

PDR



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

March 15, 1990

The Honorable Peter H. Kostmayer  
Chairman, Subcommittee on General  
Oversight and Investigations  
Committee on Interior and Insular  
Affairs  
United States House of Representatives  
Washington, D.C. 20515

Dear Mr. Chairman:

I am responding to your letter of March 7, 1990, in which you enclosed questions concerning defects in weld radiographs at Seabrook. The staff's responses to those questions are enclosed. As you will note, the Nuclear Regulatory Commission (NRC) was aware of the concerns regarding the adequacy of weld radiographs early in the construction process and conducted numerous inspections of welding, nondestructive examination, and the licensee's quality assurance program. The results of this licensing inspection process supported the staff's recommendation that Seabrook could be operated safely.

I trust this reply responds to your concern.

Sincerely,

*Kenneth M. Carr*  
Kenneth M. Carr

Enclosures:  
As stated

cc: Rep. Barbara Vucanovich

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RESPONSES TO CHAIRMAN KOSTMAYER'S QUESTIONS

- I. Seabrook IR 90-80 (p.92) states that "... as documented in CAT IR 84-07 and discussed in IR 85-31; the licensee conducted an independent third party review of all RT film stored onsite, whether provided by vendors or shot by site contractors."

QUESTION A. What findings or other events precipitated the review of radiographs referred to on page 92 of Seabrook IR 90-80?

ANSWER.

The licensee had routinely performed independent radiographic reviews of their contractors' work as an overview of construction. During the review of Pullman-Higgins radiography in the winter of 1983, it was determined that film quality was not meeting the ASME Code requirements and Yankee Atomic Electric Company's (YAEC's) expectations. The licensee issued Deficiency Report DR. 527, dated December 7, 1983, which identified multiple code violations, and requested Pullman-Higgins to provide corrective actions. Subsequent to the Deficiency Report, YAEC performed another review of radiographic film from Pullman-Higgins and rejected nearly 50% because of film quality, rather than weld quality, conditions. The licensee issued another Deficiency Report DR.574, dated February 9, 1984, that requested additional specific corrective actions from Pullman-Higgins. Subsequent to these findings, the licensee developed and implemented, through Quality Engineering Group (QEG) NDE Review Group procedure #5-Rev.0, May 14, 1984, a program of review of all safety related radiographic film.

QUESTION B.

Did employees of the licensee or its contractors prepare a nonconformance report that stated that such a review would constitute a corrective action resulting from deficiencies identified in the course of reviews by the licensee and/or its contractors? If so, what nonconformance reports led to this review?

ANSWER.

See question I.A. above.

QUESTION C. If no specific nonconformance report resulted in the radiograph review, what group of nonconformance or deficiency reports led to this review?

ANSWER.

See answer to question I.A.



QUESTION D.

What is the name of the entity that conducted the third party review of all RT film stored onsite, whether provided by vendors or shot by site contractors? How many person-months were expended upon this review? On what date was the review initiated? On what date was it completed?

ANSWER.

The Yankee Atomic Electric Company QEG NDE Review Group performed the 100% radiographic review. The review of contractor film was an ongoing, informal process before the issuance of the previously mentioned deficiency reports. Subsequently, the licensee adopted a procedure to formalize the process on May 14, 1984 (QEG NDE Review Group procedure #5-Rev.0), and added more film interpreters to their staff to cope with the quantities of film being generated and reviewed. The review effort extended essentially from January 1984 until January 1986 and involved 5 full time radiograph reviewers. This effort equates to approximately 9.75 person-years. These dates and level of effort values are conservative estimates based on the licensee employees' individual memories of the events.

QUESTION E. With regard to the licensee's third party review of all RT film stored onsite, whether provided by vendors or shot by site contractors, what did the report on this review state to be its purpose, objective, findings and conclusions?

ANSWER.

There was no formal report generated as this was an ongoing activity over an extended period of time to review and accept each weld radiograph. As film was identified that did not meet the requirements, it was returned to the contractor for corrective action. This activity was essentially an integral part of the construction process as systems could not be released for startup until the radiographic review was completed and approved.

QUESTION F. Please provide a copy of those portions of Seabrook IR 84-07 which the staff believes documents the licensee's third party review of all RT film stored onsite, whether provided by vendors or shot by site contractors.

ANSWER.

