

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION
Harold R. Denton, Director

In the Matter of)

CAROLINA POWER & LIGHT CO.)
(North Carolina Eastern)
Municipal Power Agency))

(Shearon Harris Nuclear Power)
Plant))

Docket No. 50-400

(10 CFR §2.206)

DIRECTOR'S DECISION UNDER 10 CFR 2.206

INTRODUCTION

By petition dated July 2, 1986, Messrs. Joseph Hughes and Steven Katz, on behalf of the Coalition for Alternatives to Shearon Harris (CASH), and Mr. Wells Edelman, requested pursuant to 10 CFR 2.206 that the Director of the Office of Nuclear Reactor Regulation institute a show cause proceeding pursuant to 10 CFR 2.202 to address certain issues raised by the petition and to withhold issuance of the operating license for the Shearon Harris facility until these issues are addressed in a hearing. Specifically, CASH requested that: 1) the applicant be required to redemonstrate the adequacy of its emergency planning capabilities in light of the decision by Chatham County to withdraw from participation in the emergency plan and alleged deficiencies in the applicant's emergency plan demonstrated by an emergency siren actuation incident on June 28, 1986; 2) the applicant be required to comply with 10 CFR 50.47(a)(2) concerning conducting a full scale exercise within one year before full power operation; 3) the Commission investigate allegations by Ms. Patty Miriello concerning falsification of records of employee radiation exposures, deficiencies in the radiation protection program and improper inservice inspections of large reactor coolant line welds; and 4) the Commission prepare a supplemental Environmental Impact Statement and consider psychological distress to residents

8-6-10-200-203



of the surrounding area in light of three new significant circumstances: a) the Chernobyl accident; b) the false siren incident; and c) the Chatham County pull-out.

Notice of receipt of the petition was published in the Federal Register on July 17, 1986 (51 FR 25964). The applicant filed a response to CASH's petition on August 15, 1986.

As explained in the discussion which follows, I have determined that the petition should be denied. On the basis of its review, the staff does not believe an adequate basis exists to deny the operating license or initiate a proceeding as requested by Petitioners. 1/

DISCUSSION

Chatham County Withdrawal from Shearon Harris Emergency Plan

On May 27, 1986, the Commissioners of Chatham County, North Carolina, where a portion of the Shearon Harris facility is located, passed a resolution

1/ Apart from the merits of the issues, the Petition may be independently denied on procedural grounds. CASH's Petition requests that the Director should withhold granting of any operating license until the matters it raises are resolved, relief which concerns initial licensing of the facility and not enforcement action such as is usually contemplated under §2.206. See Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), DD-85-14, 22 NRC 635, 642 n.4 (1985); Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), DD-84-11, 19 NRC 1108, 1110 n.2 (1984).



rescinding their approval of the Shearon Harris Emergency Response Plan (ERP). Petitioners asserted that this resolution moots the finding by the Federal Emergency Management Agency (FEMA) that the ERP is adequate and prevents the NRC from making the finding required by 10 CFR 50.47(a)(1) of reasonable assurance that adequate protective measures can be and will be taken in the event of a radiological emergency.

By letter dated July 7, 1986, however, the Chatham County Board of Commissioners informed the NRC that it had as of that date unanimously adopted a resolution endorsing the Shearon Harris Emergency Plan and affirming the County's commitment to carry out its operational roles as outlined in the Plan during future exercises and in the event of an emergency at the facility. In view of this action, Chatham County participation in the ERP no longer has the potential to adversely affect the Commission findings under 10 CFR 50.47(a)(1) and provides no basis for initiation of a 10 CFR 2.202 proceeding or other action as requested by petitioners.

Full Scale Emergency Exercise

The petitioners also raise concerns about the fact that more than a year has passed since the applicant's successful completion of a full scale exercise of its emergency plan as required by 10 CFR Part 50, Appendix E, §IV.F.1. The applicant currently has pending before the Commission a request for an exemption from this requirement.

