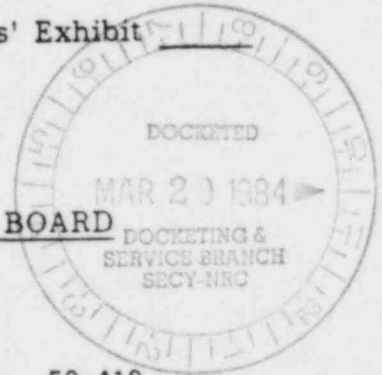


A-18
10/21/83

Applicants' Exhibit

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of)

DUKE POWER COMPANY, et al.)

(Catawba Nuclear Station,)
Units 1 and 2))

Docket Nos. 50-413
50-414

TESTIMONY OF ROBERT A. MORGAN

1 Q. STATE YOUR NAME AND BUSINESS ADDRESS.

2 A. My name is Robert A. Morgan, and my business address is Catawba
3 Nuclear Station, P.O. Box 223, Clover, South Carolina 29710

4 Q. STATE YOUR PRESENT JOB POSITION WITH DUKE POWER
5 COMPANY AND DESCRIBE THE NATURE OF YOUR JOB.

6 A. I am the Senior Quality Assurance Engineer, responsible for
7 managing and directing the Quality Assurance engineering and
8 technical support functions during construction of the Catawba
9 Nuclear Station. In my job as Senior QA Engineer I have four
10 supervisors reporting to me who are responsible for 1) mechanical,
11 welding and nondestructive examinations; 2) civil, electrical and
12 instrumentation; 3) support/restraints; and 4) records/status. In
13 these areas we specify inspection instructions for the inspection
14 groups to use in their jobs and we provide answers and evaluations
15 to questions, deficiencies, audit items and nonconformances as they
16 arise. We perform a final review of inspection records to insure
17 the requirements are met as the inspections are completed and we
18 maintain a status of inspections complete for the turnover process
19 to the Nuclear Production Department. We are the primary project
20 interface for project audits performed both internally by Duke
21 Power auditors and externally by NRC, INPO and ASME auditors.

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G PDR

1 Q. DESCRIBE YOUR PROFESSIONAL EXPERIENCE AND QUALIFI-
2 CATIONS, INCLUDING YOUR PRIOR POSITIONS HELD WITH DUKE
3 POWER.

4 A. I have a Bachelor of Science Degree in Civil Engineering from
5 Virginia Polytechnic Institute and I am a Registered Professional
6 Engineer in North and South Carolina. I have been employed by
7 Duke Power Company for thirteen years and have worked in Nuclear
8 Construction, Engineering and Quality Assurance since my
9 employment. From June 1970 to September 1974, I was assigned to
10 work at Oconee Nuclear Station in the Construction Department's
11 technical support group. I was responsible for coordinating
12 technical support activities for the reactor buildings. Upon the
13 completion of Oconee, I was reassigned to work in the Design
14 Engineering Department. I worked in design from September 1974
15 to September 1975 as a structural engineer. I was responsible for
16 designing structural steel for areas of McGuire and Catawba Nuclear
17 Stations. I was reassigned in September 1975 to the Quality
18 Assurance Department at Catawba, where I am now employed as
19 Senior QA Engineer. I have provided a resume of my work
20 experienced marked as Attachment #1.

21 Q. DESCRIBE THE FUNCTIONS WITHIN QA ORGANIZATION AT THE
22 CATAWBA SITE WHICH YOU ARE RESPONSIBLE FOR.

23 A. The QA Engineering functions are divided into the following
24 disciplines:

- 25 1) Mechanical, Welding and NDE
- 26 2) Civil, Electrical and Instrumentation
- 27 3) Support/Restraints

1 4) Records/Status

2 I have attached a chart to my testimony as Attachment #2 which
3 reflects the organizational structure at Catawba that reports to me.

