drawing. Original OEDC drawings are stored in the Knoxville Records Center, the TIC, or the originating organization. The originals of vendor drawings are destroyed when no longer needed for reference. Approval for microfilming drawings was received under II-NN-3394.

After the drawings are microfilmed, the film is mounted in aperture cards. The complete file of aperture cards in the TIC is the record file. However, copies of the cards are distributed throughout TVA as reference copies. For later plants, a security copy of the drawing microfilm is stored in roll form in National Underground Storage in Boyers, Pennsylvania.

The drawings on each construction project, principal dams, conventional dams and nuclear plants selected by TVA and NARA for accessioning into the archives will be offered when no longer needed by TVA. In addition to all drawings on selected projects, dams and nuclear plants, NARA may wish to accession the site plan drawings, location of structure drawings, switchyard general layout drawings, and powerhouse equipment layout drawings for all plants. These drawings provide a valuable overview of each project for both historical and engineering purposes.

B. TIC Responsibilities

Several categories of drawings are handled in the TIC, including:

- a. Current revisions of architectural and engineering drawings. These are the latest revisions of approved drawings produced for TVA projects by Construction, Engineering Design, vendors, etc.

IV. ITEM 4 - DESIGN AND CONSTRUCTION DRAWINGS (Continued)

- b. Previous revisions of architectural and engineering drawings. When a drawing is revised, the aperture card for the previous revision is placed in the superceded file. A complete microfilm history of most drawings is available from the TIC.
- c. As-constructed or final field revision drawings. When a project has been completed, the drawings documenting how the project was actually constructed are stamped "As-Constructed" if it is a nuclear project, or marked "As Constructed" or "Final Field Revision" in the revision description if nonnuclear. The TIC maintains the record copy of these drawings on aperture cards. The original marked reproducibles for nuclear plants are maintained at the project site by the Office of Power; the original drawings for other projects are stored by the TIC.
- d. Highway and railroad drawings (see item 11 of this schedule).
- e. Geologic drawings (see item 8 of this schedule).

The TIC does not microfilm or process:

- a. Drawings or sketches produced at the sites solely for site use.
- b. Unofficial prints annotated or color coded solely for ease of use in daily work.

The TIC microfilms makes and develops a silver emulsion microfilm reproduction of each new drawing that is approved and of each subsequent revision of that drawing. Most older drawings created before the aperture card system was established have also been microfilmed and mounted on aperture cards. However, some drawings made by site personnel at the older plants were microfilmed on 16-mm or 35-mm roll film prior to establishment of the aperture card system and have not been mounted on cards. Other old originals and filmed drawings of nonaccount and general projects (minor projects without capital accounts) have not been retrofitted into the aperture card system.

Drawing information is taken from each microfilm reproduction and keypunched onto standard 80 column tab cards and aperture cards. The microfilm reproductions are then mounted onto the aperture cards and additional duplicate diazo microfilm copies are made for

controlled distribution. The tab cards are used to update the Drawing Management System (DMS), and the Drawing Information System (DIS)¹. Listings of drawings by project are maintained at the service counter in the TIC for the convenience of users. The aperture cards for all OEDC drawings are stored in manual equipment. Arrangement is by project and by drawing number within the project.

Vendor drawings are processed by the TIC only if they are approved drawings. Approved vendor drawings are those marked "A" (Approved), "AU" (Accepted for Use), or "IO" (Information Only). All aperture cards for vendor drawings are stored in manual filing equipment. The nuclear plant cards are arranged manually by project and by requisition number within the project. Cards for nonnuclear plants are arranged by contract year and within the year by requisition number.

The "as-constructed" drawings for all plants are filed in manual filing equipment. The OEDC-originated as-constructed drawings are filed by project and within the project by drawing number. The vendor-originated as-constructed drawings are filed by project, by requisition number within the project, and then by drawing number.

¹The Drawing Management System (DMS) is a computerized listing of drawings containing the project designation, contract number, document number, title of drawing, revision level, status etc. The DMS includes all issued drawings (both by TVA and vendors) for nuclear plants since 1978 when the system began. The DIS is a computerized listing of issued drawings on nonnuclear projects.

IV. ITEM 4 - DESIGN AND CONSTRUCTION DRAWINGS (Continued)

C. Numbering Systems for Drawings

All drawings are assigned unique identifying numbers. There are currently two different numbering schemes: (1) the system established for use on Bellefonte Nuclear Plant and later projects after the 1973 Engineering Design reorganization and (2) the system used for projects prior to Bellefonte Nuclear Plant.

The first numbering system is composed of a seven-part number that contains codified information about the drawings' origin and subject. Drawing numbers will normally contain a total of 13 letters, numbers, and dashes (excluding the revision number).

Project designation and discipline/group codes are shown in separate blocks on the drawing to the left of the drawing number block. Example: 88 E 5TW2754 - EB - 12R1

88 - Project Designation Code
E - Discipline/Group Code

Drawing Number

5 - Discipline or Organization
T - Building, Area, or Feature Code
W - Drawing size or Document ID
2 - Unit Number
754 - Drawing Series
Dash
EB - System
Dash
12 - Sheet Number
R1 - Revision Number

The second numbering system is divided into four areas: (1) Hydro, Fossil, and Nuclear Projects, (2) Miscellaneous Projects, (3) Highway and Railroad Projects, including bridges, and (4) Land Between the Lakes Project.

The Hydro, Fossil, and Nuclear Projects (prior to Bellefonte) drawing number is divided into three parts. Example: 67 H 44N200R1

67 - Project Designation Code
H - Discipline/Group Code

Drawing Number

44 - Subfeature Number
N - Drawing Size
200 - Drawing Series Number

IV. ITEM 4 - DESIGN AND CONSTRUCTION DRAWINGS (Continued)

The Miscellaneous Projects include miscellaneous recurring work, river terminals, small industrial plants and miscellaneous projects or buildings for Power. The number is divided into four parts. Example: 83 H 104-53N240R1.

83 - Project Designation Code
H - Discipline/Group Code

Drawing Number

104 - Discipline Number
53 - Work Classification or Job Number
N - Drawing Size
240 - Drawing Series Number

Highway and Railroad Projects under a single project designation use a drawing number format consisting of three parts. Example: 80 HR 2106H302R0.

80 - Project Designation Code
HR - Discipline/Group Code

Drawing Number

2106 - Subproject Number
H - Drawing Size
302 - Drawing Series Number

The Land Between the Lakes drawing number format consists of four parts. Example: 71 C FC1-15N200R1

71 - Project Designation Code
C - Discipline/Group Code

Drawing Number

FC1- Site/Area Designation Code
15 - Work Classification or Job Number
N - Drawing Size
200 - Drawing Series Number

Original drawings are identified by R0 (Revision 0). Revisions to the original drawing will be identified by the revision number--R1, R2, etc., for all drawings except as-constructed drawings on nuclear plants, which utilize RA, RB, etc. (As-constructed drawings are described more completely below.)

D. Revisions to Drawings

1. Introduction

In the handling of all changes to issued drawings, one of the main concerns is that changes are recorded on the drawing to provide a complete history of the drawing.