Wells Eddelman filed a request for a hearing on this exemption request on April 3, 1986, and, together with CASH, again on August 5, 1986. The staff has the exemption request under consideration and the requests for hearing



are currently before the Commission. See Order of the Commission, dated September 12, 1986. Because this issue of the need for a full scale exercise of the emergency plan within one year before issuance of the full power operating license is being considered fully in these other contexts and the resolution of this matter will be in accordance with Commission's requirements, we are not considering it further here as the basis for a show cause order.

Inadequate Implementation of the Emergency Plan

The petitioners described an incident which occurred in late June which they believe indicates a lack of preparedness on the part of the applicant with respect to activation of the notification system both onsite and with affected communities. An alarm siren was inadvertently activated about 2:00 a. m. on June 28, 1986. Several persons awakened by the siren called various state and local authorities and the Shearon Harris plant site. These officials did not know about the siren and gave what CASH believes were confusing and uninformed responses to the calls. CASH contends that this incident indicates that there is no apparent method to secure information upon activation of a siren implying that this indicates a likelihood that adequate information would be unavailable in an actual emergency. CASH also asserts that if vandals activated the siren, then inadequate security is provided at siren locations.

In its submittal, the applicant indicates that on June 28, 1986, one siren was activated for one 3-minute cycle by a vandal who climbed the pole on which the siren was located and cut the padlock on the control cabinet. CASH asserts that the difficulties individuals near the siren had in finding



officials who could explain the event demonstrate deficiencies in notifying state and local officials of an emergency. While the sounding of the alarm may have been unsettling to those who heard it, the fact that company and state and local officials were unaware of and could not explain this isolated, vandalized, nonscheduled alarm does not call into question the ability of the applicant's emergency notification and alarm system to function in the event of an actual emergency. Because the alarm on June 28 did not involve an actual emergency, there was no reason why the various officials which CASH identifies in its petition should have known of the single siren's sounding for a 3 minute period. The applicant's emergency preparedness plan, including its ability to notify offsite authorities, has been reviewed by NRC and the Federal Emergency Management Agency (FEMA). The plan was tested during a full participation exercise in May 1985 and found to be adequate. In a memorandum dated August 27, 1985, FEMA found that the state and local emergency plans are adequate and capable of being implemented, and that the exercise demonstrated that offsite preparedness is adequate to provide reasonable assurance that appropriate measures can be taken to protect the health and safety of the public living in the vicinity of the Shearon Harris Nuclear Power Station in the event of a radiological emergency. Follow-up review of the plan and the limited participation exercise to be performed in October 1986 will continue to verify program adequacy. Based on our and FEMA's review, we believe the applicant's emergency plan would function satisfactorily to notify state and local officials in the event of a real emergency.

In addition, during an actual emergency, members of the public will receive instructions via the TV or radio Emergency Broadcast System, not via telephone

calls with local officials. A brochure which provides information related to an emergency at the Harris facility, including instructions for obtaining information when the sirens sound, has been provided to all persons within the Emergency Planning Zone (EPZ).

We note from the applicant's submittal in response to the CASH petition that it has committed to review and modify procedures to assure that when the company learns of a siren sounding inappropriately in the future, it will promptly notify local officials and the news media so that any public concern can be dispelled quickly.

The petitioners also question whether the sirens are adequately protected from vandals since frequent improper activation of the sirens might cause individuals to ignore or delay response to an actual alert. Only two instances of single sirens improperly activating have occurred during the year and a half the sirens have been in place. The methods used by CP&L to prevent improper activation are similar to those which have been satisfactorily used by licensees for a number of years.

In summary, we do not believe the siren activation incident provides a basis for a show cause order or other regulatory action.