4 Q. PLEASE DESCRIBE THE FUNCTION OF QA ENGINEERING.

5 A. Within the overall Quality Assurance Program, the QA Engineers are
6 responsible for:

- 7 • Providing inspection requirements on process control documents
- 8 and in construction procedures;
- 9 • Providing Technical Support for inspection groups on codes,
- 10 standards and regulatory requirements;
- 11 • Providing documentation review requirements for the QA
- 12 records group;
- 13 • Processing, evaluating, approving nonconforming item reports
- 14 • Initiation, or review and approve construction procedures and
- 15 determine inspection requirements as necessary;
- 16 • Primary interface on the project with the Resident NRC
- 17 inspector and Region II inspectors on NRC questions and open
- 18 items;
- 19 • Interface with Departmental Auditors and outside auditors
- 20 (ASME, INPO and JUMA) to answer QA program questions;
- 21 • Interface with the Construction Department to resolve
- 22 inspection, procedural, and technical issues;
- 23 • Interface with Design Engineering Department as necessary to
- 24 resolve questions relating to design specifications, drawings
- 25 and regulatory commitments;
- 26 • Preparation of QA procedures or revisions as necessary;
- 27 • Verification of QA completeness of systems and structures for
- 28 turnover to Nuclear Production; •

1 • Providing training to inspectors or QA Technicians as
2 necessary as it relates to an inspection and documentation
3 requirements; and
4 • Preparing weekly reports for management concerning the status
5 of work items and advising management of any developing
6 trends.

7 The QA Engineers are graduate engineers because of the technical
8 evaluations required in this position.

9 J. C. Shropshire is the QA Engineer in the mechanical, welding and
10 NDE area. Joe has been at the Catawba project since February
11 1979, has a Bachelor of Science Degree in Civil Engineering, and is
12 a Registered Professional Engineer.

13 K. W. Schmidt is the QA Engineer in the civil, electrical and
14 instrumentation area. Ken has been at the Catawba project since
15 September 1981, has a Bachelor of Science Degree in Electrical
16 Engineering and is a Registered Professional Engineer.

17 T. A. Barron is the QA Engineer for Support-Restraint. Tommy
18 has been at Catawba since May 1976 and in this position since
19 September 1982, has a Bachelor of Science Degree in Mechanical
20 Engineering, and is a Registered Professional Engineer.

21 The QA Supervisor in the Records/Status area is responsible for:

22 • Final documentation review of QA program documents, which
23 is performed in accordance with requirements specified by QA
24 Engineers;

25 • Providing materials release logs for special materials (i.e. pipe
26 and weld material);

27 • Providing a listing of certified personnel (i.e., welders and
28 inspectors);

- 1 • Administration of the QA data base programs and the
- 2 automated process control system;
- 3 • Collection, storage and retrieval of project generated QA
- 4 records until turnover to Operations QA; and
- 5 • Providing records status to QA Engineers on systems and
- 6 structures.

7 S. C. Broom is the QA Supervisor for Records/Status. Susan has
8 been the supervisor of this area since June 1981, and has a
9 Bachelor of Science Degree in Business Administration.

10 Q. HOW DID THE QA FUNCTIONS REPORTING TO YOU DIFFER
11 DURING 1981?

12 A. In December 1981, I was in position of Project QA Engineer.
13 Attachment #3 is an organization chart for this time frame. The
14 following areas reported to me:

- 15 •QA Engineer - Mechanical/Welding/NDE
- 16 •QA Engineer - Civil/Electrical
- 17 •QA Engineer - Staff
- 18 •QC Engineer - Mechanical
- 19 •QC Engineer - Civil/Electrical
- 20 •Technical Supervisor - Welding
- 21 •Technical Supervisor - NDE
- 22 •QA Supervisor Records

23 As described earlier in this testimony, I outlined the responsibilities
24 of the QA Engineers. The only change in that outline is that prior
25 to December 1981, surveillance of QA program activities was a
26 responsibility of the QA Engineers. This responsibility changed
27 December 7, 1981, when K. W. Schmidt was assigned responsibility
28 for this activity.

1 The responsibilities of the QC Engineers and the Technical
2 Supervisors are the same. Their responsibilities are:

- 3 • Supervision of the Supervising Technicians
- 4 • Ensuring that all inspectors are certified
- 5 • Coordination of all inspection activities
- 6 • Monitoring the inspection program to insure that inspections
7 are conducted in accordance with the applicable QA
8 procedures, codes and specifications
- 9 • Maintaining status of inspection activities to insure that the
10 construction schedules can be met
- 11 • Development of inspection techniques and methods
- 12 • Maintaining current on QA inspection requirements and pro-
13 viding training as necessary
- 14 • Resolving QC inspection questions and concerns
- 15 • Interface with Construction Department to resolve inspection
16 questions
- 17 • Interface with internal and external auditors to resolve in-
18 spection questions. This activity also includes interface with
19 NRC inspectors and Authorized Nuclear Inspectors
- 20 • Administration of Radiography Safety Program (Technical
21 Supervisor NDE only)
- 22 • Interface with Level III inspectors as necessary to resolve
23 inspection questions

