

AFFIDAVIT OF STEVE C. YOUNG

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January 6, 1984

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of.)	
)	
THE CLEVELAND ELECTRIC)	Docket Nos. 50-440
ILLUMINATING COMPANY, <u>ET AL.</u>)	50-441
)	
(Perry Nuclear Power Plant,)	
Units 1 and 2))	

AFFIDAVIT OF STEVE C. YOUNG

County of Lake)
) ss:
State of Ohio)

Steve C. Young, being duly sworn, deposes and says as follows:

1. I, Steve C. Young, am the Perry Nuclear Power Plant Quality Assurance Manager for Johnson Controls, Inc. (JCI). My business address is 10 Center Road, Perry, Ohio 44081. A statement of my professional qualifications and experience is attached as Exhibit A. I have personal knowledge of the matters set forth herein and believe them to be true and correct.

2. I have reviewed the Amendment To Motion To Reopen The Record On Comstock Issues, dated December 8, 1983 (Amended Motion), filed by Ohio Citizens for Responsible Energy (OCRE). The Amended Motion attaches an article from the Lake County News-Herald, dated December 1, 1983, discussing allegations by a former JCI quality control inspector, Richard Wade. The purpose of this Affidavit is to answer the health and safety allegations discussed in the newspaper article cited by OCRE

3. The December 1, 1983 News-Herald article attributes the following allegations to Mr. Wade: (1) that "[b]efore he and others took certification tests to become inspectors, Johnson officials gave them answer sheets, hoping to certify inspectors who could not recognize faulty construction," and that "he and other workers were given the answers to dozens of tests that had to be passed before the men were certified as inspectors"; (2) that "he approved thousands of faulty welds that could lead to a serious nuclear accident at the plant"; (3) that "workers 'overwelded' thousands of joints on a hydraulic piping system that pushes control rods into a nuclear reactor," and that "[m]ore than twice the needed metal was used in the welds, so the piping is excessively stressed and could break, 'which could lead to a total meltdown'"; (4) that "he didn't come forward for fear of losing his job," and that "[i]f you even raise a question on something, you're done, you're finished, the same day"; (5) that, while he "was fired for 'incompatibility,'" and "he was told he did not get along with

his bosses and fellow workers," Mr. Wade "thinks he was fired for raising too many questions at the plant"; and (6) that "[w]orkers for Johnson and other contractors are routinely paid for many hours they don't work and days they don't show up at the plant," and "[w]hen they do work, they create intentional, costly construction delays in an effort to prolong their jobs, which will be eliminated when the plant is complete." The allegations discussed in the newspaper article are untrue. The facts are as follows.

Background

4. Under its scope of work at Perry, JCI is responsible for performing mechanical construction, and associated quality assurance and quality control, primarily in the area of process instrumentation and controls. Mr. Wade was hired as an in-process inspector (IPI). Among other things, the IPIs are responsible for visual inspection and liquid penetrant testing (PT) of in-process and final welding of pipe, tubing, supports and equipment. The welding performed under JCI's scope of work is governed by the American Society of Mechanical Engineers (ASME) and American Welding Society (AWS) Codes.

5. JCI currently employs approximately 32 certified inspectors at Perry. As the JCI QA Manager, I am the senior site official responsible for these inspectors and for JCI's overall QA/QC program at Perry. I report to JCI's Corporate QA Director in Milwaukee, Wisconsin.

6. Mr. Wade was hired by JCI on October 4, 1983, following detailed interviews at the site with three senior JCI QA/QC supervisors. (I did not personally interview Mr. Wade, but discussed the results of our interviews with Mr. Wade, and approved the decision to hire him.) Mr. Wade was terminated by JCI six weeks later, on November 15, 1983. Mr. Wade participated in JCI's inspector indoctrination and training program for almost all of this period. He was certified by JCI, and approved by the Project Organization to perform inspections, on November 11, 1983. He performed inspections only on Friday, November 11, and Saturday, November 12. He was absent from work on Monday, November 14, and was officially terminated on Tuesday, November 15, for the reasons explained below. On the two days Mr. Wade performed inspections at Perry, he performed only in-process visual inspections of fillet welds on pipe, tubing, and supports in the Unit 1 reactor building. He inspected (and approved) a total of 16 welds. The welds have since been re-examined and found acceptable, as discussed below. Mr. Wade's inspections did not involve any of the hardware concerns discussed in the News-Herald article.

