



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report Nos.: 50-413/84-31 and 50-414/84-17

Licensee: Duke Power Company
422 South Church Street
Charlotte, NC 28242

Docket Nos.: 50-413 and 50-414

License Nos.: CPPR-116 and CPPR-117

Facility Name: Catawba

Inspection at Catawba site near Rock Hill, South Carolina

Inspector: J. J. Blake
for N. Economos

4/18/84
Date Signed

Accompanying Personnel: B. Uryc

Approved by: J. J. Blake
J. J. Blake, Section Chief
Operational Engineering Program Branch
Division of Engineering and Operational Programs

4/19/84
Date Signed

SUMMARY

Inspection on February 28 to March 2, 1984

Areas Inspected

This special inspection involved 87.5 inspector-hours on site in the area of worker's concerns involving welding practices.

Results

Of the one area inspected, no violations or deviations were identified.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *R. L. Dick, Vice President Construction, Acting Project Manager
- *W. O. Henry, QA Manager - Technical Services
- *C. Ray, Jr., Principal Mechanical/Nuclear Engineer
- *D. Stout, Design Engineer
- R. Barnes, Planning and Control Manager of Construction

Other licensee employees contacted included nine construction craftsmen and supervisors.

NRC RII

- *Richard C. Lewis, Director, Division of Project and Resident Programs
- *John A. Olshinski, Director, Division of Engineering and Operational Programs
- *Hugh C. Dance, Chief, Project Branch 2, Division of Project and Resident Programs
- *Virgil L. Brownlee, Chief, Project Section 2A, Division of Project and Resident Programs
- *Alan R. Herdt, Chief, Engineering Program Branch, Division of Engineering and Operational Programs
- *Jerome J. Blake, Chief, Materials and Mechanical Section, Engineering Program Branch, Division of Engineering and Operational Programs

NRC Resident Inspectors

P. K. Vandoorn
P. Skinner

- *Attended management meeting

2. Exit Interview

The inspection scope and findings were summarized on March 13, 1984, with those persons indicated in paragraph 1 above.

A meeting was conducted with licensee representatives at the request of NRC in the NRC Region II Office, Atlanta, Georgia. The purpose of the meeting was to present the information developed by members of the Region II staff in connection with the allegations that a foreman of a specific welding crew engaged in activities that were contrary to approved construction procedures.

It was felt this meeting was necessary so that the licensee could be informed of this information which may potentially involve safety issues requiring prompt attention, evaluation, and corrective action. The Region II staff felt the meeting served its intended purpose of providing the licensee with a general understanding of the nature and scope of the allegations in order that they could begin the initial steps of an in-depth inquiry into this matter.

Licensee representatives were advised of the following issues which were developed during the Region II staff inquiry into this matter: 1) welders working on stainless steel sockets may have violated interpass temperatures, 2) arc strikes may have been removed from a valve without proper documentation, 3) socket welds may have been made out of procedure in that one side of the socket was completely welded and then the other side welded, 4) the lead man on the crew reportedly acted as a "look out" for licensee QC inspectors when welding procedures were being violated, 5) welders perceived the foreman to be applying pressure for quantity, and 6) the foreman allegedly instructed welders to weld without being in possession of proper welding documentation. The identity of the foreman in question was provided to the licensee as the staff felt his identity was crucial information required by the licensee in order to have a starting point for their inquiry.

The licensee was advised that Region II staff will be closely following their activity in this matter and continuing parallel independent inspection activity to review the technical implications of these allegations.

The above matters were discussed during the meeting and amplified as required in response to specific questions posed by the licensee. The licensee was made aware of the Region II staff's concerns as a result of these matters and advised by the staff to begin an immediate review of these issues to determine what problems are raised as a result of the issues; the possibility that these activities extended beyond this particular welding crew; and, what corrective actions would be required for adequate resolution.

The licensee was informed that this meeting was not an enforcement conference; however, if there are findings of violations of procedures, codes, or regulatory requirements, enforcement action could result. The licensee was requested to keep the Region II staff fully advised on the progress of their inquiry and they indicated that they would keep the staff advised of the progress and actions planned in this matter.

Unresolved Item 413/84-31-01, 414/84-17-01 Fabrication of Socket Welds

Unresolved Item 413/84-31-02, 414/84-17-02 Unauthorized Removal of Arc Strikes

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. New unresolved items identified during this inspection are discussed in paragraph 8 and 9.

5. Background of Interviews

The NRC Region II staff has been pursuing several issues which developed during the Atomic Safety and Licensing Board (ASLB) hearing on the Catawba Nuclear Plant. The Board requested the Region II staff to followup on these issues and provide them the results of that followup. One of the issues examined by the Region II staff at the request of the Board was "foreman override." In examining this issue, the Region II staff conducted personal interviews with numerous licensee employees to determine if the "foreman override issue" was a broad generic problem at the Catawba site. The results of these interviews indicated that "foreman override" was not a site wide problem. During these interviews, the Region II staff received information from one individual who indicated possible irregularities involving one particular foreman. The Board was advised of the staff findings that "foreman override" was not a site wide problem and that the staff was in receipt of information from one individual, who subsequently became known as "Welder B", and who indicated possible irregularities involving one particular foreman. The Board was advised that the Region II staff intended to continue appropriate inspection efforts on this newly developed issue as a separate allegation in accordance with Regional policy. The Region II staff then focused their inspection efforts on the specific welding crew and its foreman. Information developed during the Welder B inquiry indicated that the specific crew in question normally experienced a high rate of personnel turnover and that a large number of welders had been assigned to that crew at one time or another as a matter of normal crew management. Selected interviews were subsequently conducted with current and former crew members both on and off site in attempts to develop additional information. During the numerous interviews conducted by the Region II Staff, each interviewee was specifically asked if he had ever experienced any problems regarding foremen directing them to work out of procedure or to engage in work activity in violation of procedure. The interviewees were primarily from the welding and pipefitters craft with several foreman and quality control inspectors also interviewed. Almost all had worked on various crews and had worked for several foremen during their employment at Catawba. Only Welder B and individuals subsequently interviewed in connection with the "Welder B issue" identified problems they

experienced and this was only with the second shift welding crew foreman. No other information was developed that indicated there were problems involving other foremen and the Region II staff concentrated inspection efforts on the second shift welding crew.

6. Restrictive Caveat with Respect to Interviews

Names of all individuals interviewed during this inspection have been omitted in this report. The full identity of these individuals are on file at Region II. Individuals are referred to with an alpha-numeric symbol within the report and appendices. This particular format is being utilized to provide a limited degree of protection to all individuals involved inasmuch as the information has not been completely substantiated and inspection efforts are ongoing by both the licensee and NRC.

7. Concerns Expressed by Welders

- a. Individual B (Welder B), a person who requested his identity be protected, was interviewed welder B and he advised in substance that he worked on the second shift welding crew, and in late 1981, he was instructed by his foreman that the job he was working on had to be completed and that he had to keep welding. He was working on two or two and a half inch schedule 180 heavy wall stainless steel sockets in the Unit 1 pipe chase and when he complained to the foreman that the work was out of procedure in that interpass temperature was being violated, the foreman told him to keep welding or "hit the road." Individual B provided a description as to the general area he was working at the time and said he believe the sockets were installed in the general area where he was working. He estimated he completed 12 sockets welds which were overheated and that they were probably part of the NI system. He related one other incident which occurred in early 1983 in which he walked into the fabrication shop and observed some three quarter inch stainless steel sockets which had been burned black. He also advised that he had received indirect threats from this foreman.

A detailed results of interview with Individual B is Appendix A to this report.

