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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD AR 2) 1984

In the Matter of DUKE POWER COMPANY, et al. (Catawba Nuclear Station, Units 1 and (2)

Docket Nos.

TESTIMONY OF W. H. OWEN

- STATE YOUR NAME AND BUSINESS ADDRESS. 1 Q.
- My name is Warren H. Owen, and my business address is 422 South 2 Α. 3 Church Street, Charlotte, North Carolina.
- 4 STATE YOUR PRESENT JOB POSITION WITH DUKE POWER Q. COMPANY AND DESCRIBE THE NATURE OF YOUR JOB. 5
- I am Executive Vice Fresident, Engineering & Construction. I am 6 A . responsible for the departments that design, construct and provide 7 the quality assurance for our generating facilities ! I am also a 8 member of the Board of Directors of the company and serve on the 9 10 Executive Committee.
- DESCRIBE YOUR 11 Q. PROFESSIONAL EXPERIENCE AND QUALIFICATIONS, INCLUDING YOUR PRIOR POSITIONS HELD 12 13 WITH DUKE POWER.
- I graduated from Clemson University in 1947 with a Mechanical 14 Α. Engineering "degree and went to work for Duke Power in 1948. 15 After assignments at two of the company's coal fired generating 16 stations and the Production's Department General Office staff, I 17 moved to the Design Engineering Department in 1961. In 1966 I 18 was appointed the Principal Mechanical engineer in the Design 19 Engineering Department. I served in that capacity until 1972 when 20 I was appointed Vice President of the Department. In 1978 I 21

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became the Senior Vice President for Engineering and Construction
 and was elected to the Board of Directors of the company. In 1982
 I was appointed Executive Vice President, Engineering and
 Construction, and remain in that position today.

I am a registered professional engineer in the States of North
 and South Carolina.

I have served in responsible positions in industry-related
organizations such as the Electric Power Research Institute, the
Edison Electric Institute, the Atomic Industrial Forum and the
Institute for Nuclear Power Operations. Currently I am serving as
Chairman of the AIF Policy Committee on Nuclear Regulation.

12 Q. DESCRIBE THE CORPORATE ORGANIZATION OF DUKE POWER
 13 COMPANY AS IT RELATES TO CONSTRUCTION, DESIGN
 14 ENGINEERING AND THE QUALITY ASSURANCE PROGRAM.

15 I have attached to my testimony an organizational chart included as Α. 16 Attachment 1 which shows those departments having a direct 17 bearing on the construction and operation of our power generating 18 facilities. The departments directly involved in the generation of 19 electricity report to Austin C. Thies. These departments are responsible for the power generating facilities of the company, 20 21 which are divided into three types; fossil plants, nuclear plants, 22 and hydroelectric plants. Each plant type is within a department managed by a Vice President reporting to Austin Thies. The Fossil 23 24 Production Department is responsible for the operation and the 25 maintenance of the coal-fired generating stations on our system; the 26 Nuclear Production Department is responsible for the operation and 27 maintenance of the nuclear plants on our system; and the Operating Department is responsible for the operation and maintenance of the 28

-2-

hydroelectric plants on our system, and for dispatching all generation on the system

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3 The three departments which are responsible for the design and construction of our generating stations all report to me. The 4 Design Engineering Department is responsible for the complete 5 6 design of generating facilities, including preparation of drawings, 7 specification of equipment, and detailed information showing 8 technical and quality requirements for construction of a station. 9 These quality requirements are developed by the Design Engineering Department and reviewed by the Quality Assurance 10 11 Department. The Construction Department is responsible for constructing the station in accordance with all the requirements 12 13 imposed by the Design Engineering and Quality Assurance 14 Departments.

15 The Quality Assurance Department is responsible for 16 monitoring the work done in the Design Engineering and 17 Construction Departments in accordance with all aspects of our 18 quality assurance program. In addition the Quality Assurance 19 Department monitors the operation of our nuclear power plants in 20 accordance with the company's quality assurance program.

21Q. DOES THIS CORPORATE ORGANIZATION DIFFER IN ANY22SIGNIFICANT MANNER FROM THE ORGANIZATION IN 1981?