Allegations Concerning Adequacy of Radiation Protection Program

In its petition, CASH alleges certain facts which it believes raise serious questions about the effectiveness of the applicant's proposed radiation protection program for its employees. CASH's allegations are based upon the affidavit

of a former employee of the applicant, Ms. Patty Miriello 2/. Ms. Miriello alleges that while employed at CP&L's Brunswick facility, inaccurate records of her radiation exposure were kept and that contrary to the requirements of 10 CFR 20.408, she has been unable to obtain an accurate record of her exposure from the applicant since terminating her employment. CASH apparently contends that these alleged problems at Brunswick, if true, raise questions about how the applicant's program at Shearon Harris will perform.

These allegations are identical to ones submitted to the Atomic Safety and Licensing Board which considered CP&L's application for an operating license and which were the subject of a late-filed contention considered by that Board. In assessing whether the issues presented raised a significant safety concern, the Board considered Ms. Miriello's affidavit and that of Mr. Stephen Browne, a CP&L employee responsible for technical direction of the personnel dosimetry program at all CP&L plants. Mr. Browne's affidavit

2/ In its petition, CASH makes the statement that "[a]lthough the NRC Office of Investigations (OI) has had documented evidence of Ms. Miriello's contentions since September 1985, the OI has yet to do a personal interview with the allegor."

Investigators from the NRC Office of Investigation have conducted a personal interview with Ms. Miriello on September 11, 1985. Approximately ninety percent of the time of the interview was spent on her concerns regarding alleged falsification of preservice piping non-destructive examination (NDE) inspection records by Nuclear Energy Services (NES), a Carolina Power and Light Company contractor at the Shearon Harris site. The remainder of this interview touched on numerous allegations by Ms. Miriello including health physics concerns and alleged falsification of radiation exposure records. Thus the assertion that a personal interview has not been conducted with Ms. Miriello by the Office of Investigation is incorrect.



was also submitted to the staff by the applicant in response to this CASH petition. Ms. Miriello's complaint concerned a discrepancy between the reading on her self reading pocket dosimeter (SRPD) and that of her thermoluminescent dosimeter (TLD). Mr. Browne's affidavit described CP&L's investigation and resolution of this discrepancy, why TLD readings are considered more accurate and why, absent evidence to the contrary, they are used as the official dose even if an SRPD reading is higher. The applicant also provided a copy of the final termination report of exposure which was provided to Ms. Miriello on September 10, 1985.

In its review of this issue, the Board concluded that Mr. Browne's explanation of the points in question was more plausible than Ms. Miriello's. They also indicated that from hearing both individuals testify in hearings before them, they found Mr. Browne to be credible, while they were skeptical of Ms. Miriello's testimony and did not rely on it. The Board concluded there was no persuasive evidence of falsification of records and no significant safety concerns and rejected the effort to reopen the record on this issue. Carolina Power & Light Co. et al., (Shearon Harris Nuclear Plant), Memorandum and Order, ASLB (June 13, 1986). 3/

3/ Intervenors, including one of the petitioners here, Wells Edelman, did not appeal the Board's order. Time for any appeal has passed. The Commission has stated that parties to proceedings may not use 2.206 petitions to reconsider issues previously decided or to avoid an existing forum where they are more logically presented. General Public Utilities Nuclear Corp., (Three Mile Island Nuclear Station, Units 1 & 2) (Oyster Creek Nuclear Generating Station), CLI-85-4; 21 NRC 561 (1985). Thus, the fact, that this issue was considered in the OL proceeding would be another basis to reject petitioner's request for a show cause proceeding on this issue.



The Staff has conducted inspections of the radiation protection programs of CP&L at both the Brunswick and the Shearon Harris facilities including specific examination of the technical areas where Ms. Miriello alleged problems were occurring. The results of these inspections are described in Inspection Reports Nos. 50-325/86-06, 50-324/86-07, dated March 21, 1986 and 50-325/86-18 and 50-324/86-19, dated July 25, 1986. Only one minor violation was discovered at the Brunswick facility. In all other areas reviewed, the applicant's program was in compliance with requirements. Ms. Miriello's allegations of inaccurate documentation of her exposure were specifically reviewed and the results of that review are documented in Inspection Report Nos. 50-325/86-18 and 50-324/86-19, dated July 25, 1986. The inspector concluded that her exposure had been accurately determined and factually documented. In fact, the inspector found no evidence in general of inaccurate exposure records at either facility. In addition, the Licensing Board in the operating license proceeding has ruled favorably on the general adequacy of the applicant's equipment, processes and procedures for radiation protection. Carolina Power & Light Co. et al., (Shearon Harris Nuclear Plant), LBP-85-28, 22 NRC 232 (1985).

