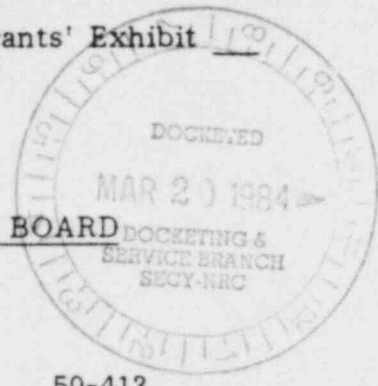


A-21
10/21/83

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 ARTHUR E. ALLUM

- 1 Q. STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A. My name is Arthur E. Allum, 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 a Technical Supervisor in the Quality Assurance Department
- 7 responsible for the mechanical inspection section during construction
- 8 of the Catawba Nuclear Station. This includes piping configuration
- 9 inspection, torquing inspections, pipe cleanliness inspections,
- 10 calibration of mechanical test equipment, storage inspections,
- 11 housekeeping inspections, valve assembly inspections, mechanical
- 12 alignment and hanger inspections.
- 13 Q. DESCRIBE YOUR PROFESSIONAL EXPERIENCE AND
- 14 QUALIFICATIONS, INCLUDING YOUR PRIOR POSITIONS HELD
- 15 WITH DUKE POWER.
- 16 A. I have attached a resume to my testimony which describes my
- 17 experience and qualification in detail. Prior to joining Duke Power
- 18 Company in 1977, I was in the United States Navy for twenty
- 19 years. While in the Navy I served as Director of the
- 20 Nondestructive Testing of Metals School; Director of the Naval Sea
- 21 System Command Test Examiner Certification Agency; electrician,

8405240077 831021
PDR ADCK 05000413
PDR
G

1 welder, and operator on diesel and nuclear powered submarines;
2 and served on submarine tenders as hull repair officer, planning
3 officer, nondestructive testing officer, nuclear systems repair
4 officer, quality assurance officer, and radiation protection officer.

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

7 A. I am responsible for three groups of inspectors, the mechanical
8 equipment group, the piping group, and the hanger group. I am
9 responsible to see that the inspectors in these areas are properly
10 trained and certified to perform the required inspections. I am
11 responsible for seeing that there are sufficient numbers of
12 inspectors to perform the inspections in a timely manner, and to
13 ensure that the inspectors understand and carry out their
14 responsibilities in accordance with the QA Program requirements.

15 Q. PLEASE DESCRIBE THE FUNCTION OF EACH OF THE GROUPS
16 THAT REPORT TO YOU, BEGINNING WITH THE MECHANICAL
17 EQUIPMENT GROUP.

18 A. The equipment group inspects the installation and repair of
19 components and machinery. They perform mechanical equipment
20 calibration, housekeeping inspections, and storage inspections. The
21 piping group inspects piping configuration, and performs cleanliness
22 inspections, as well as system pressure tests and patch tests. The
23 Hanger group inspects the installation of hangers in accordance
24 with design drawings.

25 All three groups are ensuring that equipment, piping, and
26 hangers are installed and tested in accordance with design
27 specifications and the QA Program.

1 Q. HOW DID THE QA FUNCTIONS REPORTING TO YOU DIFFER
2 DURING 1981?

3 A. During the first part of 1981, I was at the Cherokee Nuclear
4 Station site. On May 25, 1981, I was transferred to Catawba,
5 responsible for radiography, nondestructive examination, document
6 control, and receiving inspection. I was also the Radiation
7 Protection Officer. In January 1982, I assumed responsibility for
8 welding inspectors. Later I became responsible for an NDE
9 inspection crew, and one of the welding inspection crews was
10 transferred to another supervisor. In June 1983, I became
11 responsible for the group that presently report to me.

12 Q. EXPLAIN YOUR ROLE, AND THE ROLE OF THE GROUPS
13 REPORTING TO YOU IN THE OVERALL QA PROGRAM.

14 A. Our role is the same as all QA Inspection groups. We are
15 responsible for seeing that all items and systems inspected are in
16 accordance with the proscribed standards and procedures. We
17 identify items that are not in compliance with the applicable
18 standards and procedures to ensure that appropriate corrective
19 action is taken.

20 Q. DESCRIBE YOUR ROLE, AND THE ROLE OF THE GROUPS
21 REPORTING TO YOU IN THE RESOLUTION OF NONCONFORMING
22 ITEMS WHILE YOU HAVE BEEN A TECHNICAL SUPERVISOR.