7. JCI hires inspectors only after detailed interviews. All inspectors hired by JCI at Perry have prior nuclear QA/QC experience. After an inspector is hired, and prior to performing inspections, the inspector must successfully complete a comprehensive indoctrination and training program, which generally lasts for 6-8 weeks. The program includes general

indoctrination and orientation; detailed classroom instruction; required reading covering applicable Codes, Standards, regulatory requirements, and project procedures; eye examinations to verify satisfactory vision; open-book examinations to assure familiarity with JCI project procedures and procedure applications; closed-book examinations covering visual inspection and liquid penetrant testing techniques; and supervised, in-the-field training and evaluation, which usually lasts two to four weeks. JCI's indoctrination and training program is documented in project procedures approved by the Project Organization. JCI's program follows the general qualification and certification guidelines prescribed in American National Standards Institute (ANSI) N45.2.6 (1973 Edition), entitled "Qualifications of Inspection, Examination, and Testing Personnel for the Construction Phase of Nuclear Power Plants," and American Society for Nondestructive Testing No. SNT-TC-1A (June 1975 Edition), entitled "Personnel Qualification and Certification in Nondestructive Testing."

8. Briefly, ANSI N45.2.6 provides that inspector certification "shall be supported by appropriate measures such as education or training, testing, evaluation, and periodic review to assure the initial and continued proficiency of each person." The only area in which ANSI N45.2.6 recommends that employers administer written examinations as part of the inspector certification process is in the area of proficiency testing for inspectors performing nondestructive examinations

(NDE). ANSI N45.2.6 recommends that NDE certification tests be devised "in accordance with the requirements of SNT-TC-1A." SNT-TC-1A prescribes minimum qualifications for NDE personnel, based on three levels of qualification. SNT-TC-1A sets forth in general terms those areas of physical and technical qualifications which should be covered in written examinations for each of the three NDE qualification levels, and also addresses the grading of exams and the correlation of exam grades to the three certification levels. JCI's written certification examinations covering visual inspection and liquid penetrant testing (the only NDE activities performed by JCI inspectors), as well as JCI's eye examinations, meet the recommended standards of ANSI N45.2.6 and SNT-TC-1A.

The Allegation That JCI
Officials Distributed Answer Sheets

9. Mr. Wade's charge, as described in the newspaper article, that JCI officials distributed answer sheets to certification tests, is completely without basis. The relevant facts are as follows.

10. As part of his indoctrination and training prior to taking closed-book, NDE certification examinations, Mr. Wade was required to take numerous open-book examinations. These examinations, administered to all new inspectors, are to assure familiarity with applicable project procedures. Inspectors take these open-book examinations at their own pace. Inspectors notify the JCI training supervisor when they have

completed their study of particular areas of procedures (there are a total of 29 procedural areas, each covered by a separate open-book test), and then take the open-book exams corresponding to those areas. After a particular open-book test is completed, an instructor reviews any incorrect answers with the inspector. The open-book tests are not required by the NRC or the Project Organization, nor are they recommended by any Code or Standard. The tests are used by JCI as an additional training device. Until concerns arose with Mr. Wade, as discussed below, the open-book tests were not proctored, although there were training supervisors in the general area where the tests were taken. Prior to the newspaper revelation that Mr. Wade obtained test answer sheets, the answer sheets were retained in an unlocked file cabinet in the office of Mr. Bruce Christensen, a senior JCI quality engineer. Mr. Wade took his 29 open-book procedural tests between October 4, 1983, and October 14, 1983. There were only two other JCI inspectors, each of whom started work with Mr. Wade on October 4, 1983, who took open-book tests during this time period. Subsequently, a third inspector joined JCI on October 17, 1983. These three inspectors were the only other inspectors who participated in JCI's indoctrination and training program in the same time frame as Mr. Wade.