A. This organization, as it pertains to the engineering and
construction functions of the company, does not differ in any
significant manner from the organization in effect during 1981. In
the Power Operations area, the Fossil Production and Nuclear
Production Departments were formerly one department called Steam
Production.

-3-

1 Q. DESCRIBE THE INTERFACE BETWEEN THE QA DEPARTMENT AND 2 THE CONSTRUCTION DEPARTMENT ON THE CORPORATE LEVEL. 3 Α. As the Executive Vice President for Engineering and Construction, 4 I am the corporate officer with ultimate responsibility for quality 5 assurance. Although the Construction and Quality Assurance 6 Departments report to me, both departments function as 7 independent organizations, each with its own department head, who 8 is completely responsible for its work. The Construction 9 Department is responsible for building the plant according to 10 design, quality requirements, schedule, and budget. The Quality 11 Assurance Department independently verifies the quality through 12 tests and inspections, and is responsible for identifying and 13 resolving quality problems.

The Quality Assurance Department has complete independence with respect to setting quality requirements and defining the tests and inspections to identify problem areas if they exist, and has complete independence with respect to monitoring the resolution of any quality problems which develop.

The Quality Assurance and Construction Departments cooperate in the development of procedural requirements and the training of all employees so that these quality requirements are well understood. The two departments also cooperate in scheduling their work so that quality assurance inspection personnel will be available when needed.

The Quality Assurance Department has direct access to me to be sure that they have sufficient resources, both in number of employees and in technical skills, to fulfill their responsibilities. In addition the QA Department has direct and independent access to

-4-

me to discuss any problems associated with implementing the Quality
 Assurance Program.

Q. DESCRIBE THE INTERFACE BETWEEN THE QA DEPARTMENT AND
 THE DESIGN ENGINEERING DEPARTMENT AT THE CORPORATE
 LEVEL.

6 Α. At the corporate level the interface between the Design Engineering 7 Department and the Quality Assurance Department is very similar to 8 that between the Quality Assurance Department and the 9 Construction Department. The Quality Assurance Department works 10 with the Design Engineering Department in specifying quality 11 requirements for the plant and monitors the activities in the Design 12 Engineering Department to confirm that all requirements of our 13 quality assurance plan are met.

14 The Quality Assurance Department works with the Design 15 Engineering Department in providing the training necessary so that 16 design employees understand the quality requirements and the 17 responsibilities of each department.

18 Q. IS DUKE POWER CAPABLE OF DESIGNING AND CONSTRUCTING
 19 SAFE ELECTRIC GENERATING PLANTS?

20 Α. Yes. I believe that our plant experience amply demonstrates that 21 we are capable of designing and building safe plants. As a matter of long-standing practice, Duke's management is committed to 22 quality and public safety as related to design, construction and 23 operation of its generating stations. 24 Duke's design and 25 construction experience has included many projects whose daily operations have a direct bearing on public safety. This experience 26 includes some of the largest dams in the southeast, fossil-fired 27 steam stations that continue to establish national efficiency records, 28

-5-

and two nuclear stations, McGuire and Oconee. These achievements would not have been possible without Duke's commitment to quality work. This same commitment to quality has been applied throughout the design, construction and testing of the Catawba Nuclear Station.

6 The organization for design of the Catawba Nuclear Station is 7 essentially the same as that which designed and placed into 8 operation both Oconee and McGuire.

9 Q. HOW LONG HAS DUKE POWER BEEN INVOLVED IN DESIGNING AND
 10 CONSTRUCTING ELECTRIC GENERATING PLANTS?

11 Α. Duke Power Company has over 75 years experience in the design, 12 construction and operation of electric generating plants. 13 Currently, Duke has in operation eight fossil-fired steam electric plants, five nuclear units at two different plants, and 22 hydro 14 15 electric plants, all of which (with the exception of Cliffside Unit 5) 16 were designed and constructed by Duke.

