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AFFIDAVIT

My name is Jeremiah B. (J.B.) Stearns. I am submitting this Affidavit freely and voluntarily to Mr. Thomas Devine, who has identified himself to me as the Legal Director of the Government Accountability Project of the Institute for Policy Studies. I am submitting this statement to share my concerns over shoddy workmanship at the Catawba Nuclear Power Station, Units I and II, near Rock Hill, South Carolina. I am also concerned about retaliation against those of us who challenged the poor workmanship at this site. Catawba is owned primarily by Duke Power Company.

I have worked for Duke Power Company on and off over a 11½-year period since March, 1970, at both nuclear and coal plants ~~five nuclear jobs where~~ In 1970 and 1971 I worked for Duke on coal plants, at Marshall and ~~Dines~~ Belews Creek, included Site H, actually a switchyard for electricity generated by nuclear power; McGuire from March, 1973-May, 1975, and Catawba from May 1975 until June, 1981. Until my work at Catawba, I had never been fired for disciplinary reasons. I am upset that Catawba had the worst construction practices of all five jobs. Even the work on the coal plants was done with more care; but the coal local plants are not as tough a challenge since they are much less complex than the nuclear jobs.

I am qualified to assess construction workmanship; I have been doing it all my life. My father and grandfather were in construction and I began helping when I was 12. It has been my profession for at least 25-years. I am a carpenter by trade and have constructed residential and commercial buildings from homes to churches and schools. At Duke, I was a carpenter until the middle of my time at McGuire with the same job. At Duke, I was retitled "builder." Builders are the first ones on the job and make the initial field concrete pours, install the rebars, make later forms, and install some

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of the hardware. In order to coordinate with the other crafts, we had to be familiar with all aspects of the job, including the pipefitters and electricians. We used the torch. We also set anchor bolts, among other duties by the structural steel. We had to make with wood as well. In short, we had to know everybody's job, which left us well-informed about how the work was being handled.

To put my criticisms in perspective, the standard of work was much better at the homes, hotel, and churches I built compared to Catawba. I know that a school or even a coal plant can't be compared to a nuclear job, but that only makes me more upset. A nuclear job is the toughest construction challenge. I believe it should receive the most respect for quality, not the least. To aggrevate matters further, Catawba was the most wasteful of all the jobs where I worked. The other supervisors kept track of materials and tried to economize costs. At Catawba, management acted as if there was a "blank check." I could not estimate the total amount of lumber and materials lost or unnecessarily thrown out. I only know it was a routine way of doing work.

In May, 1976, when I began work at Catawba, my initial duties were in the carpenter shop where I helped build specialized forms. When the turbine building was excavated, we made the first field pours of concrete for the foundation. I first noticed unusual trouble when additional crews came in for design pours, and to install reinforcement bars to strengthen the concrete above the foundation. There was competition between the crews to see who could install the most reinforcement bars the quickest. The problem was that the rebars were not spread evenly and therefore did not match the spacing requirements of the blueprints. Sometimes the last rebar would have to be located outside the concrete to match the spacing requirements. As a result,

the foreman would just have us move the rebars to fit inside the concrete.

I continued to work on design pours at the auxiliary building which was safety-related. The most severe problems were at the auxiliary building. As one example, there were insufficient braces for the walls around the decontamination pit. This was contrary to standard construction procedure, which required either steel or wood X-braces from the bottom to insure that the concrete would be solid when poured. The bracing keeps the wall from bulging due to pressure when the concrete is poured. I complained at the lack of bracing, but the foreman told me to mind my own business and stay away when the pour was made. The people on my crew saw that the wall bulged out. The damage was fixed through expensive repairs, such as an entire crew to chip away the concrete and make the wall straight.

Not all of the problems were fixed right away. To illustrate, there was honeycombing or holes in the concrete by the exterior doghouse in Unit I. The "doghouse" is the structure which covers the steam pipes as they enter and leave the reactor. It happened either because the concrete was too dry, was improperly vibrated, or blocked by rebar in the wrong location. The honeycombs were in bunches, and many were a half foot in diameter. The foreman's initial reaction was to put forms back over the honeycombs and literally cover them up. I watched the holes being covered. I hope they were eventualy filled up with grout, but I cannot say for sure.