Revised drawings are previously issued drawings that have been revised to reflect changes in format, design, configuration, or drawing identity. They are reissued to notify current holders of the drawings of the changes.

Voided drawings are previously issued drawings that are no longer valid and are not to be used because of a change in requirements, overall design, drawing number, or format. (Aperture cards of voided drawings are retained by the TIC; the original drawings will be destroyed.)

As original drawings are pulled for revision, the drawing may be restored by retracing the original including signatures and initials. A special signature block in the lower left corner identifies the drawing as a restoration and requires approval. After approval has been noted the original drawing is destroyed and the restored drawing becomes the original.

2. Revisions to drawings of nuclear plants

Revisions of nuclear plant drawings may result from modification proposals originated by OE, OC, or the Office of Power.

A modification proposal that originates in or is approved by OE is processed by an Engineering Change Notice (ECN). An ECN may be initiated by OE or generated when modifications are requested by OC or Nuclear Power. The ECN is intended to provide OE, OC, and the Office of Power with a concise scope of a design change in a timely manner. The change or revision is processed by OE. After approval, revised drawings are issued.

Field Change Requests (FCR) may be initiated by CONST before the Nuclear Regulatory Commission (NRC) issues an operating license, or by the Division of Nuclear Power, Office of Power, after an operating license is issued. Revisions to drawings as a result of an approved FCR are processed as an ECN by OE.

A Design Change Request (DCR) is a formal written request from the Office of Power to OE for a modification to a nuclear plant. Any TVA organization associated with the nuclear power program may propose a modification to improve operation, reliability, safety, maintainability, or testability of a nuclear power plant by preparing a DCR. Revisions to drawings as a result of an approved DCR must be processed as an ECN in OE.

IV. ITEM 4 - DESIGN AND CONSTRUCTION DRAWINGS (Continued)

3. Revisions to drawings of nonnuclear plants.

Field changes to drawings for nonnuclear plants are marked on drawings transmitted to OE by memo from the constructing division. The Division of Power System Operations, Office of Power, transmits field changes in the form of Technical Reports with marked prints attached.

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APPENDIX D

PROCEDURES

PROCEDURES

To standardize the activities of OEDC, procedures were issued through the Office of Quality Assurance (OQA), the Procedures Control Section of EN DES, the Quality Engineering and Support Staff (QES), the Nuclear Engineering Support Branch, Singleton Materials Laboratory (CONST), and the various construction sites. These procedures may be initiated by various organizations, but are edited, controlled, and distributed by the issuing group.

These records are included in item 2 of this schedule.

OQA PROCEDURES

OQA issued two manuals: Quality Assurance Program Requirements Manual for Design, Procurement, and Construction (PRM) and the Interdivisional Quality Assurance Procedure Manual for Nuclear Power Plants. The Quality Assurance Procedures Manual for the Manager's Office is issued by the General Manager's office.¹ These procedures are more general in scope than those of the other issuing groups. However, they are basically working documents without permanent historical value. The record copy of these procedures is in the OEDC General File of the Computer Indexed System of MEDS. The PRM may be an exception in possessing some historical value. This manual delineates policy, responsibilities, requirements, and commitments for the QA program to be applied during the design, procurement, and construction of TVA nuclear power plants.

DIVISION-LEVEL PROCEDURES

Procedures issued by the other groups apply only to the specific division by which they are generated. These procedures contain very specific and detailed working instructions and do not have permanent value.

The types of documents issued by these groups are indicated below:

1. Procedures Control Section (OE)

Engineering procedures, administrative instructions, construction specifications, design guides and standards, standard drawings, supervisory manuals, drafting standards, information systems manuals, design criteria documents, and hazard control manual. Depending on the document involved, the record copy is either retained in the Procedures Control Section or submitted to one of the records systems of the MEDS Branch.

¹These manuals were the responsibility of the OEDC QA staff until November 1982, and the record copy put into the OEDC General File of the Computer Indexed System of MEDS. After October 1, 1984, the PRM and the IDQAP Manual were superseded by the Nuclear Quality Assurance Manual (NQAM) which is the responsibility of The Office of Nuclear Power.

DIVISION-LEVEL PROCEDURES (Continued)2. Quality Engineering and Support Staff (QES)

QA program policies, QA procedures, QA staff procedures, construction procedures, quality control instructions, receiving, storage, preventive maintenance and inspection instructions. Record copy is in the Computer Indexed System of MEDS.

3. Singleton Materials Laboratory and the CONST Sites

Construction procedures, inspection instructions, quality control procedures, and standard operating procedures. The record copy is in the Computer Indexed System of MEDS.

APPENDIX E

NUCLEAR SAFETY REVIEW STAFF OFFICE OF THE GENERAL MANAGER

The Nuclear Safety Review Staff was established by the TVA Board of Directors (BOARD) in June 1979 and placed under the Office of Health and Safety. The Staff was transferred under the Office of the General Manager effective January 14, 1980. It acts independently of TVA organizations concerned with the design, construction, operations, and support of nuclear plants and has broad authority to monitor and review TVA's nuclear activities.

Its purpose is to advise the BOARD on nuclear safety policy and to advise and assist in making decisions affecting the safety of TVA nuclear plants. It makes recommendations for such changes as it determines are necessary or desirable to correct safety provisions or to enhance the safety of TVA nuclear plants. It also advises the Board of its opinion as to whether nuclear plant operation should be continued where there is an issue concerning the immediate health and safety of the public or employee.

The NSRS acts independently to conduct onsite inspections and reviews of all phases of TVA's nuclear program. When necessary, resources and areas of expertise within other TVA organizations may be used in order to ensure nuclear plant safety.

Specific functions of the Nuclear Safety Review Staff include:

1. Advising General Manager and BOARD on nuclear safety issues, regulations, and policies. In addition to functions listed below in items 2 and 3, the following are examples of activities which support this role.
 - a. Evaluation of fundamental generic and unresolved nuclear safety issues as necessary.
 - b. Evaluation of nuclear regulatory requirements.
 - c. Evaluation of nuclear safety actions proposed or taken by organizations outside TVA.
 - d. Evaluation of need for change in nuclear plant design or operations through assessment of probabilistic risks.
2. Conducting broad overview of TVA nuclear programs to provide BOARD with assessment of the adequacy of the level of safety in these programs. Examples of activities to accomplish this include:
 - a. Independent review of nuclear plant design.
 - b. Independent monitoring of nuclear plant construction.

- c. Independent monitoring of nuclear plant operations.
 - d. Review of nuclear plant employee training.
 - e. Review of radiological emergency plans.
 - f. Review of radiation protection.
3. Performing special nuclear safety investigations. Examples include evaluation of:
 - a. Differing nuclear safety positions by offices.
 - b. Differing nuclear safety positions by divisions within offices.
 - c. NRC review requests.
 - d. Significant events at operating plants or construction sites involving nuclear safety or quality.
 4. Evaluating employee concerns regarding nuclear safety.
 5. Fostering improved attitudes toward nuclear safety within TVA.

The responsibilities of NSRS do not reduce in any respect the responsibility of other TVA organizations in the ongoing licensing, design, construction, operation, and monitoring of nuclear plants for safe operation.