The program and procedure described in the answer to question I.A. and I.D. above were in place and in use at the time of the Construction Appraisal Team (CAT) inspection documented in Inspection Report 50-443/84-07. Section V of that report discusses the "Welding and Nondestructive Examination" inspection results. One paragraph from this section of the report is quoted below:

"During the inspection of NDE activities, the NRC Construction Appraisal Team (CAT) inspectors reviewed samples of radiographic film in final storage in the vault. The NRC CAT inspectors reviewed a sample of film which was reviewed by the applicant's NDE organization as well as film which had not been reviewed prior to vault storage. No significant problems were identified involving film that was reviewed by the applicant's NDE organization. However, several irregularities were identified involving film that had not been reviewed by the applicant..."

If the film in which the irregularities were identified by the CAT inspectors had been final accepted radiographs, enforcement actions would have been pursued. Instead, the CAT inspectors recognized that the licensee's program required the noted YAEC review of all safety related vendor and site generated radiographs. In documenting the difference between the radiographic film which had been reviewed by the applicant and that which had not, the CAT inspectors specifically highlighted the fact that the radiographic review process would have represented a regulatory concern had it not been for the applicant's review process. Hence, this area of inspection was not listed as one where either potential enforcement actions or significant weaknesses were identified.

QUESTION G.

With respect to the third party NDE review, the report of inspection 85-31, conducted October 21 thru December 6, 1985 states:

The inspector discussed the licensee's third party review of nondestructive examinations for different fabricators onsite and also the licensee program for review of radiographic film for vendor supplied welds. The third party review involved a random selection of welds inspected by liquid penetrant, magnetic particle and radiography. The licensee implemented this program until approximately April 1984 when it was discontinued because additional problems were not being found and very little activity requiring NDE remained to be completed.

The inspector also reviewed the results of the licensee's overview of radiographic film for vendor supplied welds. To date, the licensee has performed an overview of virtually all vendor supplied radiographic film. Where problems were found, such as geometric unsharpness failing to meet the ASME Code, radiography was reperformed onsite and repairs were made, if necessary.

The inspector found all areas of review acceptable. No violations were identified.



1. Why was the foregoing discussion of the third party review not included in the report of CAT inspection 84-07, conducted in May 1984?

ANSWER.

The scope of the CAT inspection as defined in CAT Inspection Report 50-443/84-07 was ". . . to evaluate the adequacy of construction at the Seabrook Station. This objective was accomplished through review of the construction program and selected portions of the quality assurance program, with emphasis on the installed hardware." The context of the report makes it clear that the welding and nondestructive examination inspection effort was focused on the examination of hardware and radiographic film rather than a programmatic review. Therefore, the third party review was not discussed in this report.

As stated in Inspection Report 50-443/85-31, the third party reverification was no longer active. It should also be noted that in the same section of the report quoted in your question, the resident inspector discusses two distinct programs: (1) the licensee's third party review of nondestructive examinations for different fabricators on site and also (2) the licensee's program for review of radiographic film for vendor supplied welds, the 100% review program. The distinction between program (1) and (2) was that although both included the review of radiographic film, program (1) also entailed the performance of informational NDE under the direction of the licensee on a random selection of welds. This additional NDE, which also included liquid penetrant and magnetic

particle examinations, was for "information only" for the licensee to determine the adequacy of their contractors' NDE operations.

As stated in the quote, the licensee implemented this program until approximately April 1984, when it was discontinued because additional problems were not being found and very little activity requiring NDE remained to be completed. It is noted that the 100% review of all safety related radiographs continued well past April 1984 until all radiographic packages were turned over to the licensee and reviewed. Since the CAT inspection commenced in late April 1984, it is probable that the program of informational NDE was no longer being performed by the licensee when the CAT inspection was conducted. However, the review of radiographic film was still in progress, and was addressed by the CAT inspection report.

2. With respect to the foregoing statement from 85-31:

- a. What specific "problems were found?"
- b. How many welds were re-radiographed?
- c. How many weld repairs were made and what was the nature of any such repairs.

ANSWER.

The quoted excerpt from Inspection Report 50-443/85-31 covered inspection effort at a time (late 1985) when the licensee's program for radiographic film review was coming to an end since systems had been acceptably turned over to the licensee's startup organization for the conduct of hot functional testing (HFT) in November 1985. The overall purpose of the quoted inspection report section was to document the NRC's inspection and cognizance of selected licensee construction program controls as the construction process was ending and preoperational testing was becoming the primary activity.