- b. Individual B-1, a person who requested his identity be protected, was interviewed and advised in substance that the foreman of the second shift welding crew pushed the crew for quantity. In early 1982, the foreman had instructed another welder to weld without proper paperwork which was subsequently discovered and written up by QC. The lead man on the crew and another welder would be assigned work by the foreman when the work needed to be completed quickly. In December 1982 or January 1983, he walked into a welding booth and observed the welder working in the booth heating stainless steel sockets which were glowing

red. This was clearly a violation of interpass temperature requirements and when he asked the welder why he was heating the sockets, the welder replied that the foreman was pushing him to get the job done. On another occasion he helped a new lead man for the crew clean and polish socket welds which had been burned black. Another individual, in early 1983, pointed out a valve to him and he noted the valve had several arc strikes removed. This welder told him that the foreman removed the arc strikes without any paperwork.

A detailed results of interviews with Individual B-1 is Appendix B to this report.

- c. Individual B-2, a person who requested his identity be protected, was interviewed and advised in substance that he felt pressure from the foreman to do whatever was needed to get the job done. The foreman, on one occasion, directed him to weld on one inch stainless steel socket welds without providing any documentation. This documentation was provided several days later. He has been replaced on work by other welders from the crew who probably welded out of procedure to get the job done quickly. The foreman has impressed upon him that he should do whatever number of welds he is given to finish. On one occasion the foreman removed an arc strike from a valve and told him that he should remove arc strikes if they were not too bad.

A detailed results of interview with Individual B-2 is Appendix C to this report.

- d. Individual B-3, a person who requested his identity be protected, was interviewed and advised in substance it was his opinion that the foreman of the second shift welding crew was under a lot of pressure from the General Foreman to get the job done. Overheating of socket welds was a common problem and that he welded stainless steel socket welds without bothering to check the temperature. He usually did difficult welds which often required the use of mirrors. He would often weld one side of the socket completed, then the other. He welded approximately 60-70 small sockets in this manner. He felt the foreman did not want to know how he was doing his work, only that it was being done. The lead man would act as a lookout when he was violating procedure. He has also removed numerous superficial arc strikes without proper paperwork.

A detailed results of interview with Individual B-3 is Appendix G to this report.

- e. The foreman and lead man, Individuals A and E respectively, were interviewed and advised in substance that they never instructed any welder to weld out of procedure and they were not aware of any welding procedure violations. The lead man denied acting as a look out for any welder. The foreman denied improperly removing any arc strikes.

A detailed results of interview with Individual A is Appendix H to this report. A detailed results of interview with Individual E is Appendix I to this report.

- f. Individual C was interviewed and advised in substance that he has never been directed by the foreman of the second shift welding crew to do any work that violated procedure, nor was he aware of any welder who violated procedure. He was not aware of the lead man ever acting as a look out for QC inspectors.

A detailed results of interview with Individual C is Appendix D to this report.

- g. Individual H, a former QC inspector, was interviewed and advised in substance that he often worked the second shift and inspected work done by the second shift welding crew. He never observed any interpass temperature violations adding that it would be impossible to detect once the weld was buffed and polished. He was not aware the lead man acted as a look out for QC inspectors.

A detailed results of interview with Individual H is Appendix E to this report.

- h. Individual F was interviewed and advised in substance that the foreman of the second shift welding crew directed him to weld out of procedure on one occasion. The foreman told him to start welding on a heavy wall socket after he finished a pass 10 minutes prior. He said the weld was still too hot to run another pass. In 1983 he observed another welder who burned a socket which indicated interpass temperature was violated.

A detailed results of interview with Individual H is Appendix F to this report.

- i. Individual J was interviewed and advised in substance that he worked on the second shift welding crew for six months in 1982. He often felt pushed by the foreman who always wanted him to hurry up and get quantity. He has seen burned stainless steel sockets on at least two occasions in Unit 1 pipe chase.

A detailed results of interview with Individual J is Appendix J to this report.

8. Fabrication of Socket Welds

Welder B was interviewed in response to the "foreman override" issue which surfaced during the Catawba Licensing Hearings. During this interview welder B indicated that he had welded a number of 2" or 2½" heavy wall stainless steel socket welds without attempting to maintain interpass

temperature, thus causing the socket and weld metal to turn black. The welder stated that the black discoloration was removed prior to QC inspection. Welder B stated that the overheated sockets were in a pipe line in the Unit 1 pipe chase. Following the information provided by welder B, this inspector attempted to locate the overheated welds but was unsuccessful partly because of insufficient information, obstacles in the area of interest, and the fact that some lines were covered with insulation. Other welders in welder B's crew who were interviewed and questioned on this matter, stated that disregard of the interpass temperature was a common practice among many welders in the crew including themselves. The overheating condition was described as severe black discoloration to cherry red glow radiated by the socket fitting and pipe near the weld. The size of the sockets fabricated in this manner ranged from 3/4 inches up to 2½ inches in diameter while the thickness included both lightwall and heavywall stainless steel material. These sockets were allegedly located in the RBS, and pipe chase of Unit-1 and, the auxiliary building. Although class and system could not be specifically identified, based on the information received, it is believed that ASME code classified piping is involved including some non-code class G socket welds. In addition, certain welders indicated that in some instances, unauthorized welding practice(s) were used in order to fabricate some small diameter sockets which were located in difficult to reach areas. Allegedly one of the unauthorized practices was to weld one-half of the socket all the way out and then go back and weld the other half. Another practice which was sanctioned by the foreman was to permit the welding of sockets without having the appropriate QC/QA documents on hand.

Fabrication of socket welds allegedly without proper records on hand, without regard for interpass temperature, and without regard for authorized weld bead deposit sequence procedures is being identified as an unresolved item until these allegations can be investigated further to determine their reliability and significance to the safety of the plant. Unresolved Item 413/84-31-01, 414/84-17-01, Fabrication of Socket Welds.

9. Unauthorized Removal of Arc Strikes

During the interview, welder "B" provided the names of other welders who he alleged were pressured into violating weld procedure requirements for the purpose of expediting the fabrication of socket welds. Details of the pressure tactics used by supervision are described in the appendices to the report.

One of the welders interviewed stated that he was assigned to make the socket welds on either side of valve INI-398 on iso INI-235 Rev. 11. The piping is Class B, 3/4" diameter schedule 160 stainless steel material. The welder stated that when he looked at the valve, he noticed that there were several arc strikes on the valve casing. The welder stated that he called the foreman over to show him the arc strikes. Allegedly, upon observing the arc strikes the foreman asked for and obtained from the welder a file which he used to remove the arc strikes - see appendices for more details.

In response to this allegation, the inspector, with the aid of the licensee's representative, located the valve and observed/confirmed that a small repair had been performed as evidenced by metal removal through some mechanical means from the valve casing. A subsequent record review, which included the weld process control sheet Form M-4A and the valve data package, showed no documentation to indicate that any kind of repair work, via metal removal and/or NDE had been performed on the outside surface of this valve casing.

In a similar interview, another welder stated that he had removed numerous arc strikes without the appropriate paperwork. In this instance, the welder stated that these arc strikes were minor and superficial. The welder stated that he never repaired any major arc strikes without proper paperwork.

Removal of arc strikes allegedly without regard for approval procedural requirements is being identified as an unresolved item until the allegation can be further investigated to determine its reliability and significance in terms of plant safety. Unresolved Item 413/84-31-02, 414/84-17-02, "Unauthorized Removal of Arc Strikes."

APPENDIX A

RESULTS OF INTERVIEW

Duke Power Company

Docket Nos. 50-413, 50-414

Catawba Nuclear Plant

Report Nos. 50-413/84-31

50-414/84-17

RESULTS OF INTERVIEW WITH "INDIVIDUAL B" ON JANUARY 11, JANUARY 20, AND
FEBRUARY 29, 1984 AS PREPARED BY BRUNO URYC, JR.

On January 11, January 20, and February 29, 1984, INDIVIDUAL B, a person who requested that his identity be protected, was interviewed by Bruno Uryc, Jr., Investigative Coordinator, with the assistance of N. Economos, Inspector, USNRC Region II.