11. There was one point during Mr. Wade's open-book testing, when JCI QA management became concerned that Mr. Wade might have improperly obtained open-book answer sheets. On

October 7 and October 8, Mr. Wade asked to take an unusually large number of tests (he took eight tests on October 7 and seven tests on October 8). The large number of tests taken in such a short period raised suspicion in the minds of Mr. Wade's training supervisors. Thereafter, in reviewing Mr. Wade's test results, the supervisors became concerned about some of Mr. Wade's essay answers on one test, which were similar to answers contained on the supervisors' answer sheets for the test. The supervisors brought their concerns to me, and I called Mr. Wade to my office on October 11, 1983. Mr. Wade's supervisors were also present in the meeting. During this meeting, I asked Mr. Wade whether he had obtained open-book answer sheets and he indicated that he had not. He stated that he was "a speed reader" and that he had "total recall." While I remained concerned, I could not prove that Mr. Wade had the test answer sheets in his possession. Also, the fact that these were open-book tests meant that Mr. Wade did have access to the procedures in order to answer questions. (We had reviewed the open-book test results of the other new inspectors, and their answers did not suggest that the other inspectors had the test answer sheets.) I asked Mr. Wade if he would agree to retake the particular test which we were questioning him about. He agreed to retake the test, and performed well on the re-examination. Mr. Wade completed the remainder of his open-book tests by October 14, 1983. After my meeting with Mr. Wade, and at my direction, Mr. Wade's and the other new

inspectors' open-book tests were 100% proctored, and there was no evidence during subsequent testing that Mr. Wade, or the other new inspectors, possessed open-book answer sheets.

12. After Mr. Wade completed his open-book tests, he participated in in-the-field training from October 14 to October 25. Thereafter, Mr. Wade participated in two days of classroom instruction in visual and PT inspection techniques. On October 26, 1983, he took the first of two required closed-book NDE certification examinations. (The closed-book examination answer sheets were also retained in Mr. Christensen's office file, which was not locked.) The test was proctored. Mr. Wade failed the exam. He studied, took the exam again, and passed. He successfully completed a second required NDE certification exam, which was proctored, on November 3, 1983. All test results were reviewed by JCI training supervisors, and there was no evidence that Mr. Wade (or the other new inspectors taking NDE certification exams in the same time frame) used answer sheets. Subsequent to the NDE exams, Mr. Wade received additional on-the-job training for approximately one week, after which he was certified by JCI, and approved by the Project Organization to perform inspections, on November 11, 1983.

13. The first time JCI learned that Mr. Wade possessed copies of the answer sheets for some of the closed-book and open-book tests was on December 1, 1983, the day of the News-Herald story. JCI learned through the Project Organization, following a meeting they had with the NRC Staff, that Mr. Wade

possessed copies of test answer sheets and provided copies to the NRC Staff. After confirming that the answer sheets Mr. Wade gave to the NRC were, in fact, copies of actual answer sheets, JCI, under Project Organization supervision, immediately discontinued all inspector testing, rewrote the closed-book NDE certification exams, and committed to conducting NDE re-examinations of all JCI inspectors and supervisory personnel. JCI also committed to re-inspecting all work of any inspector who failed the re-examinations. The re-examinations, conducted under Project Organization supervision, have now been completed, and all JCI QA/QC inspectors and supervisors scored passing grades. JCI is also revising all open-book tests as an extra precaution. All open-book and closed-book answer sheets have been placed in JCI's QA document control center limited access files. All future open-book and closed-book tests will be 100% proctored by JCI supervision.

14. I have personally investigated in detail Mr. Wade's serious charge in the News-Herald article that JCI officials distributed the answer sheets to Mr. Wade and other inspectors taking certification tests with Mr. Wade. The charge is totally false. In personal discussions with me (without their supervisors present), all three inspectors taking tests during the time of Mr. Wade's indoctrination and training, have denied that answer sheets were made available by supervisors or otherwise used by the inspectors. The inspectors all expressed anger over the charges in the News-Herald story, both because