On the basis of all of the above, we conclude that further regulatory action is not warranted in regard to the applicant's radiation protection program at Shearon Harris or Brunswick.

Allegations of Improper Ultrasonic Inspection of Welds

Ms. Miriello and CASH also raise concerns about the adequacy of inservice ultrasonic inspections conducted at Shearon Harris of large reactor coolant



line welds, assertedly conducted as part of the applicant's quality assurance program. Ms. Miriello indicates that she observed two NDE examiners disagreeing about indications in ultrasonic test results which did not appear to have been resolved, that design flaws in these welds violated ASME Code Section XI, and that she had seen unauthorized revisions made to weld inspection data sheets. Ms. Miriello and CASH conclude that approximately 10% of the welds in the inservice inspection program at the Shearon Harris plant are defective and improperly documented.

First of all, it should be noted that Ms. Miriello's and CASH's assertions about the impacts of the alleged discrepancies on the quality of the welds are based on a misunderstanding of the process by which welds are determined to be acceptable at the Harris facility. During the construction of the Harris facility, each weld on safety-related piping was inspected by radiography and/or surface examination of the welds and the results were reviewed for quality and documentation by quality assurance personnel. That process has been completed at the Harris facility and the piping welds judged acceptable. The preservice inspections with which Ms. Miriello was associated is the first step of the inservice inspection process conducted throughout the life of the plant to help identify conditions which could affect the performance of plant systems and components. NDE testing (ultrasonic examination) is done of each weld before plant operation begins to get an accurate "fingerprint" of each weld to use as a baseline for comparison purposes throughout the life of the plant. This is, then, the second time these welds have been inspected and these examinations are for a different purpose than initially assuring the quality of the welds.



Ms. Miriello's allegations concerning NDE testing were originally submitted to NRC in the fall of 1985. NRC Region II inspectors conducted an inspection of pre-service inspection of safety-related piping welds at Shearon Harris in December 1985, reviewing procedures, observing actual work, reviewing data reports, and conducting independent ultrasonic verification examination of welds. These inspections are documented in Inspection Report No. 50-400/85-4P, dated July 15, 1986. The inspectors concluded that while some changes to the weld data sheets had not been made in accordance with the required procedure, which was apparently what Ms. Miriello observed, the final information being reported on the data sheets was accurate. The inspectors' own verification examinations indicated that the procedures being used to conduct the pre-service examinations were adequate and that the information reported by the examiners compared favorably to the results of their own examinations. In general, the inspection confirmed that the procedures for ultrasonic testing being used by the applicant were adequate, and that results reported by NDE personnel were adequate and in accordance with ASME Code, Section XI requirements.

On the basis of the above, I conclude that the staff is satisfied with the acceptability of the welds on safety-related piping in the Shearon Harris plant. In addition, the applicant's inservice inspection program of safety-related piping welds is adequate and accurately documenting the welds in the plant. No basis exists for issuance of a show cause order with respect to safety-related piping welds.

Supplemental Environmental Impact Statement

CASH also argues that the NRC should prepare a supplemental environmental impact statement (EIS) because of new information which it has submitted. This new information consists of the Chernobyl accident, the false siren incident, and the Chatham County withdrawal from the emergency plan. CASH also suggests that the nature of this information could create psychological distress on people near the facility and the supplemental EIS should also consider such an impact.

As discussed above, Chatham County has now agreed to participate fully in the emergency plan. The siren incident did not demonstrate any inadequacies in the applicant's ability to notify state and local officials in the event of an actual emergency. Thus, neither of these occurrences constitute significant new information.