I found two basic causes for the sloppy quality of work--incompetent or unqualified supervisors, and scheduling pressure that dominated quality considerations. Supervisory jobs were filled at Catawba according to whose relative or buddy you were. Nepotism and the buddy system are no substitute for experience and qualifications. For example, Bill Blanton was the foreman

on the walls that bulged. Design pours are an advanced responsibility, but Blanton had to learn the job from the men who worked under him. If he was knowledgeable himself about how to do the work, he did not give it away. He got the job from his buddy, J. W. Bible, the general foreman at the McGuire Plant when they both worked there. Similarly, quality assurance (Q.A.) and quality control (Q.C.) personnel were often hired off the street, ~~often~~ according to their own conversations with us; often they had no experience. Sometimes, I would intentionally install hardware wrong or put in a pipe sleeve backwards, just to test and see if the Q.C. inspectors would catch it. They never did. Although I would then go back and correct the problem, I was not left with much confidence in the quality of quality control.

The scheduling pressure was so intense that we kidded how a computer must have set an unrealistic pace without being programmed to allow time for fixing mistakes. The case of the wrong-sized doors in the auxiliary building illustrates how the scheduling pressure caused me to lose respect for management's judgment. Additionally, this example raises more questions about deviations between the approved design blueprints and the as-built condition of the plant. Quite simply, the size of the doors did not match the holes in the wall where we were supposed to hang the doors. This often was because the steel blueprints did not match the door blueprints, known as "schedules."

One day during mid to late 1979, all four doors that I was assigned to install one day were a different size than the holes. For example, a door would be bigger than the hole. I asked the foreman, Marshall White, how to install a four-foot door in a three-foot hole. He said we had to give the engineers some leeway. He said to just hang the doors in order to avoid trouble and delays. I said we couldn't and explained that if you try to make

chicken salad out of chicken shit, it does not taste very good." When I left in 1981, the doors still had not been hung.

These examples are just that. There were many instances of poor workmanship all over the auxiliary building. Workers commonly walked on sensitive valves, instruments, gauges, and other fragile equipment. There is no way to estimate the extent of damage to hardware that was banged up after it had been installed.

Some of the misconduct involved the paperwork. That helped create the impossible situations in the field. In late 1979 or early 1980, a common topic within the crew involved an action by the senior, Larry Steele, who had done work in the auxiliary building without first preparing and obtaining engineering approval for a Variation Notice (V.N.). What bothered us was that Steels was not even counseled for this practice, which we all knew was illegal. Procedures require that a worker get the V.N. approved before tampering with the hardware. I do not know how many other instances where design controls broken down, but it was obvious to the crew that the system was not working.

On Thursday, March 27, 1980, an incident occurred which significantly affected my career at Catawba. I tripped and fell in the dark over a wheelbarrow which was in a walkway where it shouldn't have been. The walkway was dark because the lights had been out all week, despite my daily reports to the safety office. I was seriously injured in the wrist, shoulder and collarbone. My collarbone was separated, although I did not know that for some time. The doctors that Duke sent me to did not tell me until June 2 the extent of my injury. By that time, I was in extreme pain and had done additional damage to my wrist and shoulder.

By October, I had to go in for surgery on my wrist. I was forced to report back to work around Thanksgiving or be terminated, although my hand was still so paralyzed that I had to drive one-handed. I was also formally written up as guilty of two violations, for not reporting to work earlier. In fact, I had even been released from the doctor's outpatient care and, on the basis not of an alleged telephone message from my supervisor, that I had not received. After returning to work, I was the focus of continued harassment from Mr. Steele, who also belittled my injury.

Most of the difficulties between Mr. Steele and me were personal and involved working conditions. The gist of the problem was that I had been restricted to light work during my recuperation, and Steele seemed to resent it. Some of the disputes again involved the hardware at Catawba. One instance concerned outside doors on the back of the auxiliary building. Those doors had elaborate electronic security locks, but they were not secure. No one had bothered to put in security hinges, so the pins on the doors could easily be pulled and removed. Despite my repeated complaints, nothing had been done when I left in June, 1981.