In September and October 1979, the Nuclear Safety Review Staff began negotiating to input all of the records created and/or received by the organization into the Computer Indexed System of the Office of Engineering Design and Construction (OEDC) Management and Engineering Data Systems (MEDS) (NCl-142-77-8). This procedure was implemented in February 1980. The purpose for requesting participation in MEDS Computer Indexed System was twofold:

1. To operate a more efficient records management system with less manpower.
2. To have access to OEDC documentation required in the conduct of NSRS delegated responsibilities.

In accomplishing its delegated functions, the NSRS creates or receives the following types of records:

1. Administrative and Housekeeping. Records include documents related, but not limited, to TVA-wide office and division information notices; travel and transportation; budget; cost estimates; personnel records not related to individuals including overtime, retirement, training, fund drives, blood banks, Equal Employment Opportunity; safety and health; and office space, equipment, supplies, and furniture; etc.

EVALUATION OF RECORDS (Continued)

2. Investigations and Reviews. Records include documents related, but not limited to, investigations of nuclear incidents, accidents, or issues; employee concerns related to nuclear safety; special investigations requested by the BOARD and General Manager, NRC, or line organizations; and reviews of activities and programs related to nuclear plant design, construction, and operation.

Generally, records concerning investigations of employee concerns are treated confidentially.

3. NRC Communications To and From TVA. Records include, but are not limited to, NUREGs; NRC notices, bulletins, and circulars; NRC generic letters; inspection reports and related correspondence; licensing; and other nuclear regulatory documents.
4. Internal Correspondence by Line, QA, and Corporate Offices Concerning Significant Nuclear Safety Issues. Records include documents related, but not limited to, nonconformances, unresolved safety questions, plant operating reportability occurrences, engineering changes, QA audits, safety meetings, reactor scrams, operating reports, and industry codes and regulations.
5. Safeguards Material. Records include documents which specifically identify a licensee's or applicant's detailed (1) security measures for the physical protection of special nuclear material or (2) security measures for the physical protection and locations of equipment vital to the protection of the facilities.

Almost all records created or received by the NSRS are input into the MEDS Computer Indexed System. These records maintained in the NSRS office that are not sent to the MEDS Computer Indexed System are evaluated in individual items in this schedule. These records include the following record series:

1. Personnel field files

Nonrecord. Record copy in Office of Management Services, Division of Personnel.

2. Budget records

Nonrecord. Record copy in Office of the General Manager, Office of Planning and Budget.

3. Reading files

Nonrecord. Evaluated in item 24 of the schedule.

EVALUATION OF RECORDS (Continued)

4. Support documentation (including confidential material) for reviews and investigations.

Nonrecord. Evaluated in item 15 of this schedule.

5. Administrative and housekeeping work files of short-term value.

Evaluated in item 24 of this schedule.

Generally, the only NSRS records that are distributed exclusively to the MEDS Computer Indexed System (i.e., there is no other recipient) are notes written to the NSRS files by a member of the staff. These notes document meetings, events, and circumstances that are primarily of internal significance only. No items of historical significance would be included in these notes.

The General Manager's File receives those NSRS records which designate a copy for the General Manager or are written to the General Manager. The Staff file copy is input into MEDS Computer Indexed System.

The types of records sent to the General Manager include:

- Administrative
- Activities and/or Meetings
- Biweekly Key Topics Reports
- Civil Penalties from NRC
- Comments on Proposed Regulations, Standards, Etc.
- Incidents and accidents at Nuclear Plants
- Investigations
- Responses to Questions from GM or Board
- Reviews
- Safeguards Information Received and Originated by NSRS
- Special Projects and/or Reports

Policies are not set by NSRS. The Staff does have the responsibility to advise the Board on nuclear safety policies but any policies formally issued would be at the General Manager or Board level. The record copy would be in the Board Files and/or General Manager's File. Correspondence documenting NSRS input and/or advice to the Board is a part of the General Manager's File (see NC1-142-81-23, General Manager's File schedule). Key topics written to document items of interest to the Board are input into the General Manager's File and into the MEDS Computer Indexed System scheduled under item 2 of this schedule.

APPENDIX F

PREVIOUSLY APPROVED SCHEDULES SUPERSEDED BY THIS SCHEDULE

<u>TVA RCA No.</u>	<u>NARS Job No.</u>	<u>Item No.</u>	<u>GSA Approved Date</u>	<u>Organization</u>	<u>Records Series Description</u>
2552	NC1-142-77-8	2	10/26/77	OEDC	OEDC records, created on or after 9/1/76, which are included in the OEDC General File of MEDS.
2535	NC1-142-77-6	2-J	4/18/77	CONST, Construction Services Branch	Concrete data sheets, test records and related documents for nonnuclear projects
2506 and 2505	NC1-142-76-21	2-K	7/08/76	EN DES, Inspection and Testing Branch	Inspection and testing records supporting the verification of nuclear and nonnuclear contractual requirements
2501	NC1-142-76-20	2-J	6/21/76	EN DES	Concrete schedules
2502	NC1-142-76-18	11	6/21/76	EN DES, Civil Engineering and Design Branch	Hartsville Nuclear Plant access rail-road study and drawings
2503	NC1-142-76-15	28	7/01/76	EN DES, Sequoyah-Watts Bar Design Projects	Sequoyah Nuclear Plant cable schedule summary
2504	NC1-142-76-14	10	6/21/76	CONST, Construction Services Branch	Equipment records
1911	NC1-142-76-10	2-L	5/18/76	EN DES	Procurement document file
2427	NC1-142-76-5	4	1/23/76	EN DES	Browns Ferry Nuclear Plant - Certification drawings
2428	NC1-142-76-4	2-H 13	1/20/76	EN DES	Design computations

APPENDIX F (Continued)

<u>TVA RCA No.</u>	<u>NARS Job No.</u>	<u>Item No.</u>	<u>GSA Approved Date</u>	<u>Organization</u>	<u>Records Series Description</u>
2431	NC1-142-76-2	2-B	1/23/76	OEDC, Quality Assurance Staff	Superceded QA procedures
2430	NC1-142-76-2	2-H 13	1/23/76	EN DES, Civil Engineering Branch	Computer printouts of analyses of structures
2420	NC-142-76-1	17	9/19/75	EN DES, Electrical Engineering Design Branch	Estimates for generating stations suborder work
2411	NC-142-75-4	3	5/01/75	OEDC, Engineering Reports and Information Staff	Engineering project histories
2401	NC-142-75-2	28	3/07/75	CONST, Project Control Staff	Computer printouts
2403	NC-142-75-1	2-J 2-K	3/20/75	CONST, Construction Services Branch	QA documentation requirements for nuclear plants including the inspection and testing of materials
1910	II-NN-3610	2-J	1/26/62	EN DES, Civil Engineering Branch	Concrete reinforcing schedule, form TVA 1880
1888	II-NN-3490	12	7/19/61	EN DES, Civil Design Branch	Resident Engineer's diary, form TVA 1037A and 1037B
1885	II-NN-3490	4 12	7/19/61	CONST	Field drawings
1875	II-NN-3490	11	7/19/61	EN DES, Civil Design Branch	Highway and railroad drawings
2710	NCI-142-83-9 NCI-142-83-18 Item 2	2	5/2/83	CONST, SQNP and WBNP	Procurement Document Records
2711	NCI-142-83-8 NCI-142-83-18 Item 1	2	5/2/83	CONST, SQNP and WBNP	Quality Assurance Records

APPENDIX G
OEDC ADP SYSTEMS

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
BFN-Browns Ferry Nuclear Plant Engineering Design and Analyses	Includes all engineering design and analysis processing within EN DES for all structures and components for BFN.	Discrete (Design Calculation)	II.B.3.a	2
BLN-Bellefonte Nuclear Plant Engineering Design and Analysis	Includes all engineering design and analysis processing within EN DES for all structures and components for BLN.	Discrete (Design Calculation)	II.B.3.a	2
CAD-Computer Application Development for Engineering	Includes computer development jobs for engineering applications in EN DES.	Discrete (Design Calculation)	II.B.3.a	1
C03-PCIII	Provides means for CONST to schedule activities, project manpower requirements, collect actual manhours and quantities, and compare estimates with those actually produced. Projections used to determine project completion for large projects.	Continuing	Attachment A II.B.	