CASH also refers to the Chernobyl accident as significant new information and asserts that it raises compelling questions on the dispersal of radiation. They contend that recent information on accident consequence estimates as discussed in NUREG/CR 2239, Technical Guidance for Siting Criteria, (dated December 1982), and NUREG 0956, Reassessment of the Technical Bases for Estimating Source Terms, (draft report issued July 1985 and Final Report issued July 1986), coupled with the Chernobyl accident, raise questions about the adequacy of the ten-mile emergency planning zone for the Shearon Harris plant.

The NRC staff is continuing to evaluate information concerning the Chernobyl accident. Nothing which the staff has learned so far, provides a basis for the staff to take regulatory action with respect to any of the

reactor facilities which the NRC regulates. CASH has not provided any information which would suggest the Harris facility is uniquely affected by what is known to date about the Chernobyl accident nor are we aware of any such information.

Nor do CASH's assertions about the suitability of the 10-mile EPZ in light of Chernobyl and recent studies on accident risk assessments appear to be directed at any unique aspect of emergency planning at the Harris facility. Rather their concern is more general, i.e., "... in light of TMI and Chernobyl (with respect to the dispersal of radiation), notions concerning the adequacy of a ten mile emergency planning zone may be inadequate to protect the health and safety of those living around the Shearon Harris Nuclear Power Plant."

Petition at 12. This is essentially a challenge to the Commission's regulations and a petition under 2.206 for enforcement action cannot be used as a substitute for a petition for rulemaking. General Electric Co. (Vallecitos Nuclear Center, License No. SNM-960), DD-79-9, 9 NRC 744, 753 (1979); Commonwealth Edison Co. (LaSalle County Station, Units 1 and 2) and All Light-Water Reactors, DD-84-6, 19 NRC 891, 897 (1984). The appropriate vehicle to seek a change to the Commission's requirements, is to file a petition for rulemaking in accordance with 10 CFR 2.802. Moreover, emergency planning issues were litigated in the operating license proceeding and one of the petitioners here was a party to that proceeding. The issue of the adequacy of the configuration of the EPZ was specifically raised in the form of contentions which were rejected by the Licensing Board. Carolina Power & Light Co. et al (Shearon Harris Nuclear Plant) ASLB No. 82-472-03 OL, Tr. 982, 984-985; aff'd., ALAB 843, 24 NRC ____, August 15, 1986. In general, parties may not use 10 CFR 2.206 procedures as a vehicle



to reconsider issues previously decided or for avoiding an existing forum in which they more logically should be presented. General Public Utilities Nuclear Corp. (Three Mile Island Nuclear Station, Units 1 and 2) and (Oyster Creek Nuclear Generating Station), 21 NRC 561.

Finally, CASH appears to assert that the NRC should prepare a supplemental EIS to consider psychological stress on residents surrounding the Shearon Harris facility in light of this new information, i.e., Chernobyl, the Chatham County pullout, and the siren incident. The Supreme Court in Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 103 S. Ct. 1556 (1983) held that the National Environmental Policy Act does not require the NRC to consider whether risk of accident might cause psychological distress on the health and community well-being of residents of the surrounding area. In any event, the new information which CASH asserts would create this psychological distress either no longer exists or does not raise any significant issues concerning the Harris facility. In summary, nothing which CASH has asserted in its petition or of which the staff is otherwise aware constitutes significant new information which would require preparation of a supplemental EIS in accordance with 10 CFR 51.92.

CONCLUSION

We have reviewed the information submitted by CASH in its petition. For the reasons discussed above, I have concluded that no basis exists for initiation of a show cause proceeding pursuant to 10 CFR 2.202 or for withholding of the operating license. Consequently, CASH's request is denied.



A copy of this decision will be filed with the Secretary for the Commission's review in accordance with 10 CFR 2.206(c).



Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland
this 15th day of October, 1986