INDIVIDUAL B stated that he is a certified welder and that he has worked primarily on Unit 1 including all the major systems involved in that unit. He stated that he has worked on the second shift welding crew. INDIVIDUAL B was questioned with regard to the possibility of excessive force being applied to align or fit up pipe and he stated that he has never observed excessive force being applied to pipe with slings, jacks, or come-alongs. He was asked if he was aware of any situation where work was done without the knowledge of Quality Control (QC) Inspectors and he stated that there may have been some surface

blemishes which were repaired without appropriate inspection, but he could provide no specific examples. He was asked if he was aware of any instances where there was excessive grinding on pipe to the point that minimum wall thickness was violated or where pipe was used in an out-of-round condition. He stated that when he was working on the Containment Spray System in Unit 1 with schedule 20 stainless steel pipe that this pipe would often go out-of-round when heat was applied during excessive repairs. He advised that he was aware of situations where welds were repaired up to six times and that the weld finally had to be cut out entirely and replaced with a new section of pipe before it could pass inspection. He stated that this happened on several occasions he was aware of on the vertical pipe which had minimum wall clearance. He stated that he was not aware of any welds that did not pass inspection on this system.

INDIVIDUAL B also stated that he has built up the minimal wall thickness at the end of pipes up to a thickness of one sixteenth of an inch in an area of up to one and a half inch on either side of the weld. He advised that this was an authorized procedure.

INDIVIDUAL B stated that he has made welds which were subsequently radiographed (x-rayed) and also repaired his welds which were subsequently found to be defective as a result of x-ray examination. He said that he has probably made less than 30 x-ray welds and that in his opinion there was no problem with the accuracy of the x-ray overlays. He stated that quite often when a repair was made and x-rayed, another defect would be indicated. He said that on occasion

after the second repair and subsequent x-ray, another defect would be indicated and it would have to be repaired. He said that he was told this occurred because of the change in camera angle. He said that he was not aware of any x-ray indicated defects which were not properly repaired.

INDIVIDUAL B was questioned concerning any instances where he was instructed to perform work by his foreman which was in violation of procedure. He stated that in late 1981, he was welding in the Unit 1 pipe chase working on two or two and a half inch schedule 180 heavy wall stainless steel sockets which he believed were either Class B or C welds. He said that he had set up a small fabrication work area and that he was welding sockets with the use of a jack stand on the fabrication table. He said that his foreman told him the job absolutely had to be completed and that he had to keep on welding. He said that the foreman had the crew lead man stand guard to watch out for QC inspectors who might come in the area while he was working. He said he was welding very fast and that he had to wrap his hands to protect them from the heat. He said he did not maintain interpass temperatures as required when welding stainless steel and when he complained to the foreman that the work was out of procedure the foreman told him to keep welding or "hit the road."

INDIVIDUAL B was asked about an earlier statement he made to the effect that he and other welders were working in this area together and that they all were told to work very fast by the foreman. INDIVIDUAL B said that he did not mean to give the impression that he and several welders were working shoulder to shoulder. He

stated he was in fact working alone in his small fabrication area. He said that he did hear of similar incidents from other welders on the crew. He said that to get to where his work area was setup you would have to go down the ladder into the Unit 1 pipe chase and turn to the left at the bottom of the ladder. He said you then walked along the pipe chase until you came to a large section of concrete which sloped across the pipe chase and at this point you would have to crawl under the concrete for approximately 20 feet until you came to an open area in the pipe chase. He said his small fabrication table was setup in this area and to the best of his knowledge the sockets he overheated were being installed in this general area. He said he worked in this area for several days and he estimated he made approximately 12 socket welds which were overheated. He said he could not be positive but these sockets may have been part of the NI or NC system, probably the NI system. He said he welded so hot that the stainless steel was turning black, a sign that welding temperatures exceeded the specifications for stainless steel. He said he did check one weld with a 350 degree temperature stick which blistered as soon as he touched the weld. He stated that when he slowed down and tried to do the welding correctly, the foreman would come over and tell him to work faster. He said there was one occasion when the lead man came over and warned him that a QC inspector was in the area.

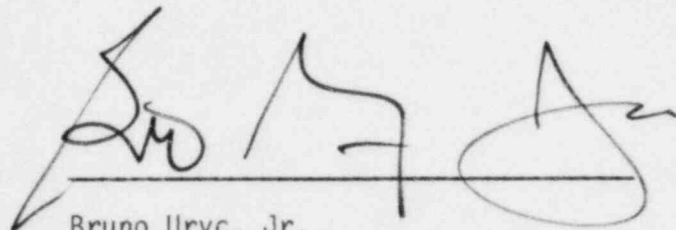
INDIVIDUAL B related another incident involving the same foreman which occurred some time in early 1983. He said he was asked by the foreman to go to the weld fabrication shop to help with some stainless steel socket welds which were being fabricated there. He said when he walked into the shop he immediately noticed

some three quarter inch stainless steel pipe had been burned black. He said when he asked, in a general way to no one in particular, who burned up the pipe, the foreman came over and took him out of the shop and took him over to the Auxiliary Building where he was given some work to do. He said that to the best of his recollection, a welder identified as INDIVIDUAL C was working on the pipe in the fabrication shop.

INDIVIDUAL B stated that while he was still working for the foreman he had a conversation with the foreman who said "that if any son of a bitch messed with my job, I'd cut his throat." He said he also recalled the foreman casually mentioning that there was "a hitman in Westminster (SC) who would kill someone for \$100." Individual B said he took these remarks by the foreman as a threat especially in light that the foreman had told him that he was a convicted felon who served time in prison. INDIVIDUAL B said that the foreman said these thinly veiled threats in early 1983 after he (INDIVIDUAL B) confronted the foreman over what he felt was harassment. INDIVIDUAL B said that the threats by the foreman were the primary reason he never reported any incidents of procedure violation to anyone. He was asked why he never reported the violations to the NRC and he responded that although no "big emphasis" was put on about contacting the NRC by his management, he felt that if he went to the NRC he would still lose his job. He added that as a result of this recent interviews with NRC he realizes he should have come forward sooner as opposed to waiting until someone questioned him regarding the matter.

INDIVIDUAL B stated that for the most part, the welders are doing a good job and the majority of foremen are very conscientious. He said he feels that the plant is relatively safe and that other than two instances described above, he could not relate any significant concerns.

END OF RESULTS OF INTERVIEW WITH INDIVIDUAL B ON JANUARY 11, JANUARY 20, AND FEBRUARY 29, 1984.



Bruno Uryc, Jr.

APPENDIX B

RESULTS OF INTERVIEW

Duke Power Company

Docket Nos. 50-413, 50-414

Catawba Nuclear Plant

Report Nos. 50-413/84-31

50-414/84-17

RESULTS OF INTERVIEW WITH "INDIVIDUAL B-1" ON FEBRUARY 17 AND 28, 1984 AS
PREPARED BY BRUNO URYC, JR.

On February 17 and 28, 1984, INDIVIDUAL B-1, a person who requested that his identity be protected, was interviewed by Bruno Uryc, Jr., USNRC Region II Investigative Coordinator, with the assistance of N. Economos, Inspector, USNRC Region II.

INDIVIDUAL B-1 stated that he has been employed as a welder at the Catawba Nuclear Plant for approximately four years. During this period of time he has welded in Unit 1 and Unit 2 on various systems, both safety related and non-safety related. He stated that he has worked for various foremen including INDIVIDUAL A, who is the foreman of the welding crew on the second shift. He said that after he was assigned to this foreman's crew he began to hear from other members of the crew that there were some improprieties taking place on the

crew which involved primarily the overheating of stainless steel welds. He also said that he soon felt there were also some problems on the crew involving crew morale and that some of the crew were disgruntled because they felt they had no one they could go to with their problems. He said generally the crew felt they were being pushed for quantity and that a lot of work was expected of them by both the foreman and the General Foreman. INDIVIDUAL B-1 said that in his opinion a lot of pressure was being put on the foreman by the General Foreman and this pressure, in turn, was being put on the crew. He cited, as an example, a period when the position of General Foreman was held by INDIVIDUAL D. He said during this period of time, approximately six months during early 1982, there was no pressure for quantity and everything went very well with the entire crew in general. He said that the foreman seemed more relaxed under INDIVIDUAL D and there never was any pressure to get large quantities of work completed. He said that during this period when INDIVIDUAL D was General Foreman he was not aware of anyone doing any work out of procedure. After INDIVIDUAL D left and the previous General Foreman returned, the problems again started to occur. He said that he has no information which would implicate the General Foreman as causing or directing that procedures be violated. He stated it was his personal opinion that the General Foreman was putting pressure on the foreman.