17 Q. HOW LONG HAS DUKE POWER BEEN INVOLVED IN DESIGN AND
 18 CONSTRUCTION OF NUCLEAR GENERATING PLANTS?

Duke's involvement in nuclear power began in early 1950s when 19 Α. 20 company personnel began receiving nuclear training. Since 1955. 21 Duke personnel have been involved full-time on nuclear projects. 22 Through Carolina-Virginia Nuclear Power Associates, Duke 23 participated in design and operation of the Parr Reactor in South 24 Carolina, which produced electricity from 1963 until 1967 as part of a five-year operating research program. The Catawba Station is 25 26 very similar to the recently completed McGuire Nuclear Station 27 located northwest of Charlotte on the shores of Lake Norman. The 28 experience which was gained in the design, construction and

-6-

operation of the Oconee and McGuire Nuclear Stations has been
 applied fully to the design and construction of the Catawba Nuclear
 Station.

4 Key engineering personnel in the Duke organization have had 5 prior nuclear experience as well as extensive experience in the 6 electric power field. Duke has numerous engineers who have 7 completed undergraduate and graduate level courses in nuclear 8 engineering at major universities, and personnel who have been 9 extensively trained through Duke's own in-house programs. I 10 should note that Duke employs more than 400 registered professional 11 engineers. I would also point out that many of the senior officers 12 of the Company, such as Bill Lee, Doug Booth, myself, L. C. Dail, Dick, George Grier, and others also are registered 13 R. L 14 professional engineers.

15 Q. HOW DOES DUKE POWER COMPANY FULFILL ITS
16 RESPONSIBILITIES TO THE PUBLIC, ITS INVESTORS AND ITS
17 EMPLOYEES TO DESIGN A SAFE PLANT?

We selected the Catawba design based on proven reliability and 18 Α. 19 design concepts. The design philosophy used by the Company is a 20 "defense in depth" concept. The first part of this concept is to design for maximum safety during normal operating conditions. 21 This concept involves providing design features which are favorable 22 23 to safe operation, features which emphasize the quality of backup systems, and a keen insight into the inspectability and testability of 24 25 the plant and its systems. Duke Power is unique in that it 26 designs, builds and operates its own power generating facilities. We have been able to take advantage of that uniqueness in a total 27 integration of functions throughout the initial concept development, 28

-7-

design, construction, and start up testing of the plant. An Operational Review Board, headed by the Nuclear Production Department, provides feedback to Design Engineering concerning operating experience. Through that feedback and the Nuclear Production Department's involvement in reviewing each system concept, components and structures, inspectability, maintainability, and testability have been given due consideration.

The second part of the "defense in depth" concept requires 8 9 that we postulate that highly improbable accidents will occur. Some 10 of these assumed accidents are quite severe in their potential impact 11 on plant systems. However, the systems and structures required 12 to bring the plant to a safe condition following a postulated accident 13 are designed to withstand these scenarios. All safety-related 14 systems are designed to be redundant in that the accident is 15 postulated to occur with one system not functioning.

16 The third part of the "defense in depth" concept is to go 17 beyond that which might be called for under assumed accident 18 conditions. Bulletins from the Nuclear Regulatory Commission, and 19 a vast base of experience which has been gained from other utilities 20 are all part of our input for a safe design.

21 Q. HOW DOES DUKE POWER COMPANY FULFILL ITS RESPONSIBILITY
22 TO THE PUBLIC, ITS INVESTORS AND ITS EMPLOYEES TO
23 CONSTRUCT A SAFE PLANT?

A. Since the initial design work of nuclear power plants in the early
 1950s, many national standards, codes and regulatory requirements
 have been developed based on extensive government tests, industry
 and university research programs, and actual experience at
 operating nuclear stations.

-8-

1 Duke Power's philosophy regarding design and construction is 2 to produce a quality product. More than 75 years of experience in 3 designing and building generating facilities following this philosophy has resulted in a record second to none. This philosophy is 4 5 carefully instilled in each practicing engineer to assure the 6 continuation of a fine tradition of engineering excellence. Duke is 7 also committed to fulfilling the requirements of various national 8 codes associated with nuclear power plant design.

9 The Nuclear Regulatory Commission includes in its regulations 10 certain general design criteria which all nuclear power reactors 11 must fulfill. The Catawba Nuclear Station fulfills each general 12 design criterion as described in Duke Power's application for an 13 operating license.