24 The position of Technical Supervisor and QC Engineer require a
25 technical knowledge of inspection techniques and methods,
26 familiarity with codes, standards and regulatory requirements

1 Q. EXPLAIN THE ROLE OF THE QA ENGINEERS AS A PART OF THE
2 OVERALL QA PROGRAM.

3 A. The QA Engineers provide the technical and procedural expertise
4 for the project QA organization. If this expertise is not available
5 on the project the QA Engineers have ready access to the project
6 Design Engineers and Corporate QA offices.

7 Q. DESCRIBE THE ROLE OF THE QA ENGINEER IN THE RESOLUTION
8 OF NONCONFORMING ITEMS WHILE YOU HAVE BEEN SENIOR QA
9 ENGINEER.

10 A. The QA Engineers are responsible for the following activities in the
11 processing of nonconforming item reports:

- 12 • Initial review for correctness and validity
- 13 • Assignment of NCI's evaluations to the appropriate department;
- 14 • Writing dispositions and corrective actions for QA related
15 items;
- 16 • Evaluation and approval of dispositions and corrective actions
17 written by the Construction Department;
- 18 • Evaluation and approval of corrective action steps for
19 Nonconforming Item Reports resolved by Design Engineering;
- 20 • Assignment of Reportability evaluations to appropriate
21 departments;
- 22 • Evaluation of significance and assignment to perform 10CFR50,
23 Appendix B, Criterion XVI evaluations on project resolved
24 nonconforming item reports; and
- 25 • Performing final reviews of NCIs to determine that all actions
26 have been completed.

27 The initial review and validity check, is a very important step in
28 the process. At this point the QA Engineers verify that the facts

1 of a nonconformance have been provided and documented in
2 sufficient detail so that a proper evaluation can be performed.
3 During this review process, the QA Engineers on occasion determine
4 that a nonconformance report is invalid. When this occurs the QA
5 Engineer calls in the originator of the NCI to discuss the reasons
6 for the invalidation. Sometimes at the point the originator gives
7 more facts and the document is processed as a nonconformance, but
8 if no new facts are provided, the document is marked invalid. The
9 main reason a report is invalidated is because the QA Engineers are
10 more familiar with the QA procedure requirements than the
11 inspectors. This is because in most cases the QA Engineer either
12 wrote the requirement or participated in the writing of the
13 requirement. When the QA Engineer determines the nonconformance
14 to be invalid, he states the reasons on the original document, which
15 is filed in the QA records vault.

16 Q. IS THERE ANYTHING IMPROPER OR INCONSISTENT WITH A
17 SOUND QUALITY ASSURANCE PROGRAM FOR A QA ENGINEER OR
18 OTHER SUPERVISOR TO REVIEW AN NCI WRITTEN BY AN
19 INSPECTOR AND VOID THE NCI BECAUSE IN JUDGMENT THE
20 ENGINEER OR SUPERVISOR, THE NCI SHOULD NOT BE WRITTEN.

21 A. It is not improper to void or invalidate a nonconformance report.
22 QA procedure Q-1 specifically requires that this step be performed
23 if a true nonconformance does not exist. The QA Engineers and
24 the other supervisors who were authorized to perform initial review
25 of nonconformance reports are technically and procedurally qualified
26 to make this determination. In many instances, an inspector who is
27 seeking guidance from his supervision discusses the facts of a
28 problem with his supervisor before he documents the situation on

1 the nonconformance report form. The supervisor provides the
2 guidance needed to all of his inspectors when questions arise. This
3 is a very important aspect of the supervisor's job. In cases where
4 an inspector disagrees with his supervisor or is unable to get an
5 answer to the questions raised, he has a responsibility to carry his
6 concern to the next level of supervision and higher until he has
7 received a satisfactory answer. In all cases where an inspector
8 wrote a nonconformance report and obtained a serial number the
9 document was processed and filed in the QA records vault. Since
10 the commencement of the project site surveillance, internal audits
11 and external audits (NRC, ASME, INPO) have reviewed our
12 nonconformance process and have never identified "verbally
13 voiding" of nonconformance reports as a problem.