He cited one incident in early 1982, prior to INDIVIDUAL D being assigned as General Foreman, when the foreman instructed a welder to weld a two inch socket without the proper paperwork. He said he was personally aware of this incident because he had to help the welder set up for the job which was left over from the

day shift. He said the welder completed the work and the foreman said he would get the paperwork straightened out with the day shift and have the weld signed off. As it turned out, the day shift did not complete the weld because it was being held for an Authorized Nuclear Inspector (ANI) hold point inspection. INDIVIDUAL B-1 said that as a result the weld was written up in a Nonconformance Inspection (NCI) report and the welder was cited for missing a hold point. He said the welder took blame for the weld and the foreman never admitted he instructed the welder to do the weld without paperwork.

He said that INDIVIDUAL E, the lead man on the crew, and INDIVIDUAL D seemed to get all of the priority work on the crew, and it was common knowledge on the crew that they generally would be assigned work by the foreman when the work needed to be completed as soon as possible. INDIVIDUAL B-1 said that in late 1982, a welder (INDIVIDUAL F) was assigned to the second shift welding crew. He said this welder quickly became a priority welder for the foreman. He said he was aware of an incident where another welder was working on some stainless sockets. He said the foreman sent INDIVIDUAL F down to take over from the other welder and that he was able to get the welding done in a shorter period of time than it would have normally taken if the work had been done properly. He said he felt that INDIVIDUAL F had to violate procedure to get the work done as quickly as he did. INDIVIDUAL B-1 said that to the best of his knowledge these welds were inspected and accepted. He said that INDIVIDUAL F liked to brag that he could get work done quickly and that was why he was given priority work by the foreman. He said that INDIVIDUAL F implied that he knew what the foreman wanted and expected and that he did not mind doing what was needed.

INDIVIDUAL B-1 related another incident where he went to assist INDIVIDUAL F in a fabrication booth in the Diesel Generator Room. He said INDIVIDUAL F was welding on two inch sockets and he did a good deal of welding in a short period of time. He said that INDIVIDUAL F had to exceed interpass temperatures to get the welding completed in a short period of time. He said the work was inspected and signed off for fit up at the beginning of the job but was not turned in for inspection until the following day. He said that had the work been turned in for inspection when it was completed, the inspector would have known the job could not have been completed in such a short period of time.

INDIVIDUAL B-1 stated that sometime during December 1982 or January 1983, he walked into a fabrication booth and observed INDIVIDUAL C welding one inch stainless steel sockets. He said that when INDIVIDUAL C pulled his TIG stinger off the weld he saw that the entire weld area was glowing cherry red. He said that that was clearly a violation of interpass temperatures and when he asked INDIVIDUAL C why he was heating the sockets so hot, he told him that the foreman was pushing him to get the welds done. INDIVIDUAL B-1 said that he believed the section of pipe that INDIVIDUAL C was working on was being installed in the pipe chase, but he did not know the exact location or the system.

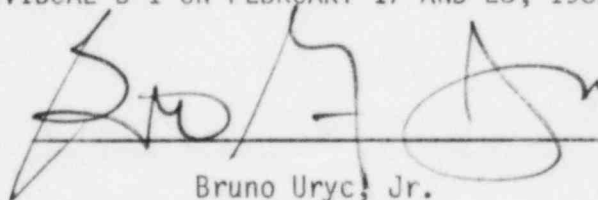
INDIVIDUAL B-1 stated that when INDIVIDUAL E left the crew, a new lead man, INDIVIDUAL G, came on the crew. He said that on one occasion he and another welder were working on some Class B one inch stainless steel sockets in the exterior doghouse. They had been told by some pipe fitters that the welds had to

be completed by the end of the shift. He said that around 7:30 p.m., the foreman came and told them that he was going to replace them with some welders "who could get the job done." A few minutes later INDIVIDUAL G and another welder came down and took over the work. INDIVIDUAL B-1 said that there was no way the job could have been finished that night. He said that later in the evening the foreman sent him back to help INDIVIDUAL G clean the welds. He said when he got to the job he observed that the welds had been overheated because of the black residue on the weld area and the general appearance of the welds. He said he observed the other welder trying to clean the welds with an air grinder and wire brush wheel. He said he helped INDIVIDUAL G clean several welds which had black residue on them. He stated that black residue on a stainless weld indicated the weld had been overheated. He also added that when the black residue was removed and the weld area polished it was impossible to determine that the weld was overheated with a visual inspection.

INDIVIDUAL B-1 stated that sometime in early 1983 he was called to a work area by another welder. This welder pointed out a valve to him and said that the foreman had removed several arc strikes from the valve and that the foreman did not have any paperwork authorizing the removal of the arc strikes. INDIVIDUAL B-1 stated that he observed a welding stencil on a weld adjacent to the valve and that the valve was located between the steam generators on the right side of Unit 2, about 30 to 40 feet from the air lock at elevation 570 at about eye level.

INDIVIDUAL B-1 said that he felt the foreman was putting a lot of pressure on the crew to get the job done and that the foreman expected the crew to get work completed even if it meant violating procedure. He said the foreman never directly told him to violate procedure, but that the foreman would talk around this and infer that short cuts should be taken. He said the foreman would often say "you know what it takes to get the job done," or "this job has to be done tonight." INDIVIDUAL B-1 said the message was always clear. He added that he felt that the General Foreman was aware of what was going on and condoned it, but he could not provide any specific information to substantiate this. He said he never reported these problems for fear of losing his job. He also added that he has never had any problems with any other foreman, nor is he aware of any problems other than those he described involving this particular foreman's crew.

END OF RESULTS OF INTERVIEW WITH INDIVIDUAL B-1 ON FEBRUARY 17 AND 28, 1984.



Bruno Uryc, Jr.

APPENDIX C

RESULTS OF INTERVIEW

Duke Power Company

Docket Nos. 50-413, 50-414

Catawba Nuclear Plant

Report Nos. 50-413/84-31

50-414/84-17

RESULTS OF INTERVIEW WITH "INDIVIDUAL B-2" ON FEBRUARY 17 AND MARCH 1, 1984 AS PREPARED BY BRUNO URYC, Jr.

ON February 17 and March 1, 1984, INDIVIDUAL B-2, a person who requested that his identity be protected, was interviewed by Bruno Uryc, Jr., USNRC Region II Investigative Coordinator, with the assistance of N. Economos, Inspector, USNRC Region II.

INDIVIDUAL B-2 stated that he has been employed as a welder at the Catawba Nuclear Plant for approximately five years and during this time he has worked on both Unit 1 and Unit 2 on various systems, both safety related and non-safety related. He stated that he has worked for several foremen to include the foreman of the welding crew on the second shift. He said that when he was first assigned to the second shift on this foreman's crew he was not aware of any problems although several members of the crew warned him that the foreman would be asking

him to do things that were not within accepted procedure. He said that eventually the foreman did begin to put pressure on him to the where he felt he was being told, in an indirect manner, to do whatever was needed to get the job done. He said he felt this also included violating procedures. He said the foreman never directly told him to do work that violated procedure, but that the foreman had a way of saying things one way and meaning something else. He said that he felt that the General Foreman was part of the problem with regards to pressure to get the job done. He advised that he based this on a period of time when INDIVIDUAL D was the General Foreman for six months and the foreman seemed to be a completely different person than when the previous General Foreman was in charge. He said that under INDIVIDUAL D there was never any pressure and all the work was being done very well. He said he could not provide any information which would substantiate any involvement by the General Foreman.