14 Q. HOW DOES THE COMPANY ASSURE THAT THE PLANT IS BUILT IN
 15 ACCORDANCE WITH THE DESIGN SPECIFICATIONS, AND THAT
 16 VARIATIONS FROM DESIGN SPECIFICATIONS DO NOT AFFECT THE
 17 QUALITY OR SAFETY OF THE PLANT?

18 A. The company assures that the plant is built in accordance with19 design specifications in several ways.

20 The Construction Department has in place an approved QA program which requires procedures and training to "build in" 21 22 quality. The Quality Assurance Department inspects work to assure 23 construction is in accordance with design drawings and 24 specifications. The QA Department has in place approved procedures and personnel to independently inspect for quality and 25 26 identify construction deficiencies. The Design, Construction, and 27 Quality Assurance Departments see that the identified deficiencies 28 are resolved. A thorough system of independent audits to assess

-9-

quality throughout the construction period is carried out by a Corporate QA Audit group, NRC resident and visiting inspectors, ASME programmatic surveys and onsite insurance agency inspectors. In addition, there is an Annual Management Audit conducted by experienced quality experts from other utilities.

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6 During construction there are several formal programs to 7 document changes in, or deviations from, design specifications 8 necessary for one reason or another during plant construction. Variation Notices are written by Technical Support Engineers in the 9 10 field with prior approval from Design Engineering when a deviation from design drawings is necessary because of interferences, the 11 12 need for additional information, the desire to use a different option 13 to facilitate construction, or for other reasons. These Variation Notices are reviewed in Design Engineering for concurrence with 14 15 the change and to identify any adverse trends in particular areas 16 of their work.

17 Design Engineering also uses the Design Nonconformance 18 Procedure to document situations where designs released for 19 construction do not fully conform with approved design criteria. 20 The documentation, review, and corrective action resulting from 21 these processes are trended, and action is taken to correct adverse 22 trends. Occurrences of this nature at other Duke plants which 23 involve nuclear safety are reviewed for potential impact on Catawba.

24 Safety-related mechanical systems in the plant undergo an 25 extensive verification program, code stamping, and review by an 26 authorized nuclear inspector from the American Society of 27 Mechanical Engineers, (ASME). This process is designed to assure 28 that the constructed condition of the safety-related mechanical

-10-

systems in the plant is correctly represented by the mathematical models which have been used to analyze the performance of the mechanical systems under associated operating and postulated accident conditions. The code stamp, or N-stamp, is a designation which is applied only after all the assemblies and components of a system have been certified to meet the rigorous standards of the American Society of Mechanical Engineers. In addition, systems and components require a rigorous startup and operational testing program which provides a final check prior to operating the plant.

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10 Safety related electrical systems similarly undergo a rigorous 11 inspection and functional testing program to confirm the constructed 12 condition of each system. This program coupled with the startup 13 and operational testing program assures that electrical systems 14 consistently perform in accordance with specified design 15 requirements.

16 Finally, because Design Engineering is in-house an 17 organization of Duke Power Company, there is a close professional 18 relationship between those who design the plant, those who build the plant, and those who operate the plant. The near geographical 19 20 proximity of the design organization to the site permits frequent visits to Catawba by Design Engineering personnel to gain 21 22 first-hand information about the progress of construction, to 23 witness implementation of the design, and to review circumstances which could impact current or future design concepts. 24

25 Q. DOES THE DESIGN ENGINEERING DEPARTMENT HAVE A PROGRAM
26 IN PLACE TO IDENTIFY AND CORRECT SYSTEMATIC DESIGN
27 DEFICIENCIES?

-11-

Design Engineering is responsible for trending Variation 1 Α. Yes. 2 Notices and reporting results to responsible groups. The collection 3 and dissemination of data is coordinated for the department by the Projects Management Division. 4 Design Engineering is also 5 responsible for taking corrective action on all adverse trends 6 identified by QA through construction Nonconforming Item Reports 7 and Design Nonconformances.