By April, 1981, the pressure had become so intense that I had to get help. I voluntarily went to the Employee Relations Department to see Eddie Young for counseling. I requested confidentiality, to which I was entitled since I had gone for counseling without being ordered by the company. I told Mr. Young about the retaliation I was suffering due to an injury that was the company's fault; and about the difficulties and retaliation faced by my colleague, Nolan Hoopingarner (Hoop), who had correctly challenged violations of NRC regulations. I also complained about the effects of Mr. Steele's mismanagement and discrimination on employee morale, productivity, and workmanship in my crew. Mr. Young listened sympathetically, reassured me

that everything was confidential and said not to worry about my job. He explained that I couldn't be fired while I was being counseled.

I never should have trusted Mr. Young. In less than two weeks, I was fired. Around a week after the interview, I took a day off of unpaid leave for which I was entitled. The next day, foreman, Marshall White, told me to "come on" and said I was going out the gate. Marshall told the warehouse clerk to check whether my tools were in the box because he was going to terminate me. The clerk said it wouldn't be necessary. We got to the gate and Marshall said good-bye. I went straight to a public telephone and called in the news to Eddie Young. He replied that he already knew I had been fired, which made me suspect my confidentiality had been violated through discussions with Marshall about my complaint.

I appealed the dismissal through registered letters to Mr. Young, his supervisor, Joe Coulter, project manager, John Rogers, and Duke President Bill Lee. Only John Rogers responded, and he rejected my protest without discussing it further. There is no doubt in my mind that my initiative in approaching the Employee Relations Department for a confidential interview cost me my job.

I was hardly alone. Mr. Devine asked me to study the 24-page transcript of a September 23, 1983, interview with one of my co-workers, Nolan Richard Hoopingarner (Hoop). I worked with Hoop for around a year during 1978-79, on the scaffold crew in the auxiliary building. Overall, I am directly familiar with around 75 percent of the contents of Hoop's interview, and the rest indirectly through discussions with other workers. With one exception, everything Hoop said in the interview was accurate, to the best of my knowledge and belief. The only statement he made that I would challenge

occurred on page eight of the interview. While Hoop was right about the facts he discussed, I do not believe that the turbine building was nuclear safety-related. The accuracy of Hoop's interview is consistent with his general reliability. He was sometimes difficult to get along with. I didn't like him myself— as a person , but you could take to the bank about 95 percent of what he said. He suffered badly on the job for being right about the wrong things, such as the nuclear safety and worker safety issues he kept bringing up. Below I will discuss additional details for which I have knowledge about issues raised in his interview. I also want to confirm some of the most important points he made. In some areas, he had barely gotten started talking about the relevant information.

First, on page one, I agree that Hoop was transferred to the cooling tower for complaining to the NRC and Department of Labor about safety worker safety and management negligence with respect to construction procedures. In fact, I overheard a conversation among the foreman, general foreman, and lead man in Hoop's crew. They said Hoop was being sent to the cooling tower, where it would be Frank Cottrell's job to get rid of him. This was also the commonly accepted explanation within the crews. Hoop's treatment was no secret. In fact, the general foreman, Robert K. McDowell, and the craft superintent, John Scruggs, held repeated special meetings with various crews to tell us the latest on what was happening to Hoop, such as the various charges made against him and attempts to fire him. The message was clear to all of us: if you try to make waves like Hoop did, the same thing will happen to you. People quit or are terminated all the time. There weren't special meetings to discuss their stories and problems. Management made the reprisals against Hoop important to all of us. They made him an example. In general, builders are sent to the cooling tower for punishment. It was

known on-site as the "penal colony." Those who made waves were sent there to be isolated.

On page three, Hoop discussed the NRC open conference. I can confirm that Hoop and Jerry Green spoke with the NRC. Hoop told me that he and Jerry were going. I also agree with the points he made to the NRC, summarized on page four. Afterwards, Hoop expressed disappointment that the NRC hadn't said much.

Around the same general time, Hoop asked me to go to the NRC with him. I declined. I explained to him, "Hoop, I know you're right, and so does everyone else, but it won't accomplish anything for us to stir up trouble. The NRC is already bought off here." Now I am sorry I did not back him at the time, although I still feel the same about the NRC.