Specific answers to questions a, b, and c are not readily available without a resource intensive search of the licensee's records. The central issue of whether quality welds were produced by the construction process can be addressed without such a search.

The number of welds re-radiographed and the number of weld repairs is not important to safety as long as the final radiographs are quality records and the welds, whether original or repaired welds, meet the applicable code and Commission requirements. It is mandatory that the licensee apply the necessary effort and resources to satisfactorily meet the requirement. The NRC verified, through the process and efforts described in preceding answers, that this was done. Absent new, specific, and significant allegations in this area, investment of resources in such an effort is not warranted.



QUESTION H. While IR 90-80, citing IR 84-07 and 85-31, implies that all radiographs of safety-related welds, including the Pullman-Higgins radiographs, were reviewed by an independent third party, it is unclear from the text of IR 84-07 and IR 85-31 that all such radiographs were in fact reviewed by the independent third party. Is it the NRC staff position that all such radiographs were reviewed by the independent third party? If so, what is the specific text in an inspection report upon which the NRC staff bases this position?

ANSWER.

Inspection Report 50-443/85-31 does state that, "to date, the licensee has performed an overview of virtually all vendor supplied radiographic film." This was consistent with the program that was inspected by the NRC in both inspection reports. It was known by the NRC staff, if not explicitly stated, that the YAEC NDE Review Group program required all safety related radiographs to be reviewed.

All safety-related vendor and site-generated radiographs, which would include those provided by Pullman-Higgins, were reviewed by the Yankee Atomic Electric Company NDE Review Group in accordance with Quality Engineering Group (QEG) NDE Review Group procedure #5-Rev.0, May 14, 1984. YAEC had the responsibility for the development, execution, and administration of the quality assurance program at Seabrook Station during the construction phase. The YAEC review of radiographs is considered to be a third party NDE review in the sense that this



evaluation of the radiographs was redundant and went beyond ASME Code and regulatory requirements, and the personnel performing the review were independent of the Pullman-Higgins radiographic process.

Responses to questions F and G.1 above explain the text in both Inspection Reports 50-443/84-07 and 85-31 from the standpoint of the consistency of report statements on radiographic review. There is no inconsistency in the separate report discussions, but it should be noted that the inspections upon which those report sections were based were accomplished by different organizational entities within the NRC for different purposes. This concept is consistent with the NRC inspection program to provide for different groups of "inspection eyes" viewing the same general inspection area.

QUESTION 11. Please provide an enumeration of nuclear reactor projects wherein the first review by a Level III examiner (employed by a major welding entity on the site such as Pullman-Higgins at Seabrook) resulted in a 20% reject rate.

ANSWER.

The NRC does not retain records of this nature for completed construction facilities. The basis for the staff's statement that the 20% rejection rate was not unusual was consultation with a Level III examiner in NRC Region I and the known past performance history of the Seabrook site (see chart attached to answer to question VI). Consistent with Chairman Carr's commitment at the March 14, 1990 hearing, the staff will try to obtain more specific data on rejection rates at other nuclear reactor projects.

QUESTION III. The February 28 memorandum from Mr. Russell to Mr. Murley states in Item 4, that:

On January 12, 1984, the examiner [i.e. Wampler] was advised... that the completion of those NCR's would be reviewed during routine NRC inspection.

Was a review of Wampler's 16 incomplete NCRs conducted? If not, why not? Why did Seabrook IR 83-22 not mention the 16 incomplete NCRs which NRC officials, during the period covered by IR 83-22, had stated would be the subject of review?

ANSWER.

In a letter from Region I dated January 12, 1984, Mr. Wampler was informed that:

"Your additional concern regarding the completion of approximately 16 nonconformance reports that were in preparation at the time of your termination will be reviewed by this office during a routine NRC Region I inspection at the Seabrook site."

It was the staff's intent to review his concern regarding the tracking and closure process for incomplete work remaining when he left. The inspector examined two nonconformance reports that Mr. Wampler had previously written along with other inprocess records to ensure that the turnover process was

properly controlled and nothing had been overlooked. Mr. Wampler had made no allegation of wrongdoing to the NRC regarding the radiographic process. In fact, the NRC has never received an allegation from Mr. Wampler regarding adequacy of the radiographic process or installed equipment. The inspector concluded from his review that Mr. Wampler's concerns were adequately addressed.