8 The purpose of this review is to detect unfavorable trends as 9 early as possible and to determine if additional corrective action is 10 needed. This corrective action assures the cause of the problem is 11 identified and appropriate steps are taken to preclude future 12 problems.

Q. DOES THE CONSTRUCTION DEPARTMENT HAVE A PROGRAM IN
 PLACE TO IDENTIFY AND CORRECT SYSTEMATIC CONSTRUCTION
 DEFICIENCIES?

19 A. Yes. Each of the QA procedures used at the Catawba Construction
17 site provides a clear method to identify and correct discrepancies.
18 In addition, there are several procedures written specifically to
19 identify, resolve and correct discrepancies. These are the
20 Nonconforming Item Report, the Variation Notice, and Construction
21 Discrepancies Procedures.

Q. HAVE YOU BEEN INVOLVED IN THE PROCESS WHICH SET THE
 PAY CLASSIFICATION FOR INSPECTORS?

A. I was not actually involved in the evaluation process, though I
understand how it works. The evaluation process is described at
greater length in the testimony of Mr. Grier, who was involved in
the evaluation process. I was, however, the one who made the
decision on the pay reclassification.

-12-

1 As background, I should mention that when we originally set 2 up the welding inspector program, we recruited the inspectors from 3 the crafts. That is, they were actually welders. We offered them 4 more money than they made as craft, primarily because at that time 5 we wanted persons with at least two year's experience as welders to be welding inspectors. Later, it became clear that the welding 6 7 inspection job did not require experience as a welder. Instead, it 8 required training in techniques being developed for welding 9 inspection. It was then that, using techniques provided to us by 10 our salary administration consultant, we began to reevaluate the job 11 requirements for the welding inspectors, along with all other quality 12 assurance inspectors.

13 Q. WERE YOU INVOLVED IN THE PAY RECOURSES BY WELDING
 14 INSPECTORS AFTER THE PAY RECLASSIFICATION?

15 A. No, I was not directly involved. However, as the recourse
16 procedure was carried out, Gail Addis kept me advised of
17 developments.

WHEN DID YOU FIRST BECOME 18 Q. AWARE OF THE SAFETY 19 CONCERNS EXPRESSED BY WELDING INSPECTORS AT CATAWBA? 20 Α. I first became aware of potential safety concerns expressed by the 21 welding inspectors at Catawba in early December of 1981. These 22 concerns were brought to my attention by Gail Addis, who had been 23 involved with the employee recourse procedure filed as a result of 24 the pay adjustment for QA inspectors.

25 Q. WHAT DID YOU DO AFTER THESE CONCERNS CAME TO YOUR26 ATTENTION?

1 A . When Ms. Addis came to me to report these concerns, I immediately 2 asked her to write a memorandum to set out all the concerns as 3 they had been reported to her. I also informed Bill Lee of the fact that these concerns had been raised during the pay recourse 4 5 process. We decided that a task force should be appointed to 6 investigate the situation. Within a day or two I appointed a Task 7 Force to determine whether technical inadequacies existed at the 8 plant and what the scope of the problem was. This Task Force 9 subsequently has become known as Task Force I. I instructed this 10 Task Force to complete their assignment and report back to me by 11 the end of the year. This they did.

12 Q. DID YOU ADVISE NRC OF THE ACTIONS BEING TAKEN BY THE
 13 COMPANY WITH RESPECT TO THESE CONCERNS.

14 A. Yes, NRC was notified in January 1982 by J. R. Wells.

15 Q. PLEASE EXPLAIN THE MANAGEMENT DECISIONS TO INITIATE THE
 16 VARIOUS TASK FORCE INVESTIGATIONS.

17 A. As I indicated above, when I appointed Task Force I, I wanted a 18 judgement by experienced people to determine whether a problem 19 existed and, if so, its magnitude and potential scope. When J 20 received the report from Task Force I, it was clear to me that 21 there were technical concerns which should be investigated.