23 A. The groups currently reporting to me do not have a role in the
24 resolution of NCI's. Our job is to identify items that require
25 corrective action. Resolution of the NCI's that might result from
26 the items we identify is handled by QA Technical Support,
27 Construction Technical Support, Design or other engineering areas
28 of the company.

1 Q. IS THERE ANYTHING IMPROPER OR INCONSISTENT WITH A
2 SOUND QUALITY ASSURANCE PROGRAM FOR A TECHNICAL
3 SUPERVISOR OR OTHER SUPERVISOR TO REVIEW AN NCI
4 WRITTEN BY AN INSPECTOR AND VOID THE NCI BECAUSE IN
5 THE JUDGMENT OF THE TECHNICAL SUPERVISOR OR OTHER
6 SUPERVISOR, THE NCI SHOULD NOT BE WRITTEN.

7 A. There is nothing improper about having supervisors perform a
8 technical review of NCI's which might void that NCI if it was
9 improperly initiated. In the past, inspectors have written NCI's
10 that were improper, incomplete, and poorly described. This led to
11 the decision a few years ago to have a technical review to eliminate
12 unnecessary NCI's. The technical review by supervision cut down
13 on the improper NCI's and caused NCI's to be better written. The
14 judgement to void an NCI is based on procedure information, often
15 with the input of QA technical personnel.

16 All inspectors have been instructed and are required to
17 generate a Quality Recourse if they feel the action to void an NCI
18 is improper. As indicated by the lack of rework resulting from the
19 investigations of the welding inspector concerns, the actions taken
20 by personnel performing these technical reviews were proper. In
21 addition to the inspection performed by the QA inspectors, we have
22 random inspections by the Authorized Nuclear Inspectors (ANI),
23 surveillance inspections by the Level II audit team, the NRC and
24 various industry groups. Our program has worked in the past,
25 and we continue to do everything possible to ensure that it
26 continues to work.

1 Q. WHAT OPTIONS ARE AVAILABLE TO A WELDING INSPECTOR WHO
2 BELIEVES THAT A SUPERVISOR MADE AN INCORRECT JUDGMENT
3 IN INSTRUCTING HIM TO VOID AN NCI?

4 A. A welding inspector or any inspector who thinks a supervisor made
5 an incorrect judgement voiding an NCI is required, and encouraged
6 to pursue a Quality Recourse to get the matter satisfactorily
7 resolved. Prior to adoption of the Quality Recourse procedure,
8 employees were encouraged to pursue questions of this nature
9 through supervision to get their questions answered satisfactorily.

10 Q. DID YOU HAVE ANY INVOLVEMENT WITH THE INITIAL TASK
11 FORCE, WHAT IS NOW REFERRED TO AS TASK FORCE I.

12 A. I had no involvement with Task Force I.

13 Q. DID YOU HAVE ANY INVOLVEMENT WITH LEWIS ZWISSLER OF
14 MANAGEMENT ANALYSIS COMPANY, THE TECHNICAL TASK FORCE
15 OR THE NONTECHNICAL TASK FORCE?

16 A. No. My only involvement was sitting in on meetings between the
17 Technical Task Force members and inspectors where the Task Force
18 members explained what was done with respect to each concern.

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

21 A. Yes. I was responsible for having some training done on
22 procedures that were unclear to the welding inspectors. I was also
23 responsible for having some reinspections performed.

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

26 A. The welding inspector concerns were a means of drawing the
27 attention of upper management to the importance of their job and to
28 show that the welding inspectors pay should not have been

1 reclassified. I believe that if the pay issue had not come up, the
2 concerns would not have come up.

3 Q. THE CONCERNS EXPRESSED BY THE WELDING INSPECTOR WERE
4 INITIALLY CHARACTERIZED AS CONCERNS AFFECTING THE
5 QUALITY OF WORK OR THE SAFETY OF THE CATAWBA PLANT.
6 IN YOUR VIEW, DID THE CONCERNS EXPRESSED BY THE WELDING
7 INSPECTORS AFFECT THE QUALITY OR THE SAFETY OF THE
8 CATAWBA PLANT?

9 A. No. I do not believe that these concerns affected the quality or
10 the safety of the Catawba plant. When the concerns were reviewed
11 by qualified members of the Task Force, no technical inadequacies
12 were found and there was no required rework or redesign. The
13 concerns were reviewed independently and without input from
14 management.