The reason for not mentioning 16 nonconformance reports in the NRC's inspection report or anything that might implicate Mr. Wampler was the fact that he requested that NRC not notify Pullman-Higgins of his contact with the NRC. This is documented in the inspector's telephone report of January 5, 1984. Further, it is not NRC policy to use individuals' names or unnecessarily expose them during inspections. The inspection was performed as though the staff were concerned about the details of the turnover process and continuity between Level III examiners.



QUESTION IV. The February 28 memorandum from Mr. Russell to Mr. Murley states in Item 4 that Seabrook IR 83-22 had "documented acceptable completion of the last two NCRs generated by the examiner." This appears to be a reference to Wampler's last two nonconformance reports, NCR 5689 and NCR 5773. Inspection Report 83-22 stated that these two NCRs "initiated by the departed Level III had been properly tracked and were already dispositioned." The discussion of NRC (sic) 5689 and NRC (sic) 5773 in Item 4 and IR 83-22 gives rise to the following questions:

QUESTION A. What deficiencies were described in NCR 5689 and NCR 5773?

ANSWER.

Nonconformance Report No. 5689 discusses the lack of a hold point for final radiography on the weld process sheet causing the radiography to be performed out of sequence, prior to liquid penetrant testing rather than after.

Nonconformance Report No. 5773 discusses a weld defect in a field weld.



QUESTION B. What was the root cause of the deficiencies described in NCR 5689 and NCR 5773?

ANSWER.

The stated cause for Nonconformance Report No. 5689 was " QA Process, ANI, and QA Records oversight." The stated cause for Nonconformance Report No. 5773 was " Inadequate review by NDE personnel."

QUESTION C. What corrective actions were specified to remedy the deficiencies described in NCR 5689 and NCR 5773?

ANSWER.

The stated disposition of Nonconformance Report No. 5689 was to "Accept as-is. The repair was radiographed and accepted on 1-24-83. Use this shot as an acceptable final RT." The stated disposition of Nonconformance Report No. 5773 was to " Repair and rehydro F0102."

QUESTION D. What did Item 4 in the February 28 memorandum mean when it stated that IR 83-22 had "documented acceptable completion of the last two NCR's generated by the examiner?"

ANSWER.

The statement means that, when the inspector reviewed the status of the non-conformance reports, the reports had been processed and dispositioned in accordance with the licensee's program for nonconformance reports and that the corrective actions had been specified by engineering and accepted by quality assurance.

QUESTION E. What did IR 83-22 mean when it stated that NCR 5689 and NCR 5773  
"had been properly tracked and were already dispositioned?"

ANSWER.

This question appears to be the same as question IV.D. above.



QUESTION V.

To date, we have been provided no evidence that the review, which NRC staff said would be conducted, of Wampler's 16 incomplete NCRs was ever conducted. If this review was not conducted, do NRC officials know the substance of the deficiencies described in Mr. Wampler's 16 not-completed nonconformance reports? If so, what is the substance of the deficiencies described in these 16 NCR's? If not, what is the basis for the implication in Mr. Russell's February 28 memorandum to the effect that deficiencies identified by Mr. Wampler had been corrected?

ANSWER.

As stated in the Response to question III above, the NRC's review was limited to confirming that inprocess issues of concern continued to be tracked to resolution. The staff understood Mr. Wampler's concern to be limited to his lack of knowledge of the "handling" of the inprocess reports he was processing at the time of his termination. The NRC normal inspection practice is to perform audits of the licensee's programs and processes, not to do 100% inspection.

The NRC staff currently believes that Mr. Wampler was, in fact, not writing nonconformance reports but was engaged in writing repair orders. A repair order would be the normal document to be executed by the NDE radiographic reviewers for a problem that did not warrant extensive repairs beyond the normal welding procedure or was discovered during in-process nondestructive examination. Pullman Power Products procedure JS-IX-14, section 3.3, states that



"Unacceptable conditions identified through application of a required NDE method shall be reported by the NDE Technician to the NDE Supervisor, or his designee, on a Repair Order. ... The NDE supervisor will forward the Repair Order to the QAE Welding." Only certain specified conditions, which are clearly specified by the subject procedure, would warrant a nonconformance report being issued.