22 Consequently, I appointed a second Task Force, which we 23 refer to as the Technical Task Force. I instructed the Technical 24 Task Force to assure that they had all the technical concerns 25 expressed by the welding inspectors. I directed them to evaluate 26 thoroughly each of these concerns. My intent in appointing this 27 Technical Task Force was to assure that all the technical concerns

-14-

1 the welding inspectors had were brought out so that they could be 2 investigated and evaluated fully, and, if necessary, corrective 3 action could be taken. My aim in doing so was to determine if any 4 of these concerns represented the possibility of unsafe or 5 inadequate construction at Catawba.

6 Q. DID YOU INDICATE IN YOUR INSTRUCTIONS TO THE TECHNICAL
7 TASK FORCE THAT YOU EXPECTED THEM TO REACH ANY
8 PARTICULAR DECISION?

9 A. Absolutely not. My instructions to them were consistent with what
10 I mentioned above. I told them I wanted all the concerns out and a
11 complete evaluation of each.

12 Q. WHY DID YOU RETAIN LEWIS ZWISSLER OF MANAGEMENT
 13 ANALYSIS COMPANY.

I retained the Management Analysis Corporation (MAC) to review 14 Α. 15 the activities of the Technical Task Force in order to provide an 16 independent view of their investigation, evaluation, and recommendations. I asked Mr. Zwissler, whom MAC assigned to the 17 matter, to review the approach and methods used by the Technical 18 Task Force to assure that it obtained all the concerns; to review 19 20 their approach and method in evaluating and resolving the 21 concerns; and to review the qualifications of the individuals 22 involved to assure that they were qualified to make the sorts of 23 determinations they would have to make. I asked Mr. Zwissler to review the Task Force resolutions to ensure completeness and 24 25 quality of work and to prepare a written report on the entire process as an independent report for Duke Management. I also 26

-15-

1 asked Mr. Zwissler to conduct his work so that he would be 2 prepared, if necessary, to testify in the licensing proceedings for 3 Catawba. 4 Q. WERE YOU INVOLVED WITH THE NONTECHNICAL TASK FORCE? 5 Α. Not directly, but I did review the recommended actions from that 6 Task Force. 7 Q. WERE YOU INVOLVED IN THE IMPLEMENTATION OF THE 8 RECOMMENDATIONS ISSUED BY ANY OF THE TASK FORCES? 9 Α. Not directly. However, I was kept fully advised of corrective 10 actions planned. 11 Q. DESCRIBE YOUR ROLE IN IMPLEMENTING THE RECOMMENDATIONS 12 OF THE TECHNICAL TASK FORCE. 13 My primary role was to provide my full support to department heads Α. 14 who were assigned actions by Task Force. DID IMPLEMENTATION OF THE TASK FORCE RECOMMENDATION 15 Q. AFFECT THE DEPARTMENTS UNDER YOUR SUPERVISION? 16 17 Α. Yes, to some extent. No major organizational changes were made in 18 any of the three departments. The majority of the changes, of course, were made in the Quality Assurance Department, and the 19 20 testimony of Mr. Grier discusses those in some detail. So far as 21 the Construction Department was concerned, changes were made in 22 procedures, and training programs in the area of communications 23 interpersonal and relationships were implemented. Design 24 Engineering changed certain of its procedures to conform with 25 changes in procedures made by the Construction Department. HOW WOULD YOU DESCRIBE THE PRIMARY CONCERNS OF THE 26 Q. WELDING INSPECTORS? 27

-16-

1 Α. I believe that the welding inspectors felt they did not have 2 adequate management and supervisory support in doing their jobs. 3 I attributed that feeling to a failure to achieve adequate 4 communication on the part of management and supervision. The 5 task of the welding inspectors is to document variation from 6 procedures. Resolution of those variations is in many instances not 7 their responsibility; it is the responsibility of others within the 8 organization. This should have been more clearly communicated to 9 the welding inspectors by management and supervision. It 10 apparently was not, and in instances where welding inspectors 11 documented variations, and it was subsequently determined that work was acceptable as performed, the inspectors believed this 12 constituted a lack of support primarily because questions they 13 14 raised were not satisfactorily answered. The reasons for the 15 decision that the work was acceptable should have been clearly 16 communicated to them.