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

19 A. No. The concerns did not indicate a breakdown in the program.
20 The program worked then and it works now. The fact that the
21 concerns were all investigated assuming the worst possible
22 condition, that is the concerns were all true and valid, shows our
23 intent to ensure that Catawba is being built in accordance with the
24 QA program.

25 Q. HAS PRESSURE FROM THE CONSTRUCTION DEPARTMENT OR
26 ANYWHERE ELSE EVER INFLUENCED YOUR PROFESSIONAL
27 JUDGMENT IN MAKING DETERMINATIONS CONCERNING WHETHER

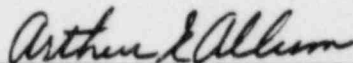
1 CONSTRUCTION DEFICIENCIES IDENTIFIED BY INSPECTORS
2 SHOULD BE APPROVED OR REJECTED?

3 A. Absolutely not. There has never been an occasion when I have
4 been pressured directly or indirectly to not identify an item that
5 does not meet applicable standards and procedures. If a deficiency
6 is identified by the inspectors, or anyone else, it is investigated
7 without regard to schedule, pressure or anything else.

8
9
10

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

13
14
15
16




Arthur E. Allum

17
18

19 Sworn to and subscribed before me
20 this 21 day of September, 1983.

21
22
23
24



Notary Public

25

26 Commission Expires 7-12-88

Personal:

Arthur E. Allum
Rt. 1, Box 159
Blacksburg, S.C. 29702

Education:

Washington High School, Washington, Pa. 1957

Additional Training:

US Navy Electrician Mate Class "A" and "B" Schools
US Navy Submarine School
US Navy Nuclear Power School
US Navy Submarine Repair Welding School
US Navy Nondestructive Testing of Metals School

Professional Involvement:

Member of the Board of Directors, Charlotte, Section
American Society for Nondestructive Testing (ASNT)
Visual Committee Member, National ASNT
Ultrasonic Personnel Qualification Committee, National ASNT
Radiography Personnel Qualification Committee, National ASNT

Work Experience:

6-83 to present - Technical Supervisor Mechanical - Catawba Nuclear Station - Duke Power Company - Responsible for the inspection of all mechanical systems and components, housekeeping inspection, storage inspection, hanger inspection and mechanical equipment calibration. Responsible for the QA organization at Cherokee Nuclear Station.

1-82 to 6-83 - Technical Supervisor Welding - Catawba Nuclear Station - Duke Power Company - Responsible for all welding inspection and nondestructive examination at Catawba including structural, piping and hangers. Responsible for training of inspectors and scheduling of work force. Responsible for the QA organization at Cherokee Nuclear Station.

5-81 to 1-82 - Technical Supervisor/Radiation Protection Officer - Catawba Nuclear Station - Duke Power Company
Responsible for Document Control inspection, receiving inspection, radiography, nondestructive examination. Radiation Protection Officer. Responsible for the QA organization at Cherokee Nuclear Station.

2-80 to 5-81 - Technical Supervisor/Radiation Protection Officer - Cherokee Nuclear Station - Duke Power Company
Responsible for the total Quality Control Inspection at Cherokee including welding, mechanical, electrical, document control, receiving, civil, nondestructive examination, radiography, and coatings.

Resume
Arthur E. Allen
Page 2

8-77 to 2-80 - Technical Supervisor/Radiation Protection Officer - Cherokee Nuclear Station - Duke Power Company
Responsible for welding nondestructive examination, radiography and mechanical inspections.

6-57 to 8-77 - Enlisted E-1 - E-9/Warrant Officer W-1 - CWO-3/Commissioned Officer 02E - 03E - US Navy - Stationed on various diesel and nuclear powered submarines as an electrician, welder, and operator. Served on submarine tenders as the Hull Repair Officer, Planning Officer, Nuclear Systems Repair Officer, Nondestructive Testing Officer, Quality Assurance Officer and Radiation Protection Officer. Served as the Director, Nondestructive Testing of Metals School and Director of the Naval Sea System Command Test Examiner Certification Agency.

NUCLEAR REGULATORY COMMISSION
Project No. 50-413
In the matter of Catawba
Staff ☒
Assistant ☒
Inspector ☒
Case # 211
Contractor ☒
Other ☒
Reporter Ron Graham
DATE 10/21/83
OFFICE