A nonconformance report log search by the licensee has disclose only 3 non-conformance reports written by Mr. Wampler during the approximately 4 months he was employed at the Seabrook Station. This is consistent with the foregoing discussion regarding the procedure for recording deficiencies that did not warrant nonconformance reports. Repair orders were not considered permanent plant documents and are not retained in the licensee's quality record files. However, the activity which the repair order initiated is recorded in other permanent plant quality documents that are retained with the individual weld packages.

QUESTION VI. Mr. Russell's February 28, 1990 memorandum leaves the impression that NRC staff have (sic) confidence that Mr. Wampler's findings regarding radiographs and /or welds had been recognized and the deficiencies implicit therein corrected. This confidence, we infer, was derived from a series of inspections. Yet, the various inspection reports provided to date (e.g. 82-06, 83-22, 84-07 and 90-80), as far as we can tell, do not even recognize that problems of the magnitude described by Wampler even occurred; nor do these reports contain sufficient documentation to enable an independent reviewer to determine the qualitative and quantitative nature of deficiencies in activities carried out by the contractor responsible for a significant portion of the safety-related welding a (sic) Seabrook. What then is the basis for NRC management and/or the Commission to make a finding that safety-related welding activities at Seabrook were conducted in accord with the Commission's regulations?

ANSWER.

Although the cited inspection reports do not explicitly discuss the details of the Wampler issue, they do demonstrate that the NRC was inspecting these problem areas and following the licensee's efforts to correct the problem. The Seabrook Station weld reject rate was known to be high since the early 1980's. The NRC SALP Report for the January 1 through December 31, 1980, period, Section 6, discussed the fact that the "unusually high weld radiographic reject rates at Seabrook have generated licensee action to improve the union-run, site-supported,

pipe welding school. "Subsequently, the June 21- July 2, 1982, NRC Inspection Report 50-443/82-06, paragraph 6.3.8, noted :

"Remedial Actions to Mitigate Welding Defects

"The NRC inspector reviewed the methods currently being employed by P-H and UE&C to evaluate and minimize welding defects. Records are currently kept and continuously updated of X-ray reject rate percentages and totals for each welder. Specific welder defect trends are recorded (where applicable) to indicate what types of defects are being produced by specific welders. This information is used to assist welding foremen and welding engineers in providing on-the-job additional instruction and to point out specific techniques which need more training. Both paid and unpaid additional training for welder upgrading is available at the site. Monthly Welder Training Upgrade Summary Sheets were reviewed by the inspector.

"An overtime hours assignment program based on radiographic quality records, previously discussed, provides incentives for welders to produce better quality and to take advantage of training and upgrading programs.

"Conclusion

"This is considered a program strength."



The licensee's construction manager, United Engineers and Constructors, was trending the performance of Pullman-Higgins welding reject rate and encouraging improved performance. In memoranda during the period of January through May, 1983, they introduced a monetary incentive program that would pay P-H for meeting set reject rate goals. The reject rate goal was set at 18% which is clearly an improvement over the past performance reject rates of nearly 40% (see attachment). Thus, a reject rate of 20% was not alarming to the resident inspector when advised in 1986 of Mr. Wampler's testimony before DOL.

There were several factors which were believed to be contributors to the high radiographic reject rates. In recent discussions with the previous UE&C welding superintendent and the Pullman-Higgins quality assurance manager, it was disclosed that the pool of qualified welders in the immediate area was not adequate to support the construction demand. For example, during the construction of the Salem nuclear power plant, the contractor could draw on the nearby ship-yards and petro-chemical industries for experienced welders. A similar pool of experienced welders was very limited in the Seabrook area. Also, the housing for these welders was limited and became more critical during the tourist summer months. The UE&C welding superintendent further stated that a poll of other nuclear construction sites at that time indicated similar initial weld radiograph reject rates in the 16% to 20% range.

The licensee attempted to ameliorate the lack of experienced welders by providing an off-site welding school and establishing welder testing facilities at remote locations such as Terre Haute, Indiana; Pasco, Washington; and other locations.



NRC inspections throughout this period verified that, although the weld radiograph reject rate was high, the quality of the final and installed components was good. This was noted in the NRC SALP, dated February 19, 1985: "It is noted, however, that with regard to completed and finally inspected hardware, very few problems were identified. In fact, in the welding and NDE areas, independent examinations by NRC inspectors revealed generally high quality work and effective licensee overview of the final radiographic film packages."