14 Q. WHAT OPTIONS ARE AVAILABLE TO A WELDING INSPECTOR WHO
15 BELIEVES THAT A SUPERVISOR MADE AN INCORRECT JUDGMENT
16 IN INSTRUCTING HIM TO AVOID AN NCI?

17 A. It is the inspector's responsibility to advise his supervisor that he
18 disagrees and wants to discuss the problem with the next level of
19 supervision, and higher, until he receives a satisfactory answer to
20 his concern. Since July 1982, a Quality Recourse procedure has
21 been in place to properly document the actions of recourse. Prior
22 to July 1982, the same basic process existed, but it was not
23 documented to the same extent as the requirements in the quality
24 recourse procedure. The other options available to the inspectors
25 were to talk to a QA Engineer, an auditor or the NRC. Although
26 these options are available, it has always been preferred that they
27 work directly with their supervision to resolved their concerns.

1 Q. WERE YOU INVOLVED IN THE PROCESS WHICH SET THE PAY
2 CLASSIFICATION FOR INSPECTORS?

3 A. No.

4 Q. WERE YOU INVOLVED IN RELATING THE DECISION OF THE
5 CORPORATE PERSONNEL DEPARTMENT CONCERNING THEIR PAY
6 CLASSIFICATION TO THE WELDING INSPECTORS.

7 A. I was responsible for getting project QA supervision together
8 for the announcement of the general increase. My manager,
9 Mr. Davison came from the Charlotte Office to make the
10 announcement to the supervision.

11 Q. WHAT WAS THE RESPONSE OF THE WELDING INSPECTORS TO
12 THIS PAY CLASSIFICATION?

13 A. They were upset with the decision. They felt that their job had
14 been improperly evaluated. The inspectors acted professionally
15 about the decision and advised us that they would follow the
16 company's recourse procedure.

17 Q. WHEN DID YOU FIRST BECOME AWARE THAT THE WELDING
18 INSPECTORS AT CATAWBA HAD EXPRESSED CONCERNS THAT
19 APPEARED TO AFFECT THE QUALITY OF CONSTRUCTION AND
20 SAFETY OF THE PLANT?

21 A. It was in December 1981, prior to the final decision on the pay
22 recourse, and at the time Task Force I was established.

23 Q. DESCRIBE YOUR INVOLVEMENT WITH THE INITIAL TASK FORCE,
24 WHAT IS NOW REFERRED TO AS TASK FORCE I.

25 A. My involvement with this Task Force was Administrative. I was
26 also responsible for arranging a work location for the Task Force
27 members and arranging for the inspectors to be interviewed.

1 Q. DESCRIBE YOUR INVOLVEMENT WITH THE TECHNICAL TASK
2 FORCE.

3 A. My involvement was to make arrangements for the Task Force
4 members to obtain specific information about the technical concerns.
5 This was accomplished by arranging for the inspectors to meet with
6 the Task Force members to discuss their concerns in detail.

7 My next involvement with the Technical task force was the
8 discussion of the evaluation of the concern with the individual
9 inspector and supervisor. At this time, the inspector was given
10 the opportunity to review the evaluation of his concern with the
11 Task Force. The Technical Task Force worked independent of the
12 Project QA organization, and their evaluations of the concerns were
13 not discussed with QA management.

14 Q. DESCRIBE YOUR INVOLVEMENT WITH LOUIS ZWISSLER OF
15 MANAGEMENT ANALYSIS COMPANY.

16 A. I was interviewed by Mr. Zwissler in February 1982. I made
17 arrangements for Mr. Zwissler to interview other supervision and
18 inspectors at the project.

19 Q. DESCRIBE YOUR INVOLVEMENT WITH THE NONTECHNICAL TASK
20 FORCE.

21 A. I had no involvement with the nontechnical Task Force.

22 Q. WERE YOU INVOLVED IN THE IMPLEMENTATION OF
23 RECOMMENDATIONS ISSUED BY ANY OF THE TASK FORCES?

24 A. Yes.

25 Q. DESCRIBE YOUR ROLE IN IMPLEMENTING THE RECOMMENDATIONS
26 OF THE TECHNICAL TASK FORCE.

27 A. I was involved with implementation of Technical Task
28 Force recommendations in four areas:

1 1) More Expeditious Procedures Changes

2 A new QA procedure was implemented which allows a "quick
3 change" in procedures. This new procedure provides the
4 necessary mechanisms to change a procedure by calling the QA
5 Technical Services Division and upon approval by the
6 Corporate QA manager, have a new procedure requirement in
7 effect within minutes if time is a real factor. Procedures
8 revised or initiated in this manner are distributed and
9 effective like all other procedures. This procedure has been
10 used 26 times and is an asset to our QA Program.