they believe the charges to be false, and because they believe there is an implication in the newspaper story that the other inspectors used answer sheets. During these discussions, one of the inspectors did state to me that Mr. Wade had used answer sheets in the presence of the inspector during one open-book test during the October 4 - October 14, 1983 time period in which Mr. Wade took his open-book tests (the inspector did not know how the answer sheets were obtained), and that Mr. Wade had offered the test answer sheets to the inspector, who refused to use the answers. The inspector told me he became fearful that he would be blamed for using the answer sheets, and immediately left the trailer. JCI has reviewed again the test results of the three inspectors who were tested during the same period as Mr. Wade, and can find no suggestion that answer sheets were used by the inspectors. JCI's Corporate QA Director and I have also carefully interviewed Mr. Wade's training instructors and supervisors, and we are completely satisfied that these supervisors did not furnish Mr. Wade with the test answer sheets. I have worked closely with most of the supervisors in question for two years or longer, and have never had occasion to question their integrity. Based on my investigation, I can only conclude that Mr. Wade, acting alone, improperly obtained the test answers. I believe the corrective actions undertaken by JCI should assure that similar unethical conduct, undermining JCI's testing and certification program, cannot be repeated.

Approval of Faulty Welds

15. The News-Herald article quotes Mr. Wade as stating that "he approved thousands of faulty welds that could lead to a serious nuclear accident at the plant." Again, the charge is without basis. As I have indicated, Mr. Wade performed visual inspections of only 16 welds during the two days he performed inspections at Perry. In response to the newspaper article, each of the sixteen welds, approved by Mr. Wade, have been re-examined by certified inspectors from JCI and the Project Organization's Construction Quality Section (CQS) and found to be acceptable.

16. The News-Herald article also quotes Mr. Wade as alleging that workers "overwelded" hydraulic piping system joints. Mr. Wade never performed inspections of hydraulic piping system joints. The area questioned by Mr. Wade does not even fall within JCI's scope of work (the hydraulic piping system welds in question are the responsibility of Pullman Power Products). Mr. Wade never raised a question with JCI supervisors concerning the adequacy of hydraulic piping system welding. Thus, I am not aware of any basis Mr. Wade might have for the charge stated in the News-Herald article.

Mr. Wade's Alleged Fear of Coming Forward

17. Mr. Wade's allegations, printed in the News-Herald story, that "he didn't come forward for fear of losing his job," and that "[i]f you even raise a question on something,

you're done, you're finished, the same day," are without any basis. All new JCI QA/QC inspectors are instructed on the necessity of reporting and documenting any safety concerns. This is the job of inspectors, and JCI supervisors continually stress in discussions with inspectors the importance of this duty. In addition, posted in JCI's Quality Engineering office trailer, and throughout the plant, is NRC Form 3, entitled "Notice to Employees," which clearly notifies workers of their right to contact the NRC with safety concerns; or the Department of Labor, in the event employees believe employers are discriminating against them for reporting safety concerns. (JCI has received no Department of Labor discrimination complaints from Mr. Wade or any other employee.) Also posted in the JCI Quality Engineering trailer, and throughout the plant, is a Cleveland Electric Illuminating Company poster entitled "A Reminder," urging all employees to contact their management, CEI, or the NRC directly, with any safety concern. Mr. Wade repeatedly passed these notices during his six weeks of employment at Perry.

19. JCI also trained Mr. Wade and other new inspectors in the use of JCI's QC Inspection Question Sheet, a copy of which is attached as Exhibit B. The Question Sheets are distributed to all JCI QA/QC personnel at Perry for use in documenting to senior JCI QA management procedural questions or concerns (in addition to those items formally documented through JCI's corrective action system). All Question Sheets, containing the

inspector's problem description, and the inspector's "recommended solution," are reviewed by me, the JCI Corporate QA Director in Milwaukee, and by JCI Engineering, as well as by the Project Organization (CQS). A response is documented by upper management on the original Question Sheets, and returned to the originating inspector. In addition, in most cases, JCI quality engineers personally discuss the Question Sheets, including recommended solutions, and management's responses, with the inspectors. In 1983, Perry QA/QC personnel filed over 100 Question Sheets with JCI QA management. All have been, or are in the process of being, responded to by JCI QA management. Mr. Wade never utilized the Question Sheet form during his six weeks at Perry. Nor did he ever initiate any formal corrective action, or raise with any JCI QA/QC supervisors any of the issues discussed in the News-Herald article. JCI has only terminated six inspectors (including Mr. Wade), out of approximately 66 inspectors, since JCI began performing safety-related work in 1978. There were two other inspectors terminated in 1983 (one in March and one in April). There were two terminations in 1982, and one in 1981. All six inspectors have been terminated for good cause, and there is no evidence in the newspaper article, or anywhere else, that JCI has improperly terminated any of these six inspectors for raising safety concerns.