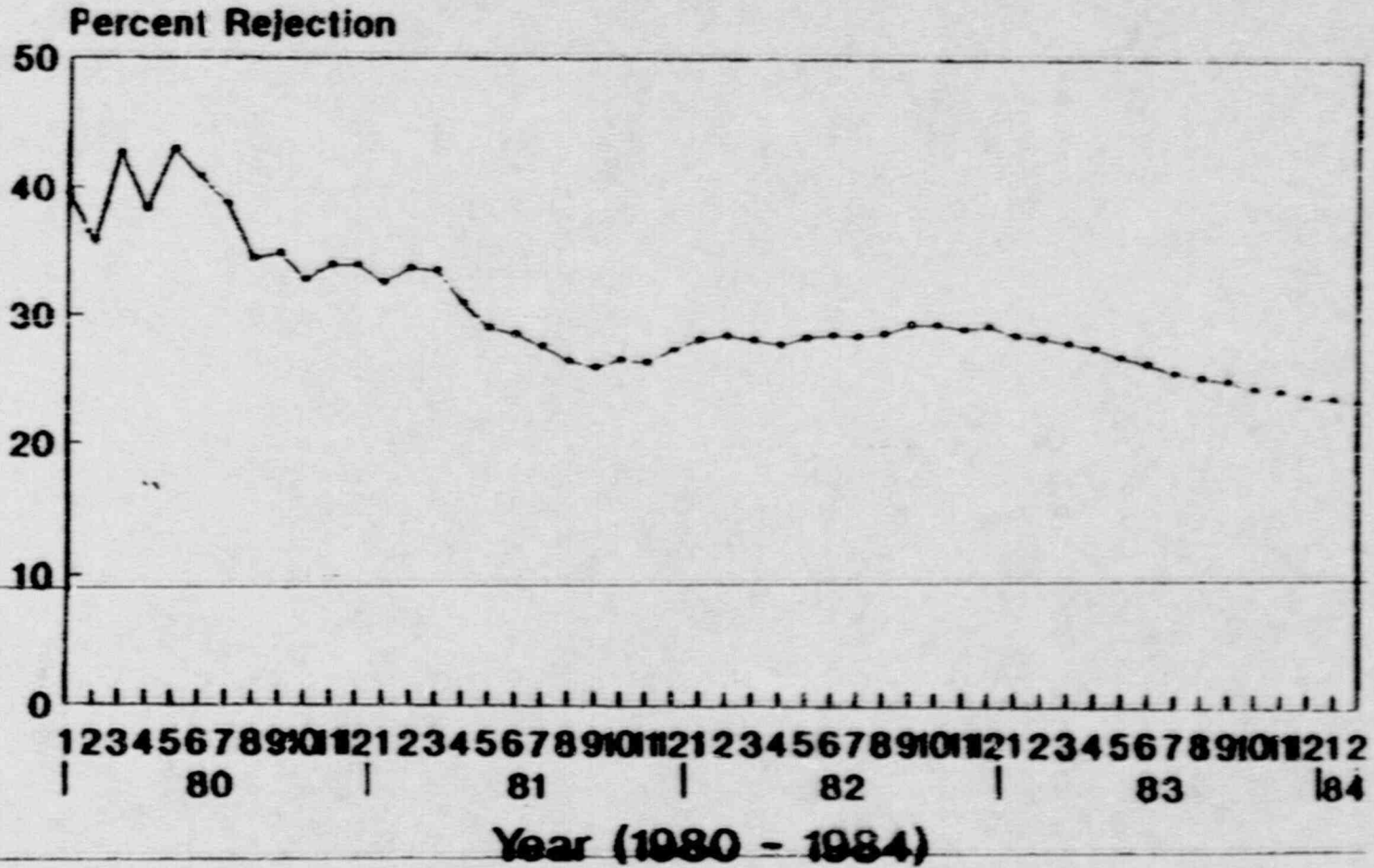
Lastly, the NRC knew that the licensee's ASME Code fabrication and installation program required adequate process and documentation controls to ensure the systems were properly designed, fabricated, and installed. The mechanism for assuring this was the document control program and the N-5 Code Data Report.