11 2) Institution of "Train the Trainer" - Intent of Procedure
12 Program

13 When a QA procedure is changed it is evaluated by QA
14 Management to determine what type training is be required.
15 The "Train the Trainer" program requires that the project QA
16 organization assemble affected QA supervisors for training by
17 the individual who wrote or made the procedure or revisions.
18 Since this program was implemented we have had 20 sessions
19 and each session was a success. Information and questions
20 were exchanged by both the procedure author and the
21 supervision responsible for implementation. By providing this
22 first hand exchange of procedure intent, we have reduced the
23 possibility of confusion on procedure intent.

24 Additionally the author of the procedure performs an
25 audit after procedure implementation to ensure that the intent

1 is being followed. The implementation reviews have provided
2 management with valuable data concerning effectiveness of
3 implementations.

4 3) Expansion of Procedures Comment Circle

5 Since QA procedures affect all supervision, a stronger effort
6 was instituted to obtain comments from all affected first line
7 supervision. The new method in use allows submission of
8 informal handwritten comments which are forwarded to the QA
9 group responsible for writing the procedures. Since
10 implementation of the new program, valuable procedure
11 comments have resulted in more workable and clearer
12 procedures.

13 4) Establishment of Periodic Meetings with Construction
14 and QA to Discuss and Review Problems

15 The recommendation made by the Task Force was to hold
16 periodic meetings with Construction for the purpose of
17 reviewing problems in using process control procedures. This
18 recommendation was expanded by QA and Construction
19 management to include periodic meetings of all technical areas.

20 Q. DESCRIBE YOUR ROLE IN IMPLEMENTING THE RECOMMENDATIONS
21 OF THE NONTECHNICAL TASK FORCE.

22 A. I attended training sessions along with my supervisors and
23 employees conducted by C. N. Alexander on our new Quality
24 Recourse procedure and new Harassment procedure.

25 Q. HOW WOULD YOU DESCRIBE THE PRIMARY CONCERN OF THE
26 WELDING INSPECTORS?

27 A. The primary concern that the welding inspectors had was that
28 management had not supported them. I interpreted that to mean

1 that we had not supported them on pay, and we had not always
2 supported their decisions on inspections. The inspector's concerns
3 had previously been discussed with their supervision, and the
4 inspectors were given answers to their questions. There was a
5 communications problem between the inspectors and their
6 supervisor, and the first line supervisor and the second level
7 supervisor.

8 Q. THE CONCERNS EXPRESSED BY THE WELDING INSPECTOR WERE
9 INITIALLY CHARACTERIZED AS CONCERNS AFFECTING THE
10 QUALITY OF WORK OR THE SAFETY OF THE CATAWBA PLANT.
11 IN YOUR VIEW, DID THE CONCERNS EXPRESSED BY THE WELDING
12 INSPECTORS AFFECT THE QUALITY OR THE SAFETY OF THE
13 CATAWBA PLANT?

14 A. No. I do not believe that the concerns affected the quality or
15 safety of the Catawba plant. The inspectors knew they could not
16 accept any work which they felt was improperly performed, and I
17 do not believe that the inspectors accepted any improper work.

18 Q. IN YOUR VIEW, DID THIS EXPRESSION OF CONCERNS BY THE
19 WELDING INSPECTOR INDICATE THAT THERE WAS A BREAKDOWN
20 IN THE QA PROGRAM AT CATAWBA OR THAT THE QA PROGRAM
21 WAS NO LONGER WORKING AT CATAWBA?

22 A. No. Their expression of concern did not represent a breakdown, it
23 represented a communication problem. The QA organization is
24 structured to audit and check the program effectiveness. These
25 independent verifications have insured that the program has worked
26 properly.