Mr. Wade's Termination

19. Mr. Wade is quoted in the News-Herald article as stating that "he thinks he was fired for raising too many questions at the plant." This is untrue. First, as I have stated, Mr. Wade raised no safety-related questions during his six weeks of employment at Perry. As documented in Mr. Wade's personnel file, Mr. Wade was terminated for failing to pass his 90 day probationary employment period with JCI. All new JCI inspectors are subject to special supervisory scrutiny during the 90 day probationary period, to assure that they have the necessary competence and attitude to carry out their inspection duties. Mr. Wade failed to pass probation because of a bad attitude toward his work, failure to follow work instructions, and absences from his assigned duties for periods of up to four hours (in these instances, Mr. Wade was either off-site without permission, or on-site and in an area where his training supervisors could not locate him). A summary of the facts leading to Mr. Wade's termination is as follows.

20. During his final week of in-the-field training and immediately prior to Mr. Wade's final certification, Mr. Tom Skidmore, Mr. Wade's second shift inspection superintendent, received a number of complaints about Mr. Wade from Mr. Wade's supervisors and other second shift inspectors. On several occasions, Mr. Wade could not be located by his training supervisors for extended periods during the second shift. In addition, Mr. Wade indicated to several supervisors, including

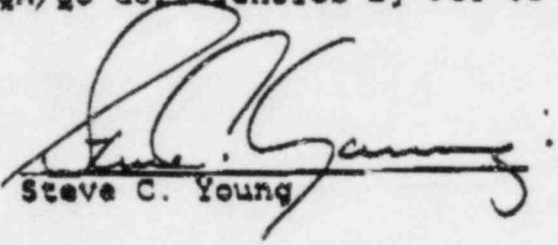
Mr. Skidmore, that he had significant QA/QC experience and that he did not need to be trained because he already knew everything. (Regardless of an inspector's prior experience, it is, of course, necessary to learn JCI's procedural requirements applicable to Perry.) Several of the second shift inspectors complained to supervisors that Mr. Wade was uncooperative, and they indicated a preference not to work with him. (None of the complaints had anything to do with health and safety concerns expressed by Mr. Wade. He expressed none.) Finally, Mr. Wade returned late from lunch during most of this week, by periods of approximately 15 minutes to as much as several hours. Mr. Wade's supervisors were concerned about these problems; however, because of Mr. Wade's apparent technical experience and expertise, and his successful completion of JCI's certification program, Mr. Wade's supervisors decided to permit Mr. Wade to be certified while continuing to closely monitor his performance.

21. On Friday, November 11, Mr. Wade's first day as a certified inspector, Mr. Wade was again late returning to work after lunch. There were no significant problems with Mr. Wade on his second day of inspection work, Saturday, November 12. On Monday, November 14, Mr. Wade did not report for work, and called Mr. Skidmore during the shift to say that he was sick. Mr. Skidmore questioned Mr. Wade's excuse, and asked Mr. Wade to come to the site to meet with him, which Mr. Wade agreed to do. The meeting was attended by the JCI second shift lead

inspector, Mr. Jeff Bevan, who was concerned about Mr. Wade's attitude and conduct over the previous week. Mr. Wade was rude and unprofessional throughout the meeting. Mr. Skidmore asked Mr. Wade about the various problems that had occurred with Mr. Wade during the week. At one point, Mr. Skidmore asked Mr. Wade about a particular incident the previous week, in which Mr. Wade's training supervisors had been unable to locate Mr. Wade for several hours. Mr. Wade refused to tell Mr. Skidmore where Mr. Wade had gone. At another point in the meeting, Mr. Wade made an angry statement that "he was going to kill" another second shift inspector. Based on Mr. Wade's conduct in the meeting, and because of unresolved concerns over Mr. Wade's conduct over the previous week, Mr. Skidmore concluded that Mr. Wade should be terminated. He informed Mr. Wade of his decision, and asked him to return the following day to pick up his last pay check. After the meeting, Mr. Skidmore called me at home to inform me of his decision, and I concurred that there was good cause to terminate Mr. Wade. Mr. Wade was officially terminated the following day, November 15, 1983. (On November 16, 1983, Mr. Wade called Mr. Skidmore at his home, asked to speak to Mr. Skidmore's roommate, and stated to Mr. Skidmore's roommate, "If I could get Skidmore to swing at me, I'd kill him." The incident was reported to Perry Plant Security.) In short, Mr. Wade was terminated, during his probationary period, because of serious questions over his conduct and attitude, and not because he raised any safety concerns.