The N-5 Code Data Report program required that, after pressure testing of the ASME code class piping systems, the "NA" installer (P-H) prepare a partial N-5 report. This activity was described and controlled in accordance with the P-H quality assurance procedure, "Preparation of Code Data Reports and Control of Application of Code Stamps." The execution of the code data report certified that all material, installation, inspections, and testing were performed in conformance with the rules of construction of ASME Section III of the code. Prior to the execution of the N-5 report, a Joint Quality Assurance and Engineering review of the completed piping system installation and a final documentation review were performed. These reviews were performed over and above the routine 100% documentation control reviews performed by the

contractors and the licensee before system turnover to ensure all required activities were completed, including any radiography. During these reviews, any missing radiography would be detected and either a search initiated for the original radiograph, the welds would be re-radiographed, or an engineering disposition processed.

In summary, the NRC based its decision to recommend issuance of the license on its knowledge that the overall nuclear construction program is composed of multiple layers of safeguards that preclude or minimize the extent to which any one deficiency can subvert the safety of the facility. The radiographic review process comprises only a very limited part of the integrated program to ensure system operability. In recognition that quality of safety related welds at Seabrook involved subcontractor weld examination and repair as necessary, limited third party independent examination, 100% safety related weld record review by the licensee, selected critical code weld record reviews by the authorized nuclear inspector, independent NRC examination of selected welds, and independent NRC review of selected weld records by many NRC inspectors, we have concluded that safety related welding at Seabrook is adequate to support full power licensing. Mr. Wampler's in-process findings were valuable inputs to the welding quality assurance program and do not now raise new concerns for the integrity of the systems.

# Seabrook Station Radiograph Reject Rate





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March 7, 1990

Honorable Kenneth Carr  
 Chairman  
 United States Nuclear Regulatory Commission  
 Washington, D.C. 20555

Dear Mr. Chairman:

I am writing about questions raised by Mr. Joseph D. Wampler concerning defects in radiographs of welds at the Seabrook site. Information provided the Subcommittee to date on this matter engenders the following additional questions.

- I. Seabrook IR 90-80 (p. 92) states that "... as documented in CAT IR 84-07 and discussed in IR 85-31; the licensee conducted an independent third party review of all RT film stored onsite, whether provided by vendors or shot by site contractors."
  - A. What findings or other events precipitated the review of radiographs referred to on page 92 of Seabrook IR 90-80?
  - B. Did employees of the licensee or its contractors prepare a nonconformance report that stated that such a review would constitute a corrective action resulting from deficiencies identified in the course of reviews by the licensee and/or its contractors? If so, what nonconformance report led to this review?
  - C. If no specific nonconformance report resulted in the radiograph review, what group of nonconformance or deficiency reports led to this review?
  - D. What is the name of the entity that conducted the third party review of all RT film stored onsite, whether provided by vendors or shot by site contractors? How many person-months were expended upon this review? On what date was the review initiated? On what date was it completed?

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- E. With regard to the licensee's third party review of all RT film stored onsite, whether provided by vendors or shot by site contractors, what did the report on this review state to be its purpose, objective, findings and conclusions?
- F. Please provide a copy of those portions of Seabrook IR 84-07 which the staff believes documents the licensee's third party review of all RT film stored onsite, whether provided by vendors or shot by site contractors.
- G. With respect to the third party NDE review, the report of inspection 35-31, conducted October 21 thru December 6, 1985 states:

The inspector discussed the licensee's third party review of nondestructive examinations for different fabricators onsite and also the licensee program for review of radiographic film for vendor supplied welds. The third party review involved a random selection of welds inspected by liquid penetrant, magnetic particle and radiography. The licensee implemented this program until approximately April 1984 when it was discontinued because additional problems were not being found and very little activity requiring NDE remained to be completed.

The inspector also reviewed the results of the licensee's overview of radiographic film for vendor supplied welds. To date, the licensee has performed an overview of virtually all vendor supplied radiographic film. Where problems were found, such as geometric unsharpness failing to meet the ASME Code, radiography was reperformed onsite and repairs were made, if necessary.

The inspector found all areas of review acceptable. No violations were identified.

- 1. Why was the foregoing discussion of the third party review not included in the report of CAT inspection 84-07, conducted in May 1984?
- 2. With respect to the foregoing statement from 85-31:
  - a. what specific "problems were found?"
  - b. how many welds were re-radiographed?
  - c. how many weld repairs were made and what was the nature of any such repairs?

H. While IR 90-80, citing IR 84-07 and 85-31, implies that all radiographs of safety-related welds, including the Pullman-Higgins radiographs, were reviewed by an independent third party, it is unclear from the text of IR 84-07 and IR 85-31 that all such radiographs were in fact reviewed by the third party. Is it the NRC staff position that all such radiographs were reviewed by the independent third party? If so, what is the specific text in an inspection report upon which the NRC staff bases this position?