1 Deactivated Systems - due to nuclear plant deferrals.

2 Job numbers for personal services contractors included.

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
ENR-Energy Analysis for EN DES Analysis	Includes all engineering design and analysis processing within EN DES for all energy related projects.	Discrete (Design Calculation)	II.B.3.a	2
FOS-Fossil Powered Plants-Engineering Design and Analysis	Includes all engineering design and analysis processing within EN DES for all fossil powered generating units.	Discrete (Design Calculation)	II.B.3.a	2
HTN-Hartsville Nuclear Plant- Engineering Design and Analysis	Includes all engineering design and analysis processing within EN DES for all structures and components for HTN.	Discrete (Design Calculation)	II.B.3.a	1,2
HYD-Hydro Powered Plants-Engineering Design and Analysis	Includes all engineering design and analysis processing for all hydro powered units and other hydro projects.	Discrete (Design Calculation)	II.B.3.a	2
K03-PCIII	Provides a means to schedule activities, project manpower requirements, collect actual manhours and progress and compare the estimates with those actually produced projections are used to establish project completion for large projects.	Continuing	Attachment A II.B	

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
K04-Engineering Requirements Planning Sub-system (ERPS)	Tracks procurement requests from design through purchasing; tracks all vendor documents under approval; tracks of all inspector and testing data.	Continuing	Attachment A II.A	
K05-OEDC Cost Control System	Provides analyses and programming support for budget and cost information.	Continuing	III.B.3.b.	
MEDS-Computer Indexed System Data Base	Provides access to location of Computer Indexed System Records: see item 1 of this schedule.	Continuing	III.B.3.a	
MSS-OEDC General	Miscellaneous support for OEDC Management Systems Service Staff including data management and planning.	Continuing	III.B.3.b.	
OVR-Engineering Design Overhead	Includes all computer processing not corresponding to any other system within EN DES	Discrete (Design Calculation)	II.B.3.a.	2
PBN-Phipps Bend Nuclear Plant Engineering Design and Analysis	Includes all engineering design and analysis processing within EN DES for all structures and components for PBN.	Discrete (Design Calculation)	II.B.3.a.	2

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
SQN-Sequoyah Nuclear Plant Engineering Design and Analysis	Includes all engineering design and analysis processing within EN DES for all structures and components for SQN.	Discrete (Design Calculation)	II.B.3.a.	2
S03-Project Control Development and maintenance	Provides ADP analysis programming support for the project control system used by OEDC.	Continuing	Attachment A II.B.	
TAP-Engineering Design and Analysis for Storage	Includes engineering design and analysis processing within EN DES for storage.	Discrete (Design Calculation)	II.B.3.a.	2
WBN-Watts Bar Nuclear Plant Engineering Design and Analysis	Includes all engineering design and analysis processing for EN DES for all structures and components for WBN.	Discrete (Design Calculation)	II.B.3.a.	2
YCN-Yellow Creek Nuclear Plant Engineering Design and Analysis	Includes all engineering design and analysis processing for EN DES for all structures and components for YCN.	Discrete (Design Calculation)	II.B.3.a.	2
YZZ-Miscellaneous System	Miscellaneous training and administrative jobs.	Continuing	III.B.3.b.	

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Y01-Drawing Information System	Maintains information pertaining to the status of TVA design drawings, TVA controlled drawings and manufacturers drawings. The system also tracks ECNs, FCRs STRIDE FDCC's and work packages. CONST uses system to show plant, unit, and system configuration.	Continuing	III.B.3.b.	
Y02-Contract Release System	Generates EEB contract releases and related reports for BLN, HTN, PBN, and YCN.	Continuing	III.B.3.b.	
Y03-Computer Assisted Piping Design	Produce piping drawings for YCN.	Discrete (Design Drawing)	II.B.3.a.	1
Y05-Process Computer Input/Output List	Tabulates point numbers and keeps track of associated data for inputs/outputs (gauge settings) to plant computers.	Continuing	Attachment A II.A.	
Y06-SEAMS Wiring Lists	Provides updates and lists of SEAMS data	Continuing	III.B.3.b.	
Y08-Time Reporting Information System (TRIS)	a) Status of Cost and manpower (SCAM) generates cost information by activity within project	Continuing	Attachment A II.A.	

APPENDIX G (Continued)

System ID And Title	System Description	System Type	Applicable Section In Item 28	Notes
Y08-Time Reporting Information System (TRIS) (Continued)	b) Personnel data reports	Continuing	III.B.3.b.	
	c) Time reporting for overtime and straight time of individuals	Continuing	Attachment A, II.C.	
Y11-YCN Master Valve Status Report	Tracks valve procurement and produces valve data sheets	Discrete (Valve data Sheets)	II.B.3.a.	
Y17-YCN Hanger Status Report	Tracks status of design on YCN hangers	Continuing	III.B.3.b.	
Y19-Training Profile System	Log of employee training infor- mation	Continuing	III.B.3.b.	
Y21-Trend Analysis	Updates reports on QA NCR's and identifies trends	Continuing	Attachment A, II.A.	
Y22-MEDS Access M	Generates design drawing distri- bution	Continuing	III.B.3.b.	
Y24-TIC Drawing System	Reports all drawings which have been microfilmed	Continuing	III.B.3.b.	
Y25-ADB Sign Production	Tracks microfilm and reproduc- tion charges	Continuing	III.B.3.b.	

APPENDIX G (Continued)

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System ID And Title	System Description	System Type	Applicable Section In Item 28	Notes
Y27-General Cable and System	To aid designers in design of nuclear power plant electrical cable and raceway systems for HTN, PBN, and YCN and future plants.	Nonoperational	-	
Y33-Electrical Equipment and Instrumentation System	To track electrical equipment, instruments and computer I/O information. Will incorporate Y82, Y98 and Y99 systems.	Continuing	Attachment A, II.A.	
Y35-Progress Photo Index	Lists progress photos by date and description	Continuing	III.B.3.b.	
Y37-EDB Communications Point List	Reads data and produces ADCC switchyard summaries	Nonoperational	-	
Y39-Outstanding Work Items	Work items for BFN	Continuing	III.B.3.b.	
Y40-Piping and Pipe Support Documen- tation System	Tracks pipe support infor- mation as required by NRC bulletin 79-14	Continuing	Attachment A, II.A.	
Y41-NEB Preop Testing	Maintains file of preop tests and status of tests for nuclear plants	Continuing	III.B.3.b.	