INDIVIDUAL B-2 related an incident where the foreman told him to start welding on some one inch Class G stainless steel sockets in the Auxiliary Building. He said he recalled that the sockets were in a small room that had a lot of stainless steel lines coming into stainless steel cabinets in the room. He said he foreman told him to start the work and when he asked the foreman for the paperwork, the foreman said he would get the paper for him later. He said the did eventually get the paperwork from the foreman several days later. He said he worked in this area for several weeks welding stainless steel sockets. He recalled that one evening he was pulled off the job by the foreman and sent to another location to work. He said he was replaced by another welder (INDIVIDUAL F) and at the end of

the shift he heard this welder talking about being put on the job and kidding him about having to finish up his work. He said INDIVIDUAL F told him he was taken off the job because he could not get the job done and he (INDIVIDUAL F) finished the work. INDIVIDUAL B-2 said he felt that INDIVIDUAL F probably welded out of procedure to finish the work. He said that INDIVIDUAL F often joked about being able to get the job done and mentioned that he had welded 10 stainless steel sockets in one night.

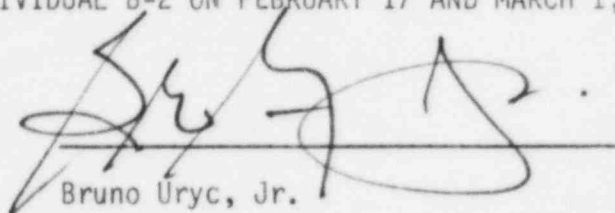
INDIVIDUAL B-2 said that although he had heard that INDIVIDUAL E would act as a lookout for QC inspectors, he has never seen this on a first hand basis. He said he has seen INDIVIDUAL E "hanging around" the door to the Reactor Building and he could have been watching out for QC inspectors. INDIVIDUAL B-2 said he recalled two specific instances when the foreman took him outside the Auxiliary Building to talk to him. He said on the first occasion, the foreman asked him why he was only able to weld two stainless steel sockets that evening. He said the foreman told him that he was not telling him to do anything wrong, but that when there was work to do that it should be done. He said he had been recently certified on the TIG process and that a more experienced welder possibly would have been able to do more welds. He said he was going as fast as he could and still stay within procedure and that these two welds were field welds which were difficult to weld. He said that the foreman impressed upon him that whatever number of welds he had to do that night that he should be able to get them done. INDIVIDUAL B-2 said that at the time if he had welded all the welds he had been assigned he would have had to violate procedure and that the foreman knew this.

On the second occasion, he said the foreman again talked to him because the foreman told him he felt he was having problems doing the job. He said he never quite understood what the foreman was trying to tell him at the time. He said that he thinks now that the foreman was trying to tell him that he needed to do more work and that he should do anything required to get the job done to include violate procedure.

INDIVIDUAL B-2 said that on one occasion he was assigned to complete some welds left over from the first shift. He said there were two welds, one on each side of a valve. He said that as he prepared his work he examined the valve and saw several arc strikes on the valve. He said he went and got the foreman to look at the valve so that the foreman would know the arc strikes were on the valve before he started welding. He said the foreman looked at the arc strikes and asked him if he had a metal file. He said he handed his file to the foreman who filed the arc strikes off the valve. He stated the foreman told him to file off arc strikes if they were not too bad because it would "save the company a bunch of time and money, and a bunch of paperwork." He said that he mentioned this incident to several people so that if anyone noticed the arc strikes had been removed without paperwork, he would not be accused of doing it. He identified this valve as being in Unit 1 Reactor Building at 351° elevation 365, valve number 1 NI398.

He said he did not report these incidents because he was afraid of losing his job. He said he has not had any similar problems with any other foreman and that he is not aware of any problems other than those involving this particular foreman.

END OF RESULTS OF INTERVIEW WITH INDIVIDUAL B-2 ON FEBRUARY 17 AND MARCH 1, 1984.

A handwritten signature in black ink, appearing to read "Bruno Uryc, Jr.", written over a horizontal line. The signature is stylized and cursive.

Bruno Uryc, Jr.

APPENDIX D

RESULTS OF INTERVIEW

Duke Power Company

Docket Nos. 50-413, 50-414

Catawba Nuclear Plant

Report Nos. 50-413/84-31

50-414/84-17

RESULTS OF INTERVIEW WITH "INDIVIDUAL C" ON FEBRUARY 29, 1984 AS PREPARED BY
BRUNO URYC, JR.

On February 29, 1984, INDIVIDUAL C was interviewed of the Catawba Nuclear Plant construction site, Rockhill, South Carolina, in the U. S. Nuclear Regulatory Commission (USNRC) Region II Resident Inspector's Office. This interview was conducted by Bruno Uryc, Jr., USNRC Region II Investigative Coordinator, with the assistance of Kim VanDoorn, Senior Resident Inspector, USNRC Region II.

INDIVIDUAL C advised he has been employed with Duke Power company for six and a half years and that he has been working at the Catawba Nuclear Plant for three years. He said he was initially hired at Catawba as a welder and in April 1983 he became a mechanical maintenance assistant in nuclear production. INDIVIDUAL C

stated he worked on the second shift welding crew for approximately two and a half years and that during that time he has never experienced any problems on the crew. He said that the foreman never pressured him to violate any welding procedures and that he has never performed any welding that violated procedure. He said he worked primarily in the Unit 1 pipe chase, but he could not recall any specific systems he worked on. He recalled working on the Unit 1 ice condenser tying in the chiller packages and that he also did some socket welds around the pressurizer in Unit 1. He advised that he did some "box work" in Unit 2 and that he did not do any class welding in that unit.

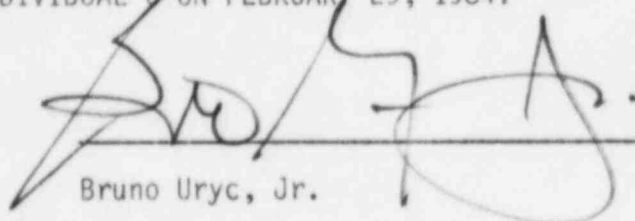
When asked if he had any information to indicate that the lead man had acted as a lookout for welders on the crew who were working out of procedure, INDIVIDUAL C stated that the lead man was a good lead man and he never had any problems with him. He stated that he was not aware of the lead man ever acting as a lookout for QC inspectors and he has never heard of that being done. He stated that the QC inspectors were very good and if they ever had any indication that anyone was acting as a lookout, they probably would have made every attempt to circumvent the lead man (as a lookout) and catch the welder who was supposedly welding out of procedure. INDIVIDUAL C said that the foreman was a very good foreman and, in fact, he felt that the foreman had made a considerable effort to teach him good welding practices.

INDIVIDUAL C denied ever welding on sockets with excessive heat to the point where they glowed red or exceeded interpass temperature. He said he has never observed anyone welding out of procedure and if he did he would have certainly

reported it to the proper individuals. He stated that some of the welders of the crew would use the interpass temperature requirements to "lay down on the job," that is, they would use it as an excuse to do as little work as possible. He said that the foreman did work his crew hard and that the foreman had a habit of always trying to check on his welders to ensure they were working and that their work was being done properly. He said that many welders misinterpreted the foreman's drive as being intimidation and harassment. He stated that in his opinion the foreman was a very conscientious man who wanted to get the job done.

INDIVIDUAL C concluded by stating that the plant is safe and that "it is the best plant that money can buy." He reiterated that he was not aware of any problems that would affect the safety of the plant.

END OF RESULTS OF INTERVIEW WITH INDIVIDUAL C ON FEBRUARY 29, 1984.



Bruno Uryc, Jr.