II. Please provide an enumeration of nuclear reactor projects wherein the first review by a Level III examiner (employed by a major welding entity on the site such as Pullman-Higgins at Seabrook) resulted in a 20% reject rate.

III. The February 28 memorandum from Mr. Russell to Mr. Murley states in Item 4, that:

On January 12, 1984, the examiner [i.e. Wampler] was advised ... that the completion of those NCRs would be reviewed during routine NRC inspection.

Was a review of Wampler's 16 incomplete NCRs conducted? If not, why not? Why did Seabrook IR 83-22 not mention the 16 incomplete NCRs which NRC officials, during the period covered by IR 83-22, had stated would be the subject of review?

IV. The February 28 memorandum from Mr. Russell to Mr. Murley states in Item 4 that Seabrook IR 83-22 had "documented acceptable completion of the last two NCRs generated by the examiner." This appears to be a reference to Wampler's last two nonconformance reports, NCR 5689 and NCR 5773. Inspection Report 83-22 stated that these two NCRs "initiated by the departed Level III had been properly tracked and were already dispositioned." The discussion of NCR 5689 and NCR 5773 in Item 4 and IR 83-22 gives rise to the following questions:

- A. What deficiencies were described in NCR 5689 and NCR 5773?
- B. What was the root cause of the deficiencies described in NCR 5689 and NCR 5773?
- C. What corrective actions were specified to remedy the deficiencies described in NCR 5689 and NCR 5773?
- D. What did Item 4 in the February 28 memorandum mean when it stated that IR 83-22 had "documented acceptable completion of the last two NCRs generated by the examiner?"

- E. What did IR 83-22 mean when it stated that NCR 5689 and NCR 5773 "had been properly tracked and were already dispositioned?"
- V. To date, we have been provided no evidence that the review, which NRC staff said would be conducted, of Wampler's 16 incomplete NCRs was ever conducted. If this review was not conducted, do NRC officials know the substance of the deficiencies described in Mr. Wampler's 16 not-completed nonconformance reports? If so, what is the substance of the deficiencies described in these 16 NCRs? If not, what is the basis for the implication in Mr. Russell's February 28 memorandum to the effect that deficiencies identified by Mr. Wampler had been corrected?
- VI. Mr. Russell's February 28, 1990 memorandum leaves the impression that NRC staff have confidence that Mr. Wampler's findings regarding radiographs and/or welds had been recognized and the deficiencies implicit therein corrected. This confidence, we infer, was derived from a series of inspections. Yet, the various inspection reports provided us to date (e.g. 82-06, 83-22, 84-07 and 90-80), as far as we can tell, do not even recognize that problems of the magnitude described by Wampler even occurred; nor do these reports contain sufficient documentation to enable an independent reviewer to determine the qualitative and quantitative nature of deficiencies in activities carried out by the contractor responsible for a significant portion of the safety-related welding at Seabrook. What then is the basis for NRC management and/or the Commission to make a finding that safety-related welding activities at Seabrook were conducted in accord with the Commission's regulations?

I have been informed that NRC staff is seeking to interview Mr. Wampler on or about March 13. I would assume that, prior to any such interview, the NRC interviewers would wish to be fully informed on this matter and would, therefore, have in hand the information requested in this letter. I would also assume that the Commission had this information prior to making its decision to allow the Seabrook reactor to operate at full power.

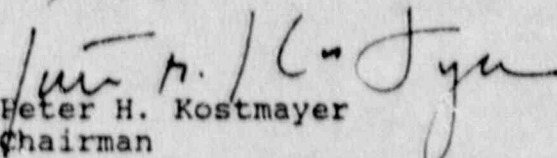
The Commission's basis for finding that safety-related welds at Seabrook complied with NRC regulations will be one of the issues addressed at the Subcommittee's March 14 hearing on the Seabrook project. Accordingly, I would appreciate your providing prior to March 13, 1990 the answers to the foregoing questions. To provide the answers prior to March 13 should require no substantive effort



since, as I have indicated in the preceding paragraph, the Commission presumably possessed the requested information before authorizing full power operation.

Thank you.

Sincerely,

  
Peter H. Kostmayer  
Chairman  
Subcommittee on General  
Oversight and Investigations