APPENDIX G (Continued)

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<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Y82-Auxiliary Power Load Information System (To Be Incorporated Into Y33)	Tracks design information and computes loading on the auxiliary power load system in nuclear plants. Loading sums are done for all boards supplying power and calculations for emergency power supply diesel generators.	Continuing	Attachment A, II.A.	
Y84-Circuit and Drawing Index	Tracks communications circuit drawings	Continuing	III.B.3.b.	
Y88-Electrical Bill of Materials	To provide a master catalog of electrical equipment and plant specific lists of electrical equipment with contract information and to generate drawing bills of materials.	Continuing	Attachment A, II.A.	
Y91-Panel Wiring Information System	Updating, wiring, and report procedures for panel wiring.	Discrete (Design drawing)	II.B.3.a.	
Y93-Stride Activity Review	Tracks NSSS contracts on HTN/PBN	Continuing	III.B.3.b.	1
Y96-Inspection and Testing	Evaluated in item 23 of this schedule.			
Y98-Cable Routing to be incorporated into Y33.	To aid in design of electrical cable systems for power plants. Produces cable routes and schedules.	Continuing	Attachment A, II.A.	

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Y99-ETABS & ITABS (Electrical Equipment and Instrumentation Tabulation) To be incorporated into Y33.	To maintain information relating to instrumentation (ITABS) and electrical equipment (ETABS) and is used as a tracking record.	Continuing	Attachment A, II.A.	
Z Unident Word Processing	Collection of graphical and statistical applications executed on the M/S TEKTRONIX 4052 with emphasis toward management reporting.	Continuing	III.B.3.b.	
Z BLN Jumper System	Specifies design characteristics of electrical jumpers and tracks their installations.	Continuing		
Z BLN Purch List System	Provides start-up and test unit with a list of incomplete work items prior to the transfer of system, components, or structures to Power Production.	Continuing	III.B.3.b.	
Z Responsibility Accounting System	Extension of a Finance System in a pre-development stage	Nonoperational	-	
Z Tie Change System YCN	Maintains information about revisions to EN DES/CONST work load ties	Nonoperational	-	1

	<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z	Design Scope Change	Maintains data on CONST and EN DES activities with \$500,000 impact	Nonoperational	-	1
Z	Tagged Equipment Inventory	Inventory of tagged equipment	Nonoperational	-	1
Z	Heat Number System	Maintains heat numbers for all metals used in construction	Nonoperational	-	1
Z	YCN Operator Data Management System	Provides file placement and trackability for System 3	Nonoperational	-	1
Z	YCN Small Tools Inventory	Inventory of small tools	Nonoperational	-	1
Z01-	Preventative Maintenance of Equipment	Preventative maintenance of equipment. To maintain equipment records and notify maintenance personnel when to perform routine preventative maintenance.	Continuing	III.B.3.b.	
Z02-	Improved Materials Control System	Materials control using S2K DBMS	Nonoperational	-	1
Z03-	Construction Cost Accounting System	Tracks and collects time and leave data using badge readers. Used to pay trades and labor employees.	Continuing	III.B.3.b.	

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z04-Construction Materials Control System	<p>Construction Materials Control Subsystem. The Construction Materials Control Subsystem (CMCS) provides support for construction site warehouse and engineering personnel in receipt, storage, and issuing of permanent and construction materials. CMCS initially obtains requisition and contract information directly from the MAMS Procurement Subsystem. This information is augmented with other construction usage details to produce detailed material listings, storage requirement reports, expediting reports, and receiving documents. Material receipt information is captured by CMCS and is passed to the MAMS Accounts Payable Subsystem for utilization in the material payment process. Reporting of inventory quantities is provided and exception reports are prepared for routine inventory items which have reached reorder points. Issuing of material is controlled by CMCS to assure that the proper material has been approved for issue for individual work packages. Historical records of material issues are maintained to document and track the flow of material from issue to installation. The facility for</p>	Continuing	II.B.3.b.	

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
	defining and prompting the maintenance of material during the construction process is provided. The MAMS Classification Subsystem is utilized to prepare construction site catalogs for utilization during the construction materials cycle.			
Z06-Cable Reel System	Maintains an inventory of cable reels, the feet of cable remaining on each reel and the unique identifiers of each cable pulled from each reel.	Continuing	II.B.3.c.	
Z07-CONST Payroll				
Z08-Quality Assurance Trend Analysis	Maintains results of QA audits and investigations	Discrete (Portion of Project Trend Analysis)	II.B.3.a.	
Z09-Electrical Fuse System - WBN	See Z11 for description. Z09 for WBN only.			
Z10-Hanger Control System	Monitors and controls the design and installation of all hangers. Provides quantitative reports on a system, unit, or project basis.	Continuing	Attachment A, II.B.	

System ID And Title	System Description	System Type	Applicable Section In Item 28	Notes
Z11-Electrical Fuse System (See Z09)	Provides a computer listing of all fuses and pertinent informa- tion such as size, type, voltage rating, manufacturers code, drawing reference number, and unique identifier.	Continuing	Attachment A, II.A.	
Z12-BOP Raceway	Provides the cabability to track and document design conduit and the construction tasks on an individual conduit basis	Nonoperational	-	1
Z13-BOP Cable Trays	Provides capability to track and document design cable tray segments and construction tasks on an individual segment basis	Nonoperational	-	1
Z14-BOP Equipment	Provides capability of tracking and documenting design and con- struction equipment as well as the construction tasks on an individual device basis	Nonoperational	-	1
Z15-Stride Equipment	Provides the capability to track and document equipment being designed by GE and Braun under the STRIDE contract for HTN	Nonoperational	-	1
Z16-Stride and BOP Values	Provides capability to track and document values being designed by Braun under the STRIDE contract	Nonoperational	-	

APPENDIX G (Continued)

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<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z17-Central Equipment Shop Facility	Tracks parts and repairs on heavy equipment	Continuing	III.B.3.b.	
Z18-CSB Non-rated Equipment Program	Lists and tracks nonrated equipment	Continuing	III.B.3.b.	
Z19-STRIDE Instrument System	Identifies the design character- istics of STRIDE reactor island and radwaste instruments and tracks various construction activities associated with each instrument. These activities include such procedures as receipt installation, nameplate fabrication, internal wiring inspection, etc.	Nonoperational	-	1
Z20-STRIDE and BOP Piping System	Identifies the design character- istics of STRIDE, balance of plant and NSSS process piping and tracks various construction activities associated with each spool piece. These activities include such procedures as receipt, installation, hydrostatic testing, etc.	Nonoperational	-	1

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z21-Hangers and System Supports	Identifies the design characteristics of hangers and supports and tracks various activities associated with each component.	Nonoperational	-	1
722-STRIDE Raceway	Identifies the design characteristics of STRIDE reactor island and radwaste cable raceway components such as conduits, pull boxes and trays. Various construction activities associated with each component are also tracked.	Nonoperational	-	1
Z23-STRIDE Cable	Identifies design characteristics of STRIDE reactor island and radwaste power and communication cables. Various CONST activities associated with each cable are tracked and directed by the system. Also BOP cable.	Nonoperational	-	
Z24-BOP Cable	Identifies the design characteristics and tracks TVA routed cables.			
Z26-Work Sampling	Provides statistical data for for studies.	Continuing	III.B.3.b.	