APPENDIX E

RESULTS OF INTERVIEW

Duke Power Company

Docket Nos. 50-413, 50-414

Catawba Nuclear Plant

Report Nos. 50-413/84-31

50-414/84-17

RESULTS OF INTERVIEW WITH "INDIVIDUAL H" ON FEBRUARY 29, 1984, AS PREPARED BY BRUNO URYC, JR.

On February 29, 1984, INDIVIDUAL H was interviewed in Rockhill, South Carolina by Bruno Uryc, Jr., USNRC Region II Investigative Coordinator, and N. Economos, Inspector, USNRC Region II.

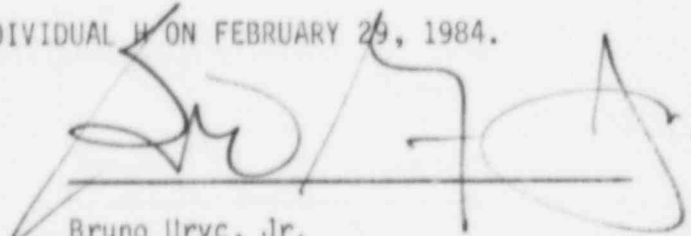
INDIVIDUAL H stated that he was formerly employed with the Duke Power Company at the Catawba Nuclear Plant construction site from September 1981 to August 1983. He said he initially hired on as a welder and after approximately one year he transferred to welding inspections. He said he was a QC welding inspector for approximately four years. He related that he worked on the second shift when the regular inspector was out and did a significant amount of inspections for the second shift welding crew. He said that during the time he was an inspector there was only one inspector on the second shift, and occasionally there would be two.

He stated that the second shift welding crew was the only welding crew working the second shift and that this crew was always scattered all over the site. He said that while he was on the second shift he never saw any violations of interpass temperature requirements. He added that he would have had to catch a welder in the process of overheating stainless steel socket welds and actually see a burnt condition. He said that if stainless steel was burned there was no way for him to determine if interpass temperatures were exceeded because all stainless steel welds were buffed and cleaned prior to final visual inspection. He stated that after the welds were buffed and cleaned there was no way a visual inspection would reveal overheating.

INDIVIDUAL H stated that while he was working he was always inspecting. He said that as he went from one inspection to another he would always be looking around the plant and observing workers. He said he was not aware of the lead man on the welding crew acting as a lookout and he had no indication any welders were welding out of procedure. He said had he known this he would have made every effort to detect it and document the problem.

INDIVIDUAL H said that based on his personal knowledge, the plant is being built in a safe manner and the quality of work is very good. He added that he feels that Duke Power Company has gone "overboard on safety" and he has no fear of living near the plant.

END OF RESULTS OF INTERVIEW WITH INDIVIDUAL H ON FEBRUARY 29, 1984.



Bruno Uryc, Jr.

APPENDIX F

RESULTS OF INTERVIEW

Duke Power Company

Docket Nos. 50-413, 50-414

Catawba Nuclear Plant

Report Nos. 50-413/84-31

50-414/84-17

RESULTS OF INTERVIEW WITH "INDIVIDUAL F" ON MARCH 3, 1984 AS PREPARED BY
BRUNO URYC, JR.

On March 3, 1984, INDIVIDUAL F was interviewed at the Catawba Nuclear Plant construction site, Rockhill, South Carolina, in the U. S. Nuclear Regulatory Commission (USNRC) Region II Resident Inspector's Office. This interview was conducted by Bruno Uryc, Jr., Investigative Coordinator, with the assistance of Kim Vandoorn, Senior Resident Inspector USNRC Region II.

INDIVIDUAL F stated that he has been employed with Duke Power Company at the Catawba Nuclear Plant construction site since July 1978. He stated that he is a certified welder and that he is certified to weld TIG and stick on both carbon steel and stainless steel. He said that he has been working on the second shift for approximately two years and during that period of time he has been assigned

to the welding crew of which INDIVIDUAL A is the foreman. He stated that he has welded in the Unit 2 Auxiliary Building and Reactor, and that he has welded on almost all systems in these areas to include the NV and RF system.

In response to a question concerning any problems he may have had with any foremen since working at the site, INDIVIDUAL F stated that he could only recall one instance involving a foreman identified as INDIVIDUAL I. He said that on this occasion he was "loaned out" to INDIVIDUAL I to do some welding for that crew. He said this incident occurred in the latter part of 1981 and that he was working on the NV system in the penetration room at elevation 577 behind the heat exchangers. INDIVIDUAL F said that he was welding on a six inch stainless schedule 40 pipe and that while welding he noticed that the gap of the weld started to close and draw in. He said that he stopped welding and went to INDIVIDUAL I to talk about the problem and asked him what he should do. He said that INDIVIDUAL I told him that he should do the best he could on the weld and then INDIVIDUAL I asked him what "class" the weld was that he was working on. He said he told INDIVIDUAL I that it was a Class "C" weld and INDIVIDUAL I told him to do the best he could. He said that he got the feeling that INDIVIDUAL I was indirectly saying that he should just weld over the collapsed gap because he could not get a definite answer from INDIVIDUAL I about the problem. INDIVIDUAL F said that he went back to the weld and repaired the gap as required by procedure and completed the weld. He said that the weld was inspected and accepted and he feels that the weld was good. He said that although INDIVIDUAL I did not tell him directly to violate procedure, he felt that INDIVIDUAL I's

obvious disinterest in the matter was in fact a way of letting him know that he should weld over the collapsed gap. He stated that this was the impression he had of the incident based primarily on the fact that INDIVIDUAL I asked him what class weld he was working at the time.

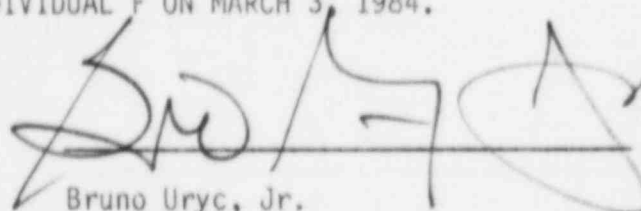
In response to a question concerning any similar incidents involving the foreman of the second shift welding crew INDIVIDUAL F stated that the foreman has only told him to weld out of procedure on one occasion. He stated that this particular incident involved a stainless steel socket weld. He said that he had just completed a pass on the weld and the procedure called for the weld to cool before beginning the next pass. He stated that after completing the pass he lit up a cigarette and was standing near the weld when the foreman came by and held his hand up to the weld as if he was feeling if the weld was still hot. He said the foreman then turned and told him to get started welding on the socket again. INDIVIDUAL F stated that it could not have been more than 10 minutes from the time he completed the pass until the foreman came up to see if it was still hot. He said that when the foreman told him to start he went over and began welding again. INDIVIDUAL F that in his opinion the weld was still too hot to begin another pass. He stated that to the best of his recollection he was working on a two inch stainless steel socket in the Unit 1 Reactor Building hatch just inside the airlock near a ladder that goes to the bottom floor. He said that the weld was just to the right of the ladder and that it was a class "C" 90 degree bend.

INDIVIDUAL F advised that last year, 1983, sometime around Thanksgiving, he saw a welder welding on a one inch stainless steel socket in the basement of the Turbine Building on the number 1 side. He said that to the best of his recollection this welder was working a class "G" line which only required a visual inspection. He said that when he looked at the socket weld he saw a black tint on the cap of the weld which indicated to him that it may have been overheated. He stated that the welder cleaned the weld and it was subsequently inspected and passed.

When questioned as to any other problems he may have been aware of, INDIVIDUAL F stated that the only problem he had involved violation of interpass temperature on stainless steel. He said that the weld which was checked by the foreman was definitely over 350 degrees because he had just finished welding a pass when the foreman came up to check it. He said that he was about half finished with the weld and that it was a heavy wall stainless steel socket. He stated that stainless steel cools very slowly, especially if it is heavy wall.