Remaining Allegations

22. The News-Herald article quotes Mr. Wade as stating that workers for JCI and other Perry contractors "create intentional, costly construction delays in an effort to prolong their jobs, which will be eliminated when the plant is complete." The article contains no further details, and I am not aware of any basis for the charge. Mr. Wade approved the few welds he inspected while at Perry, and never complained to his supervisors of intentional, or any other, construction problems. JCI's QA/QC staff is, of course, not concerned about any "construction delays" that might result from their inspection work. Finally, I am not aware of the basis for Mr. Wade's general charge in the newspaper article that "[s]ecurity at the plant is appallingly bad." Although I am not responsible for Perry plant security, my experience has been that JCI's QA/QC personnel are carefully monitored by security guards while entering and exiting the Perry Plant. I know of no security lapses that have resulted in QA/QC deficiencies by JCI or other contractors.


Steve C. Young

Subscribed and sworn to before me
this 6th day of January, 1984.


NOTARY PUBLIC

My Commission Expires

11-12-1988
JOANNE RIBICKAS, Notary Public
State of Ohio-Lake County
My comm. exp. Nov. 12, 1988

RESUME

STEVE C. YOUNG

PROJECT QA MANAGER - JOHNSON CONTROLS, INC.
SYSTEMS ENGINEERING AND CONSTRUCTION DIVISION

EXPERIENCE

Company: Johnson Controls, Inc. - 1982 to present
Perry Nuclear Power Plant Perry, Ohio
Function: Project QA Manager - Responsible for the overall direction and administration of the Quality Assurance Engineering and Quality Control Inspection activities. Prepare, review and approve the procedural program for all ASME and safety related activities performed on the project site.

Company: Johnson Controls, Inc. SECD-Power West - 1981 - 1982
Function: Project QA Manager - WPPSS Nuclear Projects 1/4. Responsible for the overall direction and administration of the Quality Assurance Engineering and Quality Control Inspection activities. Prepare, review and approve the procedural program for all ASME and safety related activities performed on the project site. Maximum work force, 10 Quality Engineers and 25 Quality Inspectors.

Company: WSH/Boecon/Geri - 1981
Function: Assistant Project Engineering Manager - WPPSS Nuclear Project 2, responsible for all engineering aspects including Field Engineering, technical and design, subcontract administration and procurement with a full complement of approximately 200 people. Responsibilities revolved primarily around management planning and owner/A/E interface.

Company: WSH/Boecon/Geri - 1980 - 1981
Function: Corporate Quality Assurance Audit Manager - Responsible for planning, documentation, scheduling and implementation of the Corporate Quality Assurance Audit Program to insure internal and external compliance of applicable procedures, specifications codes and regulatory requirements as concerned with ANSI, 10CFR and ASME. Developed the program for QA auditing in accordance with ANSI N45.2.12 and the Lead Auditor Training and Certification Program in accordance with ANSI N45.2.23.

Company: Plemco Ltd. - 1979 - 1981

Function:

Project Engineering Manager, U.S. Oil and Refining Co. Responsibilities included evaluation and recommendation for all mechanical piping, civil, electrical and instrumentation design, fabrication and field erection. Prepared the necessary installation and control procedures utilizing design specifications to assure proper installation. Was delegated signature approval authority of the President and Chief Executive Officer. Provided costs and similar information for projects bidding and scheduling. Responsible for new facilities and equipment to be listed in the U.S. Oil and Refining Co., fuel oil hydrotreater, catalytic reformer, sulphur recovery and waste water treatment. This included equipment layout, equipment evaluation, cost estimating and budgeting cost controls, production analysis, labor relations and CPM scheduling. Directly responsible for the administration of employees in excess of 100.