17 I base my conclusion in this regard on the involvement and 18 oversight I had with the welding inspector concerns. As I have mentioned above, that involvement began with the pay recourse 19 20 matter and though I was not involved directly in the recourse, Ms. 21 Addis kept me informed of events. In addition, I am of course 22 thoroughly familiar with the reports of the Task Forces. I have reviewed each and have discussed the findings and conclusions with 23 24 the members.

Q. THE CONCERNS EXPRESSED BY THE WELDING INSPECTOR WERE
 INITIALLY CHARACTERIZED AS CONCERNS AFFECTING THE
 QUALITY OF WORK OR THE SAFETY OF THE CATAWBA PLANT.

-17-

IN YOUR VIEW, DID THE CONCERNS EXPRESSED BY THE WELDING
 INSPECTORS AFFECT THE QUALITY OR THE SAFETY OF THE
 CATAWBA PLANT?

4 A. No. They did not express any concerns which would adversely
5 affect either the quality or the safety of the plant.

6 Q. IN YOUR VIEW, DID THIS EXPRESSION OF CONCERNS BY THE
7 WELDING INSPECTORS INDICATE THAT THERE WAS A
8 BREAKDOWN IN THE QA PROGRAM AT CATAWBA OR THAT THE
9 QA PROGRAM WAS NO LONGER WORKING AT CATAWBA?

10 No. Quite the contrary. The discussions and communications Α. 11 between management and employees that took place in late 1981 and 1982 clearly showed that employee recourse procedures were in 12 13 place and working. As I noted above, the concerns voiced by the 14 inspectors centered on communications problems, in that questions 15 they raised were not being fully answered. All of the review clearly showed that our QA program was in place and working. 16 17 Q. ARE YOU FAMILIAR WITH THE 1981 SALP REPORT?

18 A. Yes.

19 Q. THE 1981 SALP REPORT RATES THE CATAWBA PROJECT "BELOW
20 AVERAGE", BASED IN PART ON CRITICISM OF THE QA PROGRAM.
21 IN YOUR VIEW, DOES THIS SALP REPORT INDICATE THAT THERE
22 ARE SIGNIFICANT OR SYSTEMATIC DEFICIENCIES IN DESIGN OR
23 CONSTRUCTION, OR THE QA PROGRAM, AT CATAWBA?

A. No. The 1981 SALP report covered a period from September 1979
through August 1980. Based on an analysis of the basis for the
1981 SALP report, I concluded that all the items leading to that
1981 rating were satisfactorily corrected prior to issuance of the

-18-

1 report. The 1981 SALP Report was based on data generated months before the report was issued. The period covered by the 1981 2 3 SALP Report happened to coincide with a period of extremely heavy 4 construction activity at Catawba. Naturally during such a period there were more violations recorded. The 1981 SALP Report based 5 its ratings on the number of violations with little attempt to account 6 7 for other factors, such as construction activity. Therefore. Catawba was given a "Below Average" rating. Under such 8 circumstances the "Below Average" rating does not indicate either 9 10 systematic or significant deficiencies in the QA program at Catawba. 11 In our view the rating was not justified and we have told the 12 NRC this. Among other things, the 1981 SALP Report does not take into account corrective action taken by Duke. In any event, a 13 "Below Average" rating does not indicate systematic or significant 14 deficiencies. The NRC itself has said that "[a] rating of below 15 average does not mean that a facility was unsafe or that its 16 operation or construction should be stopped." So the NRC's own 17 words preclude drawing that conclusion. In addition, I do think it 18 19 is significant to note that two subsequent SALP reports have given Catawba very high marks, particularly in the Quality Assurance 20 21 area.

Q. DESCRIBE WHAT WAS DONE IN RESPONSE TO THE VIOLATIONS
 COVERED BY THE 1981 SALP REPORT.

-19-

Α. No response was necessary at the time of the report because as I noted above, the nonconformances covered by the report had all been resolved previously. As I mentioned, the report was issued long after the data on which it was based was generated. I hereby certify that I have read and understand this document, and believe it to be my true, accurate and complete testimony. Withleuen Sworn to and subscribed before me this Aday of September, 1983. ury Commission Expires 7-28-86

-20-

Attachment 1