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z27-Bellefonte Name Tags	Collects and reports on the fabrication, receipt, and installation of permanent plant name tags.	Continuing	Attachment A, II.B.	
Z28-BOP Instruments	Identifies design characteristics of TVA designed instruments and tracks various construction activities associated with each instrument. (HTN-PBN)	Nonoperational	-	1
Z29-CSB Oil Analysis System	Lists equipment from which oil samples are taken.	Nonoperational	-	
Z30-Preventative Maintenance for Central Equipment Shop	Monitors and reports on preventative maintenance needs and availability of all CONST heavy equipment.	Continuing	III.B.3.b.	
Z31-BLN ECN log	Describes and indicates the status of Engineering Change Notices (ECN's)	Continuing	III.B.3.b.	
Z32-Work Package	Tracks status of drawings on work packages.	Continuing	III.B.3.b.	

APPENDIX G (Continued)

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L.S.

System ID And Title	System Description	System Type	Applicable Section In Item 28	Notes
Z35-BOP Instruments	To monitor and document engineering and construction activities for a device. Activities assigned to each component such as deliveries, issued, installed, etc, are verified to have three test cards. As test is completed, card is filed and serves as documentation record for that specific test.	Nonoperational	-	1
Z36-Field Fab Control	Tracks fabrication of controlled materials	Nonoperational	-	1
Z37-Yellow Creek Hangers	Lists all hangers identified by EN DES and selected CONST data fields for each identifier. Includes collection, processing and reporting of hanger data information.	Nonoperational	-	1
Z38-Valley Wide Cable	Same as Z06 but was developed later for additional sites.	Continuing	III.B.3.c.	
Z39-Equipment System	Lists all equipment devices and selected design and construction data fields for each equipment identifier. Includes collection, processing and reporting of equipment data information.	Nonoperational	-	1

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z40-Computerized Raceway	Identification design characteristics of raceway components (conduit cable trays and risers) and documents construction activities with these components.	Nonoperational	-	1
Z41-YCN Instruments	Provides capability of monitoring and documenting the design effort, installation, checkout, and maintenance of the power plant instrument by specific components. Tracks construction installation status by selected unit system, unit, plant, etc.	Nonoperational	-	1
Z42-Pipe Hanger Information System	Tracks status of pipe hanger construction.	Continuing	III.B.3.b.	
Z43-Instrument Panel Tubing System - BLN	Reflects information regarding instrument panel tubing lines and/or root valves.	Nonoperational		
Z44-Improved Preventative Maintenance - YCN	Expanded system to monitor preventative maintenance executions and needs on specified devices.	Nonoperational	-	1

APPENDIX G (Continued)

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<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z45-Yellow Creek Valve System	Lists all valve records and related data identified by EN DES and indicates required construction data fields for each valve record. Includes collection, processing, and reporting of value data information.	Nonoperational	-	1
Z46-Yellow Creek Piping	Tracks all controlled piping, including problems and tests to be executed.	Nonoperational	-	1
Z47-Field Fabs	Monitors and tracks Field Fabs	Nonoperational	-	1
Z49-Electrical Local Control Panel/ Testing Panel - BLN	Provides design configuration and location of control/test panels. Generates a document used for fabrication and verifying the configuration.	Continuing	Attachment A, II.B.	
Z50-Inspection, Storage, and Periodic Maintenance - BLN	Monitors the device inspections and periodic maintenance servicing to be done by the engineering units.	Continuing	III.B.3.b.	
Z51-Weld History Index - BLN	Collects weld inspection data to be transmitted to COMP OPS.	Continuing	Attachment A, II.B.	

APPENDIX G (Continued)

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<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z52-TCN Cable System	Lists all cables identified by outside vendors (if any) and TVA EN DES as well as selected CONST data fields for each identifier. Includes collection, processing and reporting of cable data information.			1
Z53-CONST Drawing Control System - WBN	Site - based system for control, tracking and distribution of drawings	Continuing	III.B.3.b.	
Z54-BLN-QA Records Checklist	Logs status of documents in the QA vault.	Continuing	III.B.3.b.	
Z55-WBN Hanger Tracking and Document Control	Maintains information about hanger installation and tracking	Continuing	III.B.3.b.	
Z56-BLN Field Change Package	Tracks field change package for engineers.	Continuing	III.B.3.b.	
Z57-BLN Hanger History Index	Provides cross-referencing and tracking of hanger documentation.	Continuing	Attachment A, II.B.	
Z58-Parts entry order to Caterpillar	A remote JOB Entry (RJE) based system which provides TVA with the ability to directly input order entries into the Caterpillar order process system.	Continuing	III.B.3.b.	

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z59-Outstanding Work Items List - BLN	Maintains a listing of CONST and EN DES outstanding work items on systems, structures, or features transferred to NUC PR.	Continuing	Attachment A, II.B.	
Z60-Civil Support Information List - BLN	Maintains tracking and documen- tation information regarding seismic pipe supports.	Continuing	II.B.3.b.	
Z61-QCIR-NCR Audit Tracking - YCN	Monitors outstanding audit deficiencies	Nonoperational	-	1
Z62-Electrical Fuse System (see Z11)				
Z63-Mechanical Connection System - BLN	Maintains information on threaded and bolted flange connections.	Continuing	Attachment A, II.B.	
Z65-Receiving, Storage, Preventative Maintenance, and Inspection (RSPMI)				
Z66-Tape Library Management System	Provides automatic tape cycling control, and reporting for all Sys/3 installations.	Continuing	III.B.3.b.	

APPENDIX G (Continued)

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<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z67-WBN Engineering Support Systems	Identifies status information from multiple data bases.	Proposed-Nonoperational	-	
Z68-WBN Online Heat Number System	Tracks WBN heat numbers	Continuing	III.B.3.b.	
Z69-ASP Merit Pay System	Provides accountability, reportability, and control of OEDC wide merit pay incentives.	Discrete	II.B.3.a	
Z70-WBN Materials Control	Traces issues, transfers, receipts, and excess documentation	Continuing	III.B.3.b.	
Z71-WBN FCR System	Tracks Field Change Requests	Continuing	III.B.3.b.	
Z72-WBN ECN System	Tracks Engineering Change Notices	Continuing	III.B.3.b.	
Z73-WBN Mechanical-A Universal	General tracking, installation, monitoring, and document index system	Continuing	III.B.3.b.	
Z74-WBN Mechanical-B Universal	General tracking, installation, monitoring, and document index system	Continuing	III.B.3.b.	
Z75-WBN Instrument Calculation and General	Collection of pseudo-Fortran routines used for engineering calculations	Proposed-Nonoperational	-	

APPENDIX G (Continued)

System ID And Title	System Description	System Type	Applicable Section In Item 28	Notes
Z76-WBN Weld Front- End and Tracking	Weld monitoring system which inputs data into 294	Continuing	III.B.3.b.	
Z77-WBN Concrete Tracking	Tracks concrete, grout, and mix pour records	Continuing	III.B.3.b.	
Z78-WBN NCR System	Tracks nonconformances	Continuing	III.B.3.b.	
Z81-Tracking and Reporting of Open Items	Provides reporting, account- ability, and control of unresolved QA and audit points.	Continuing	III.B.3.b.	
Z84-Watts Bar Punchlist	Tracks incomplete work on transfer packages	Continuing	III.B.3.b.	
Z85-Watts Bar Outstanding Work Items List	Monitors outstanding work on features transferred to NUC PUR	Continuing	III.B.3.b.	
Z86-WBN Work Package Tracking	Maintains status, tracking and other information on work packages	Continuing	III.B.3.b.	
Z87-Equipment Pool	Monthly testing of all rated equipment. Tracks location, class, account number, etc.	Continuing	III.B.3.b.	