27 Q. HAS PRESSURE FROM THE CONSTRUCTION DEPARTMENT OR
28 ANYWHERE ELSE EVER INFLUENCED YOUR PROFESSIONAL

1 JUDGMENT IN MAKING DETERMINATIONS CONCERNING WHETHER
2 CONSTRUCTION DEFICIENCIES IDENTIFIED BY INSPECTORS
3 SHOULD BE APPROVED OR REJECTED?

4 A. No. In every job there is pressure but in no way has pressure
5 been a factor in any decisions I have made concerning the quality
6 of work at Cetawba.

7 I hereby certify that I have read and understand this document, and
8 believe it to be my true, accurate and complete testimony.

9

10

11

12

Robert A. Morgan
Robert A. Morgan

13

14

15 Sworn to and subscribed before me
16 this 23rd day of September, 1983.

17

18

19

20

Harrie A. Williams
Notary Public

21

22 Commission Expires March 9, 1993

R E S U M E

ROBERT ALEXANDER MORGAN

PERSONAL: Duke Power Company
P. O. Box 223
Clover, SC 29710

FORMAL
EDUCATION: Virginia Polytechnic Institute: BSCE 1970

ADDITIONAL
TRAINING: Structural Design - AISC
Basic Metallurgy - ASM
Corrosion Control - Carboline Company
Wastewater Treatment Course - Clemson University
Water Treatment Course - Clemson University
Dynamics of Motivational Management - Success Mgt. Institute
Cathodic Protection - Harco Corporation
Nuclear Coatings Seminar - Carboline Company
QA And QC in Concrete Construction - ACI
Engineering Economics - NCSU/Duke Power Company
Welding - Metallurgy, Quality and Inspection - University of Tenn.
Professional Engineer Refresher - Clemson University
Mechanical Shock Arrestors - Pacific Scientific Company
Grouting Seminar - Gifford Hill Company
ASME Section III NF - ITT Grinnell
Alternate Analysis Typicals - Duke Power Company
Miscellaneous Management Courses Sponsored by Duke Power (Mgt. Development,
Mgt. Graduate, Effective Mgt.)
Audit Program Training - Duke Power Company
Various QA Program Training - Duke Power Company

PROFESSIONAL
INVOLVEMENT: Registered Professional Engineer - S.C. 7232
N.C. 8580

Member - ASME
Inactive - Level III Structural Inspector
Lead Auditor
Licensed Wastewater Treatment Plant Operator
Licensed Water Treatment Plant Operator

WORK
EXPERIENCE:

June 1970 - May 1973 - Assistant Field Engineer assigned to the Civil Engineering Section at Duke Power Company's Oconee Nuclear Station, responsibilities included Technical Support and Quality Assurance Functions in the following areas:

- .Reactor Building Containment Construction
- .Transportation and Erection of Major equipment
- .Installation of Major Equipment internals into primary system
- .Auditing and Inspection of Concrete Placement and Structural steel erection
- .Development and Implementation of Protective Coatings Program
- .Operation of Water and Wastewater Treatment Plants (Applicant was licensed in both).

- .Field design when required
- .Write and review Quality Assurance Procedures when required

May 1973 - September 1974 - Associate Field Engineer - Office Section, Oconee Nuclear Station, responsibilities included:

- .Distribution and filing of Correspondence and Quality Control Records
- .Review of Manufacturer's Certification Reports for compliance with applicable specifications
- .Document Control Program
- .Receiving Inspection Program
- .Calibration Program
- .Preliminary construction Plant layout for Perkins Nuclear Station

September 1974 - September 1975 - Associate Engineer, Duke Power Design Engineering Department assigned to the Structural Section, responsibilities included:

- .Plan and rigid frame analysis
- .Structural Design for various areas of McGuire and Catawba Nuclear Stations
- .Writing Design Specifications

September 1975 - May 1977 - Quality Assurance Engineer - Civil and Electrical, Duke Power Company, Catawba Nuclear Station, responsibilities included:

- .Six months assignment at McGuire Nuclear Station working with QA Program at McGuire
- .Placing inspection and documentation requirements on all documents relating to Nuclear Construction
- .Review of all completed documentation to assure compliance with specified requirements
- .Surveillance of work activities for compliance with code and procedural requirements
- .Review/approval of Nonconformance Reports
- .Primary interface with NRC inspectors at project
- .Training of QC Inspectors
- .Keeping QA Management advised of project problems
- .Supervision of Engineers and Technicians

May 1977 - February 1981 - Project Senior Quality Assurance Engineer, Duke Power Company, Catawba Nuclear Station, responsibilities expanded to include:

- .Supervision of Two QA Engineers
 - .QA Engineer Civil and Electrical
 - .QA Engineer Mechanical, Welding, and NDE
- .Functional responsibility of Project Inspection Program

February 1981 - September 1982 - Project Quality Assurance Engineer, Duke Power Company, Catawba Nuclear Station, responsibilities to include:

- .Supervision of QA Technical Supervisors and QC Engineers who were responsible to assure that QA Inspections are in accordance with QA Program
- .Supervision of QA Engineer, Surveillance and scheduling - This position was responsible to insure surveillance was conducted on project activities and that QA was on target for scheduled commitments
- .Supervision of QA Engineers as previously described

.Supervision of QA Records Supervisor. This position was responsible to insure that QA records were given a final review and were being stored and protected in accordance with requirements.

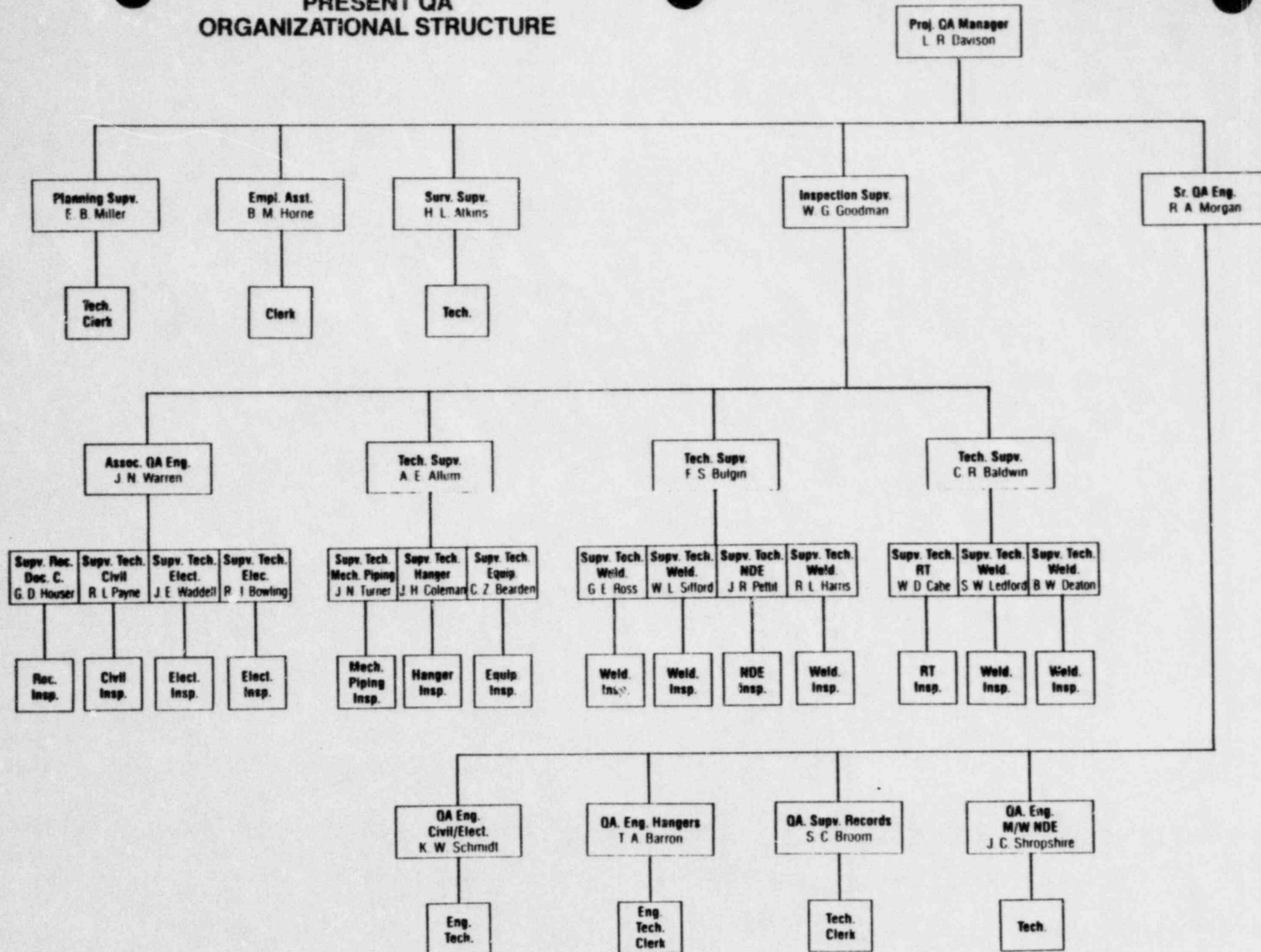
.Supervision of Employee Relations. This position was responsible for maintaining an effective employee relations program on site and providing Administrative Services for the Project QA Organization