Company:

Burns and Roe, Inc. - 1977 - 1979

Function:

Sr. Quality Assurance Engineer - Systems WPPSS Nuclear Project No. 2 - Duties included administrative reporting of activities related to nonconformances; directing the on-site audit program of approximately twelve (12) prime contractors and their sub-tier contractors; administration of reporting, coordinating and evaluating reportable deficiencies as they applied to 10CFR Part 21 and 50.55 (E). Other duties included preparation/review/evaluation of the combined WPPSS/B&R Project Quality Assurance Program and Control Procedures; coordination of NCR inspections and reporting and client corporate audits. Authored some technical papers for indoctrination and training of QA/QC personnel.

Company:

Phillips-Gettschow Co. - 1975 - 1977

Function:

Quality Assurance Engineer - Lead Auditor Employed as Quality Assurance Engineer, Lead Auditor and Vendor Surveyor, responsible at a corporate level for Dresden NPS, Braidwood NPS, Seabrook NPS, Kewaunee NPS, Point Beach NPS, Quad Cities NPS and Collins Fossil PS. Certified Level III Visual Inspector (piping, welding, component supports and instrumentation) in accordance with ANSI N45.2.6 also certified Lead Auditor in accordance with ANSI N45.2.23. Duties included as a minimum the following: survey and qualify the quality system programs of service suppliers, material suppliers and manufacturers, review and approve procurement specifications and purchase orders originating in the Home Office, review and ascertain resolution of nonconformances. Review customer's design specifications and insure that procedures and instructions were available to field personnel to assure that all work conformed strictly to the requirements of the ASME Code and customer requirements, maintain required standards of knowledge and experience for Quality Inspectors and conduct training programs as necessary to indoctrinate Quality Inspectors in Quality Control functions and workmanship standards, provide assistance to all

personnel as required for interpretation of procedures, specifications, and instructions, and assure that all ASME Code requirements were met by monitoring, audit, or surveillance.

Company: Power Systems, Inc. - 1974 - 1975
Function: Mechanical Quality Control Inspector, for the Donald C. Cook, NPS. - Responsible for inspection and documentation of piping, welding, mechanical systems hangers and testing of Class I, II, and III safety related systems.

Company: United Engineers and Construction - 1973 - 1974
Function: Quality Control Engineer in training. This training included all phases of Nuclear Quality Assurance and Quality Control activities as follows: Set up permanent documentation to assure that all critical systems and structures were manufactured and installed according to applicable codes and standards. Conducted frequent audits of inspection processes for completeness and adequacy at the Salem NPS. Also, periodically conducted audits to examine adherence to approved procedures and effectiveness of a quality system. Reviewed and reported on applicable specifications, amendments and revisions prepared by the responsible engineer prior to issue.

Company: Bechtel Corporation - 1969 - 1973
Function: Field Engineer, South Point Nevada Power Station. Assigned to South Point Fossil Power Station, Southpoint, Nevada for field design of small bore, 2" and under piping and hangers. This activity included field location and marking, and seismic analysis.

EDUCATION

1980	Columbia Basin College
1978	Columbia Basin College
1974	Lake Michigan College
1973	Forty Hours NDE Level II RT Forty Hours NDE Level II MT & PT Dupont Corporation Chestnut Run, Delaware

1970

Capital Radio and Electronics Institute
of Technology, Washington, D.C.
Nuclear Instrumentation and Control Tech-
nology, (Correspondence)

1969

Tulsa University
School of Engineering

Q.C. INSPECTION
QUESTION SHEET

PKG. NO. _____

DATE _____ NO. _____

ORIGINATOR

ORGANIZATION

PLANT BLDG./AREA

REFERENCE DOCUMENTS

PROBLEM

RECOMMENDED SOLUTION

SIGNATURE_____
DATE

RESPONSE

BY _____
SIGNATURE_____
DATE

Q.A. MANAGER CONCURRENCE _____

SIGNATURE_____
DATE

PROCEDURE REVISION REQUIRED YES NO

PROCEDURE NO. _____