I can confirm that Hoop pointed out wrongdoing to Messrs. Pelfrey, McDowell, and Scruggs, as discussed on page four. I can also confirm that as long as he raised problems, they were on his case. They cussed at him, told him to mind his own business, and to stop talking to other workers, the NRC, and OSHA about the issues. Hoop talked about this a little on page five of his interview.

On page five, Hoop summarized his 1980 discussions with Mr. Maxwell. He was right again. To provide further explanation, scaffolds routinely rested on and were supported by cable trays, which could weaken the trays and led to cable being pushed out of the tray. Scaffolds also laid on three-inch pipes, and cable trays. I do not know how much the pipes and unistruts were weakened in the process.

On page nine, Hoop discussed his protest about carbon steel and stainless steel pipes laid directly on top of each other. The rule is to avoid direct contact. Hoop is right that management broke the rule. I also

This first test showed up, if I am not mistaken, with 30-some laminations in this piece of pipe. That would be roughly six feet in length and the prepped surface would be about two inches wide. Some were as long as an inch to an inch and a half and some were as short as one-eighth of an inch. Unfortunately, my theory had come true. It was, in fact, just a rotten piece of pipe. Were it my plant, I would have taken that piece of pipe out of there.

CP-88 was the procedure I was told to use to try to fix those laminations. However, CP-88 had nothing to do with the stubs of pipe that were welded in the containment wall. CP-88 was only for the metal that the containment wall was built out of.

I know how bad the lamination problem was because I would ask the PT man how the testing was going. Once he put the developer on the pipe and the bleedthrough started showing up, he called me and told me he wanted me to look at the wall. He told me he had never seen anything like it in his life, and I agreed. I thought quite probably that Tech Support would say we were going to cut a piece out of the containment wall, do away with this stub, weld a stub of good pipe into a square and put this back into the containment wall, then make a 100 percent x-ray weld and that would be the end of it. But that is not what happened.

Instead, the foreman decided to just keep fixing it. Although I did not actually work on getting these laminations out, I know that CP-88 was used, and several welders I knew worked to get these laminations removed. I would ask the workers, Roy Brady, for instance, at the end of the day, how it went that day and he would

because I helped build the covers to correct the problem. We had to build covers twice because the first cover was just plastic and did not hold.

I believe that one of the major causes of the problems at Catawba was scorn and intolerance for workers who challenged shoddy construction practices. The resentment was especially obvious if you skipped a level in the chain-of-command and went over someone's head. It was futile anyway, because managers always backed the supervisor, foreman, or lead man whose decision was challenged. It did not matter who was right or wrong. You did as you were told, and your immediate supervisor was always right. In my experience, there were no exceptions to this pattern. I never accomplished change for the better by identifying problems. I only created problems for myself. This environment caused us to lose respect for managers and lowered morale. It also helps explain why so many workers sought counseling from Employee Relations before we knew it was a trap.

The mismanagement and low morale caused waste and mischief among the employees. Surprisingly, management did not seem to care. For example, workers spent long periods without anything to do while waiting for materials to arrive that were not there due to inaccurate scheduling. Mr. Devine informed me that at the Zimmer Plant, workers made belt buckles out of nuclear grade steel while they were killing time and sold the buckles at $40-$50 a piece. Well, the same kind of belt buckles were all over Catawba and went for the same price.

The NRC was no solution. Management had communicated with us indirectly not to talk with the NRC. You had to go through company channels first and not talk to the NRC directly. We did not trust the NRC anyway because the problems on-site were so obvious that only blind NRC inspectors would have any excuse for missing them. When Hoop went to the NRC, I told

several of their inspectors that they were fortunate to have Hoop on their side now, helping them to find things. They gave me a dirty look and walked away without a word.

I have read the above 12-page statement, and it is true, accurate, and complete to the best of my knowledge and believe.

JEREMIAH B. STEARNS

State of SC. YORK)
) ss.
County of)

On this 9th day of November, 1983, the said JEREMIAH B. STEARNS, appeared before me, the undersigned Notary Public, and acknowledged the the above and foregoing Affidavit is true and correct to his best information, knowledge and belief.

NOTARY PUBLIC
My Commission Expires: July 29, 1985