APPENDIX G (Continued)

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System ID And Title	System Description	System Type	Applicable Section In Item 2 ^R	Notes
Z88-Civil Material- BLN	Provides the capability to accurately monitor and document defined construction activities. The system provides detailed status and quantitative analysis reports which enable efficient tracking of civil material from procurement through field fabrication. It also enables the field to take into account the civil material that is committed to a particular job or field fabrication order when establishing a minimum quantity or reorder point.	Continuing	Attachment A, II.B.	
Z89-Tool and Instrument Calibration	Tracks instruments and notifies property personnel when instruments need calibration.	Continuing	III.B.3.b.	
Z90-Heat Number	Provides a method of tracking heat numbers and their descriptions as needed by the site.	Continuing		
Z91-Universal Program	Provides a method of tracking installation and inspection of miscellaneous devices, as needed by the site.	Continuing		

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z93-Cost and Budget Control System	Provides information on current and estimated future cost of construction projects. Man-hours are entered and updated from the project control data files. Material and other costs are estimated and entered manually and updated from financial records as expenses are incurred. A monthly cost analysis report compares actual expenditures with estimates by account number. A budget analysis report compares budgeted amounts with actuals for current and future years.	Nonoperational		
Z94-Weld Monitoring System	Monitors the production, inspection, and repair of field welds. It provides a common reference for weld identification which improves communication between all levels of the work force. Summary reports assist in isolating trends in the production of quality welds.	Continuing	Attachment A, II.A.	

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APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z95-Welder Status System	Maintains a current welder employment and certification test data on a computerized master file. Maintains codes that uniquely identify the welder both in his craft and for the length of job. Provides reports of active welders by craft, the tests for which they are certified, and the date their certifications must be renewed.	Continuing	III.B.3.b.	
Z96-Concrete System	Tabulates and maintains records of all materials and yardages by construction activity. The system also maintains records of all cylinder test information, maintains all test records, and calculates the test statistics and presents the results in both tabular and graphic form.	Continuing	Attachment A, II.A.	
Z97-Personnel Training Status System	Documents, monitors, and assists in scheduling personnel certification and training.	Continuing	III.B.3.b.	

APPENDIX G (Continued)

<u>System ID And Title</u>	<u>System Description</u>	<u>System Type</u>	<u>Applicable Section In Item 28</u>	<u>Notes</u>
Z98-Mechanical Control System-Valve and Piping	Provides the capability to track and document selected mechanical systems design and construction tasks on an individual component basis (i.e., individual valve, spool, or piping hanger). Provides the present status of a particular component and sorted detailed and summary reports for specific activity, system, unit, etc. The system includes instrumentation valves, miscellaneous valves, piping, and hanger programs.	Continuing	Attachment A, II.B.	
Z99-Engineering Construction Monitoring and Documentation System (ECM&D)	Provides the capability to monitor and document design tasks, construction installation activities, checkout, and maintenance of plant systems by specific component (i.e., individual instrument, cable, conduit, equipment, etc.). The system includes instrumentation, equipment, cable trays, conduit, cables, cable pull slips, and cable termination programs. This system uses data files created and maintained by design cable routing and instrumentation systems.	Continuing	III.B.3.b.	

APPENDIX H

OFFICE OF QUALITY ASSURANCE

The Office of Quality Assurance (OQA) was established September 5, 1982, under the Office of the General Manager and operated in line with this office. Selected activities previously performed in the Division of Engineering Design Quality Assurance Branch, the Division of Construction Quality Assurance Branch, and the Power Quality Assurance and Audit Staff were performed by the corresponding OQA branches to ensure that Tennessee Valley Authority's (TVA) requirements for quality, efficiency, and cost effectiveness were met.

OQA was responsible for the establishment and effective execution of an overall, integrated quality assurance program for TVA. It ensured that organizations, systems, and procedures at all levels of TVA and of contractors and vendors provided assurance that TVA facilities were designed and operated in accordance with plans and procedures to achieve intended results.

In carrying out these responsibilities, OQA identified quality problems; initiated, recommended, or provided solutions through designated channels; verified implementations of solutions; determined the adequacy of facilities and equipment to carry out approved procedures and instructions; and issued special instructions necessary to execute its responsibilities. It notified responsible management of unsatisfactory work or unapproved practices and, if necessary, stopped unsatisfactory work or controlled further processing, delivery, installation, or operation of nonconforming items or services.

Specific functions of the OQA included:

Management Services Staff

1. Provided support services to the office including budget, cost control, and general administrative services.
2. Planned and conducted training, indoctrination, and orientation for all personnel of the office.
3. Assisted other TVA organizations in planning and conducting training, indoctrination, orientation, and certification activities for personnel performing quality assurance activities and activities affecting quality.
4. Developed and maintained qualification requirements and administrative certification practices for personnel of the office.
5. Supported the development and maintenance of staffing plans and schedules for the office.

APPENDIX H (Continued)Design in Quality Assurance Branch

1. Maintained surveillance over TVA design activities to determine and verify quality objectives are being attained.
2. Planned and performed audits of quality assurance activities during design to determine and verify their adequacy and effectiveness.
3. Performed followups to ensure resolution of quality problems identified internally by the NRC or others.
4. Performed selected reviews, inspections, examinations, or tests if necessary to ensure that quality objectives are achieved.

Construction Quality Assurance Branch

1. Maintained surveillance over TVA construction activities to determine and verify that quality objectives are obtained.
2. Planned and performed audits of quality assurance activities during construction to determine and verify their adequacy and effectiveness.
3. Performed followup to ensure resolution of quality problems identified internally by the NRC or others.
4. Performed selected reviews, inspections, examinations, or tests if deemed necessary to ensure that quality objectives are achieved.

Operations Quality Assurance Branch

1. Maintained surveillance over the operation of TVA facilities, including their maintenance, repair, modification, and refueling to determine and verify that quality objectives are being attained.
2. Planned and performed audits of quality assurance activities during operation to determine and verify their adequacy and effectiveness.
3. Performed followups to ensure resolution of quality problems identified internally by the NRC or others.
4. Performed selected reviews, inspections, examinations, or tests if deemed necessary to ensure that quality objectives are achieved.