INDIVIDUAL F stated that he was never aware of the lead man acting as a lookout for welders. He said that he has never been sent by the foreman to relieve any welder who was working on a weld. He also stated that other than the incidents described above, he has never violated any welding procedure, nor is he aware of any welder on the second shift welding crew who did.

END OF RESULTS OF INTERVIEW WITH INDIVIDUAL F ON MARCH 3, 1984.



Bruno Uryc, Jr.

APPENDIX G

RESULTS OF INTERVIEW

Duke Power Company

Docket Nos. 50-413, 50-414

Catawba Nuclear Plant

Report Nos. 50-413/84-31

50-414/84-17

RESULTS OF INTERVIEW WITH "INDIVIDUAL B-3" ON MARCH 8, 1984 AS PREPARED BY
BRUNO URYC, JR.

On March 8, 1984, INDIVIDUAL B-3, a person who requested that his identity be protected, was interviewed by Bruno Uryc, Jr., Investigative Coordinator, with the assistance of N. Economos, Inspector, USNRC Region II.

INDIVIDUAL B-3 stated that he has been employed as a welder at the Catawba Nuclear Plant for approximately three years and that he has worked on the major systems in both Units 1 and 2. He said that he has been assigned to the second shift welding crew and that he was not aware of the foreman ever doing anything intentionally wrong. He stated that, in his opinion, the foreman did not fully understand procedures, and as a result, his instructions to his crew would often be wrong in that he would tell them to do things without knowing the proper procedural requirements. He said that he felt that the General Foreman put a lot

of unnecessary pressure on the foreman and that the foreman and General Foreman did not get along well. He said that the foreman had no control over what he (the foreman) was doing because of his fear of the General Foreman. He related that the General Foreman would often hand the foreman a stack of weld documents and tell him, "I want these done tonight," and that the foreman would "flip out" and go and look at every weld trying to figure out who would do what weld. He said the foreman would often ask him to evaluate who should be placed on what job. He said the foreman did have a problem with new crew members in that he could not give them a lot of welds at one time because they would have difficulty the paper work. He said that this, in conjunction with the foreman not understanding the procedures thoroughly himself and the pressure from the General Foreman, caused the foreman a lot of problems.

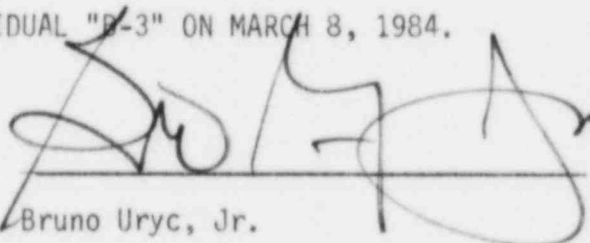
INDIVIDUAL B-3 said that overheating of stainless steel sockets was a common problem and that he had welded stainless steel sockets without bothering to check the temperature. He said when the stainless steel weld turned black he knew it was too hot. He said this was done frequently and he could not provide specifics as to time frame, specific system, or specific weld. He said he has seen many welders burn stainless steel welds black, but this was occurring before purging was being used on stainless steel systems. He said that sometime in 1980 or 1981, Duke Power Company (DPC) finally caught the problem and began using a purge. He related that after the problem was identified, numerous welds were cut out. He stated that part of the problem was a result of welders not understanding the procedures for welding stainless steel. He said that after the purge was put into use he would still occasionally see stainless steel sockets burnt black.

He said that he did not do too much work on routine type socket welds because he was primarily working on repairs or difficult welds. He said the difficult socket welds were often in a tight location or awkward position which frequently required him to weld using mirrors. He said that on these difficult welds he would completely weld up on half the weld and cap it, then completely weld the other half and cap it. He said that this was not a qualified DPC procedure and he estimated he completed 60 or 70 welds in this manner primarily on one inch or smaller sockets in the Unit 1 pipe chase. He said that no one told him to weld with this unqualified procedure and he felt that even though it was not right, it was done better than if someone else would have been assigned these welds. He said that this particular procedure of completely welding one side and then the other was not a certified Duke procedure, but was within ASME code. He said he thinks these welds are good. He said he felt he had to use this procedure because some of these difficult welds were made three and four times by other welders before he finally made the repair. He said he knew he would eventually get all the difficult welds on the second shift.

INDIVIDUAL B-3 stated that he felt that the foreman did not want to know how he was doing the difficult work, only that it was getting done. He said that the lead man was aware of what he was doing and would act as a look out of QC inspectors while he was using this procedure. He related that the lead man was well aware of what was going on and would act as a look out for anyone who needed him. He also said that INDIVIDUAL C could verify some of the incidents described above. He advised that the foreman never told him to work in violation of procedure, but that he violated procedure on his own volition because he realized that pressure was being put on the foreman to get the work done quickly.

He said that he has removed numerous arc strikes without paperwork and that these arc strikes were minor and superficial. He said he could not recall any specifics regarding these minor arc strikes. He did add that he has never repaired any severe arc strikes without proper paper work. He suggested that if any stainless steel welds are reexamined it should be those done prior to the time purge was used. He said that almost all the problems on the second shift occurred prior to the time INDIVIDUAL D came on board as General Foreman. He said he could provide no specifics concerning time or systems on which he worked relative to his using the unauthorized welding procedure described above, other than the majority were on one inch or less stainless steel and some two inch stainless steel.

END OF RESULTS OF INTERVIEW WITH INDIVIDUAL "D-3" ON MARCH 8, 1984.



Bruno Uryc, Jr.

APPENDIX H

RESULTS OF INTERVIEW

Duke Power Company

Bucket Nos. 50-413, 50-414

Catawba Nuclear Plant

Report Nos. 50-413/84-31

50-414/84-17

RESULTS OF INTERVIEW WITH "INDIVIDUAL A" ON MARCH 8, 1984 AS PREPARED BY
BRUNO URYC, JR.

On March 8, 1984, INDIVIDUAL A, was interviewed at the Catawba Nuclear Plant construction site, Rockhill, South Carolina, in the U. S. Nuclear Regulatory Commission (USNRC) Region II Resident Inspector's Office. This interview was conducted by Bruno Uryc, Jr., USNRC Region II Investigative Coordinator, with the assistance of Kim Vandooorn, USNRC Senior Resident Inspector.

INDIVIDUAL A advised that he has been employed with the Duke Power Company from 1970 to 1975 as a welder at the Oconee and McGuire Nuclear Plants, and from 1977 to 1980 at the Cherokee Nuclear Plant construction site as a welding foreman. He said he has been the welding foreman on the second shift at Catawba since February 1980 and that he is the only full time foreman on the shift. He stated that he reports to the General Foreman and that the General Foreman wants to get

the job done. He said he has never had any problems with the General Foreman and that he never felt the General Foreman was putting any pressure on him to get the job done. He said he feels he has a good working relationship with the General Foreman.

INDIVIDUAL A was informed that during interviews with some welders they had alleged that he was putting pressure on the crew for quantity and that this perceived pressure resulted in work being done out of procedure. INDIVIDUAL A stated that he has never intentionally told anyone to work out of procedure and that he has never observed anyone on his crew do any work that was outside procedure. He added that he was not aware of anyone on his crew doing work that violated established procedure.

INDIVIDUAL A was asked if he was aware that his crew was feeling pressure to the point they were violating procedure to get the job done. He replied that he had no indication of this and that he did not feel he ever put any pressure on any individual crew member. He stated that work on the second shift "is up and down." He said there are some days where the crew is very busy, particularly when there are jobs which could impact testing or systems completion.