September 1982 - Present - Senior Quality Assurance Engineer - Projects, Duke Power Company, Catawba Nuclear Station, responsibilities include:

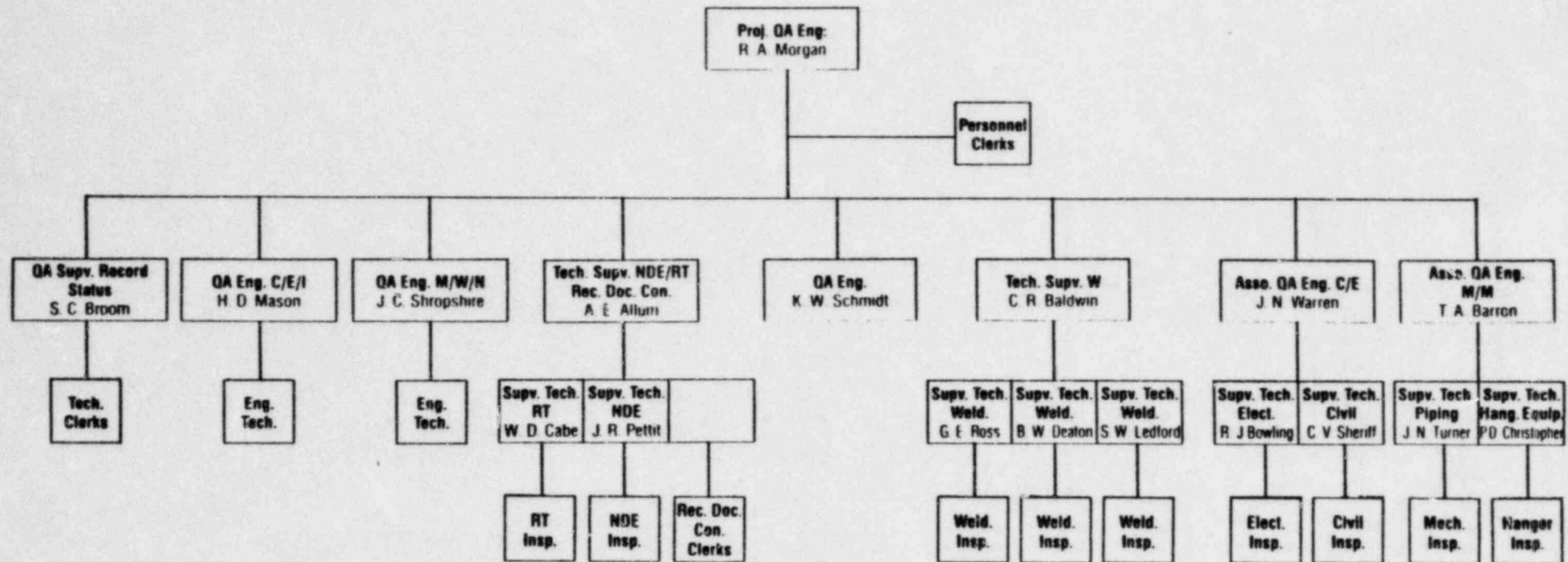
.Supervision of QA Engineers who are responsible for the QA Engineering and Technical Support functions at the project.

.Supervision of QA Records Supervisor who is responsible for final review of temporary storage of Project QA records.

PRESENT QA ORGANIZATIONAL STRUCTURE



ORGANIZATIONAL STRUCTURE — DECEMBER '81



NUCLEAR REGULATORY COMMISSION
Docket No. 50-413 Official File No. 18
In the matter of Catawba
Staff ☒
Applicant ☒
Intervenor ☒
Case # 1017
Complaint ☒
Other ☒
Reported Ren Graham DATE 10/21/83
RECEIVED ☒
RECEIVED ☒