Systems Engineering Branch

1. Developed and maintained a comprehensive description and documentation of the overall quality assurance programs, consistent programs, and related management policies and requirements.

APPENDIX H (Continued)

2. Provided technical expertise and support services with regard to codes, standards, specifications, and regulatory requirements for quality assurance.
3. Planned and coordinated an overall integrated quality records management system for TVA's Quality Assurance Program.
4. Coordinated and prepared periodic and special reports on the status and adequacy of TVA's Quality Assurance Programs.
5. Provided a program manager for each facility or project quality assurance program to coordinate office activities relating to that facility.

Quality Improvement Staff

1. Evaluated updates of significant nonconformances and events reported by TVA projects to determine completeness and effectiveness of corrective action to prevent recurrence.
2. Maintained logs and conducted analyses on quality problems, failures, deviations, and similar events and recommended actions to improve quality and productivity when appropriate.
3. Monitored industry experience and NRC publications, and assured their consideration within TVA to ensure that potential quality problems are avoided.
4. Developed and provided assistance in quality improvement methods and techniques for use within TVA.
5. Performed internal services and audits to assess the adequacy and effectiveness of quality assurance activities performed by the office.

NOTE

Effective October 1, 1984, the Office of Quality Assurance was placed under The Power and Engineering Program and many of the duties OQA had performed were assumed by QA staffs in the various P&E offices. Effective October 1, 1985, OQA ceased to exist.

On June 23, 1982, a memorandum was sent from F. W. Anderson to G. H. Kimmons requesting permission to become incorporated into the OEDC MEDS filing system as a master file user. The purpose for requesting participation in MEDS was:

1. The operation of a more economical and efficient records management system.
2. The access to OEDC documentation required in OQA fulfilling their responsibilities.

The records series that OQA created or received in accomplishing its functions included:

1. OQA administrative and housekeeping records including equipment and supplies, personnel, space requirements, travel, visitors, etc.
Record - MEDS CIS; Nonrecord - held in office until no longer needed for work.
2. Audits, audit schedules, and surveying correspondence - Record - MEDS CIS
3. Topical Reports - Record - MEDS CIS
4. ID-QAP's - Record - MEDS CIS
5. NSRS Reports - Record - MEDS CIS

The paper records maintained in the OQA office that were not input into MEDS are:

1. Personnel files
2. Reading files
3. Limited budget, administrative, and housekeeping records

Documents being put into the MEDS Computer Indexed System are being held pending approval of this schedule. When approved, they will be subject to Item No. 2 retention period.

<u>Record Type</u>	<u>Schedule Item No.</u>
Administrative instructions	2
Administrative records - long term	2
Administrative records - short term	24
ADP records	28
Annual progress reports	2
Apprentice training records	27
Architectural - engineering contracts	2
As-constructed drawings	4
Budget - support documentation	16
Budget records	2
Bulletin board notices	24
Calculations	2
Calculations solely for site use	12
Calibration records	2 & 9
Certifications - personnel	2
CFC campaign	24
Changes of address	24
Changes of contract	2
Codes and standards referenced in design documents	2
Coding sheets	28
Computer cards	28
Computer programs	28
Computer records	28
Concrete aggregates	2
Concrete cylinder data sheets	2
Concrete delivery tickets	12
Concrete mix compressive test strength	2
Concrete records	2
Concrete records not required for life of plant	12
Concrete specifications	2
Construction engineering procedures	2
Construction equipment records	10
Construction progress photographs	5
Construction records - long term	2
Construction records - short term	12
Construction specifications	2
Contract changes - permanent material	2
Contract records - permanent material	2
Control rod timing tracings	6
Core drill holes	2
Cost estimates	2
Cost estimates - support documentation	17
Daily progress reports	2
Data bases	28
Design calculations	2

<u>Record Type</u>	<u>Schedule Item No.</u>
Design change requests	2
Design check model	26
Design criteria documents	2
Design guides and standards	2
Design models	26
Design philosophy improvement requests	2
Drawings, design and construction	4
Drawings, geologic	8
Drawings, highway and railroad	11
Drawings solely for site use	12
Drill hole charts	8
Drilling and measuring devices - operating manuals	21
Drilling records	2
Earthfill	2
Engineering change notices	2
Engineering procedures	2
Environmental monitoring station records	2
Equipment transfer records	2
Excavation records	2
Field change requests	2
Field diaries	12
Field mixed concrete test specimen data	2
Field notebooks	12
Final classification of accounts	2
Force reports	2
Forms	24
Fund drives	24
Geologic drawings	8
Geologic logs	2
Government standards	24
Grievances settled at the branch or division level	7
Grouting documentation	2
Highway and railroad drawings	11
Housekeeping records	24
Indefinite quantity term contracts	2
Industry standards	24
Inspection and testing instructions	2
Inspection and testing records	2
Inspection and testing; cost and man-hours documentation	23
Inspection reports	2
Interproject transfer orders	2
Licensing of nuclear plants	2
Logs, status	24
Machine readable records	28
Magnetic data bases	28
Models	26

<u>Record Type</u>	<u>Schedule Item No.</u>
Monthly progress reports	2
Nonconformance reports	2
Noncritical systems tests	2
Nonrecord material	24
NRC inspection visits	2
Operating manuals for drilling and measuring devices	21
Organization changes	2
Orientation materials	22
Permits for operating facilities	2
Personal services contracts	2
Personnel certifications	2
Personnel records not relating to individuals	2
Photographs	5 & 25
Pile driving records	2
Policy statements	2
Post-modification tests	2
Preoperational test full-length rod control timing tracings .	6
Preoperational tests	2
Preventive maintenance instructions	2
Procedures	2
Procurement records - permanent material	2
Professional activities and committees	2 & 24
Project authorizations	2
Public relations materials	22
Public safety programs	2
Quality assurance audits	2
Quality assurance audits - support documentation	15
Quality control instructions	2
Quality control procedures	2
Quality control records	2
Radiographs	18 & 19
Radiographs - construction	19
Radiographs - supplier	18
Receiving reports	2
Recommendations for award of contract	2
Reference material	24
Reinforcing schedules	2
Reproduction orders	24
Requests for delivery - permanent material	2
Requests for delivery - temporary material	12
Requisitions - permanent material	2
Research and development data	2
Right of way transfer documents	2
Rock investigations	2

<u>Record Type</u>	<u>Schedule Item No.</u>
Routing slips	24
Screen analysis of concrete aggregate	2
Sequence control charts	2
Shift concrete reports	2
Shipping tickets - permanent material	2
Shipping tickets - temporary material	12
Site evaluations	2
Slides - photographic	5
Soils investigations	2
Specification control records	24
Specifications	2
Standard operating procedures	2
Startup records	2
Status cards	24
Status logs	24
Supplier QA manuals	14
Supplier radiographs	18
Supplier records	2
System documentation	28
Task force reports	2
Technical papers	2
Temporary material	24
Test results	2
Training materials	22
Training records, apprentices	27
Training requests	2
Vacancy position announcements	20
Vendor catalogs	24
Vendor drawings	4
Verification records	2
Warehouse annual inventory reports	2
Weekly progress reports	2
Weld data sheets	2
Welding documentation	2