INDIVIDUAL A was asked if he ever instructed any welder to weld without proper paperwork and he stated he has never done that. He said he has never threatened any of his workers to get the job done. He said his crew was not normally rushed to get the job done as there was not much work on the second shift. He stated

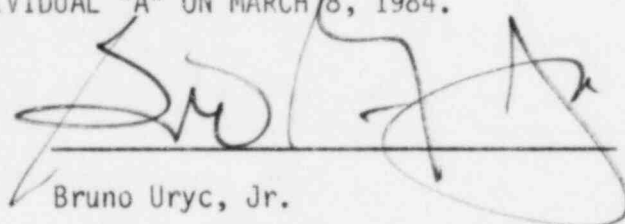
that on those occasions when they did get an urgent job he would tell his welders that they had to get the welding done as soon as possible and not "goof off." He said he has had occasions when he would check on a welder and place his hand near a stainless steel weld to see if it was still hot and after feeling the weld was not hot he told the welder to finish welding. INDIVIDUAL A related that he has told his welders that they should look for arc strikes and that they could be removed if they were within a half inch of the weld zone. He said that arc strikes could not be removed from valves and he has never removed any arc strikes from any valves in violation of procedure, nor has he ever instructed any of his workers to remove arc strikes in violation of procedure.

INDIVIDUAL A stated that he has tried to tell his workers to come to him if they had any problems. He said he has had some disciplinary problems with some members of his crew and he thought perhaps some of them may be trying to get back at him by making accusations against him.

INDIVIDUAL A was asked if he was aware that his lead man was alleged to have acted as a "look out" for QC inspectors. He said he never directed the lead man to stand guard for QC inspectors, nor was he aware that ever happened. INDIVIDUAL A stated that he has never violated procedure, nor did he ever tell any of his workers to do so. He further denied reacting to any pressure from the General Foreman and that any violations of procedure which did occur were not intentional, but purely accidental. He said there were occasions when he has had to tell people to get back to work because they were loafing on the job and that

some of his welders were taking advantage of the interpass temperature requirements. He said that although there were times when work had a high priority, he has never been told by any of his crew that he was pushing too hard.

END OF RESULTS OF INTERVIEW WITH INDIVIDUAL "A" ON MARCH 8, 1984.



Bruno Uryc, Jr.

APPENDIX I

RESULTS OF INTERVIEW

Duke Power Company
Catawba Nuclear Plant

Docket Nos. 50-413, 50-414
Report Nos. 50-413/84-31
50-414/84-17

RESULTS OF INTERVIEW WITH "INDIVIDUAL E" ON MARCH 9, 1984 AS PREPARED BY
BRUNO URYC, JR.

On March 9, 1984, INDIVIDUAL E was interviewed at the Catawba Nuclear Plant construction site, Rockhill, South Carolina, in the U. S. Nuclear Regulatory Commission (USNRC) Region II Resident Inspector's Office. This interview was conducted by Bruno Uryc, Jr., USNRC Region II Investigative Coordinator, with the assistance of Kim Vandoorn, USNRC Senior Resident Inspector.

INDIVIDUAL E advised he has been employed with Duke Power Company at the Catawba project since April 1978. He said he was initially hired as a helper and three months later he certified as a welder. He is currently working on the first shift as a lead man on a welding crew. He said he worked on the second shift as a lead man for INDIVIDUAL A from 1980 to 1983.

INDIVIDUAL E stated that occasionally some of the crew complained to him about pressure from the foreman. He said that as an example some workers would finish their work with an hour or two remaining on the shift and the foreman would have them start another job. He said some of the crew would slow down in their work when they felt that the foreman was putting pressure on them. He said there were some welders on the crew who would get special jobs and this was because these individuals were good welders and could get work done quickly. He said he was not aware of any one intentionally violating procedure and he denied ever acting as a lookout for QC inspectors.

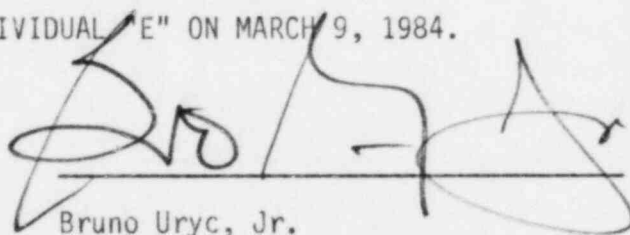
INDIVIDUAL E stated it was possible that welds were overheated but he could not pinpoint any examples or give any reason as to why this would have been possible. He said he has not seen any stainless steel socket welds burned black, but if someone wanted to cheat on a weld it would have been easy to do. He said he never removed arc strikes without following procedure and he was not aware of anyone who may have done so. He stated he was very cautious about staying within procedure because of several incidents he was personally involved with wherein he was out of procedure. He said that in both of these incidents the problem was detected during QC inspections and properly repaired.

INDIVIDUAL E stated that, in his opinion, the General Foreman put a lot of pressure on the foreman, but he did not think this pressure was intentional. He said there was a six month period when INDIVIDUAL D was the General Foreman and during this period the foreman seemed more relaxed. He said he could provide no

information to substantiate his opinion regarding the General Foreman. He also stated that the foreman had some disciplinary problems with several workers and these individuals rebelled against the foreman rather than work harder when it was necessary. INDIVIDUAL E said that the foreman did not talk to him about the pressure and he thought that the foreman often let the General Foreman get the best of him. He said he often has seen the foreman tense and nervous.

He concluded by stating that he feels the plant is safe and that he is not aware of any problems which would impact on the safety of the plant.

END OF RESULTS OF INTERVIEW WITH INDIVIDUAL "E" ON MARCH 9, 1984.



Bruno Uryc, Jr.

APPENDIX J

RESULTS OF INTERVIEW

Duke Power Company

Docket Nos. 50-413, 50-414

Catawba Nuclear Plant

Report Nos. 50-413/84-31

50-414/84-17

RESULTS OF INTERVIEW WITH "INDIVIDUAL J" ON MARCH 9, 1984 AS PREPARED BY
BRUNO URYC, JR.

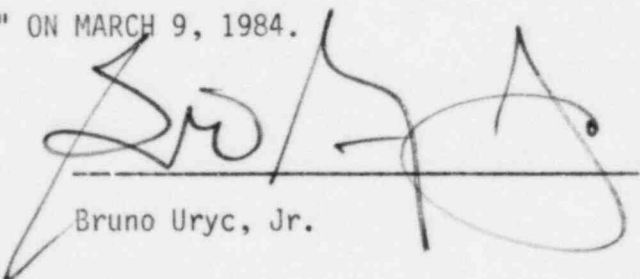
On March 9, 1984, INDIVIDUAL J, was interviewed at the Catawba Nuclear Plant construction site, Rockhill, South Carolina, in the U. S. Nuclear Regulatory Commission (USNRC) Region II Resident Inspector's Office. This interview was conducted by Bruno Uryc, Jr., USNRC Region II Investigative Coordinator, with the assistance of Kim Vandoorn, USNRC Senior Resident Inspector.

INDIVIDUAL J stated that he has been employed with Duke Power Company at the Catawba site since March 1979 and that he is a certified welder. He said he worked on the second shift on INDIVIDUAL A's crew for a period of six months in 1982. He said that during this time he was welding on stainless steel sockets in the Unit 1 pipe chase. He stated that he often felt pushed for quantity, but he never violated procedure. He recalled that other members of the crew

also mentioned to him that they felt pressured to get the work done quickly. He said that the foreman always wanted the crew to hurry up and get quantity work done. He said the foreman frequently seemed to be "bird dogging" the workers and this often gave the impression of pressure to get the job done.

INDIVIDUAL J said he did see a stainless steel socket burned black on at least two occasions in the Unit 1 pipe chase. He stated he did not recall the location of these sockets or who was working on them. He said that a stainless steel socket that was burned black indicated that too much heat had been used during welding. He said he had never been told to remove arc strikes without following procedure and he has never seen anyone remove arc strikes out of procedure. He was asked if he had ever heard of the lead man acting as a lookout for QC inspectors and he said he has never heard of or seen that happen. He said he was not aware of any willful violation of procedure and that based on his knowledge he feels the plant is safe. He said he was not aware of any problems that would impact on the safety of the plant.

END OF INTERVIEW WITH "INDIVIDUAL J" ON MARCH 9, 1984.



Bruno Uryc, Jr.