

ENCLOSURE 3

STAFF RESPONSE TO THE OIG REPORT

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

March 27, 1992

MEMORANDUM FOR: The Chairman  
Commissioner Rogers  
Commissioner Curtiss  
Commissioner Remick  
Commissioner de Planque

FROM: James M. Taylor  
Executive Director for Operations

SUBJECT: SEABROOK - THE STAFF'S REVIEW OF THE OFFICE OF THE  
INSPECTOR GENERAL (OIG) REPORT 90-31H - "REVIEW OF  
THE NRC STAFF'S RESPONSES TO CONGRESSIONAL INQUIRIES  
REGARDING JOSEPH WAMPLER AND THE WELDING PROGRAM AT  
SEABROOK NUCLEAR STATION"

In a November 21, 1991, memorandum to the staff (COMIS-91-015), the Commission directed that the staff review the OIG report 90-31H for lessons learned and proposed corrective actions.

On February 12, I transmitted preliminary comments based on the OIG findings. On March 6, 1992, senior staff met with representatives of the Office of the Inspector General. As a result of these discussions, clarifying changes were made to the preliminary responses to ensure that the response could not be misconstrued. Enclosure 1 provides our final response to the OIG findings, as requested in the Commission's November 21, 1991, memorandum to the staff. A transcript of the March 6, 1992 meeting is provided as Enclosure 2.

In summary, the staff agrees with almost all the findings in the OIG report which involve actions by the NRC technical staff (Findings I.1, I.2, I.3, I.4 and I.5; III A.1, II A.2, III A.3, III B.1, and III B.2; IV; V.1, V.2, V.3 and VI). The enclosure contains extensive discussions concerning the circumstances contributing to staff errors or inaccuracies. The response to the remainder of the OIG report findings (II.1, II.2, and II.3) involved a coordinated effort of the technical staff and the Office of General Counsel (OGC). With regard to findings II.1, II.2, and II.3, the staff and OGC agree that there should have been better internal coordination by both OGC and the staff between the preparation of the letter to Mr. Wampler and the preparation of the response to Senator Kennedy and that OGC reviewers should also have reviewed the transcript of the Department of Labor proceeding involving Mr. Wampler.

It is clear from the findings of the OIG report that significant lessons can be learned from this experience. The following are current actions being taken by the staff:

Enclosure 3

1. NRC management will better ensure that NRC construction inspection reports contain adequate as well as accurate information. They should provide a "stand alone" description of significant NRC activities and issues raised and resolved during construction. Should issues arise after construction, this will ensure that there is an accurate record of NRC actions and findings. Revised guidance will be issued to the staff by July 1, 1992.
2. The procedure for concurrence will be strengthened to better ensure the accuracy of NRC documents. The revised procedure will be issued by April 3, 1992.
3. The staff, to the maximum extent possible, will take the time needed to ensure its responses to questions pertaining to safety matters are clear and accurate.
4. In addition, as a result of the staff's post-licensing review activities at Seabrook as discussed in my October 4, 1991, report to the Commission, we will take steps to strengthen our construction inspection program for future plants. We also plan to provide improved continuity of the NRC presence on site during construction to assure that important activities are adequately covered and that knowledge of these activities is better retained within the agency.
5. Further, in recent meetings with agency senior managers I have reemphasized their responsibilities and the responsibility of those they manage to assure that the information they provide to the Commission and Congress is not only timely and accurate, but also clear and wherever possible traceable to documented sources. When such documentation is not available, it is better to take the time to develop full responses rather than address detailed questions incompletely.
6. The staff will assure that documents important to regulatory decisions will have appropriate legal review.

With regard to this matter, the staff considers it important to emphasize several points related to the OIG report and the exchange of correspondence with the Commission and with Congress which were the subject of the OIG investigation.

1. The OIG report finding I.5 states that, "This investigation developed no information to indicate that the Region I assessment was an attempt to mislead the Congress by providing false or inaccurate information." Further, in discussions with the EDO on February 3 and 7, 1992, the Inspector General stated that the OIG had developed no evidence of intent by the staff to mislead the Commission or the Congress.
2. With the information available to the Commission on 3/1/90, reasonable assurance of the protection of public health and safety was available. This has been confirmed by 2 years of subsequent extensive effort by the staff and licensee. Seabrook was properly licensed - there were no significant remaining safety issues.

3. With regard to the February 28, 1990, memorandum from Region I, which was provided to the Commission and which was investigated by the IG, the staff notes that this memorandum was in response to late-filed allegations and was prepared by the staff in a period of about 24 hours. This expedited review was in accordance with NRC procedures (NRC-0517-059). As noted in the February 28, 1990, memorandum, this review reported that the late-filed allegations "raised no new safety issue." This memorandum further noted that "we have not had time to develop detailed answers to the contained 15 questions (in Senator Kennedy's letter) and currently lack complete knowledge of answers to who knew what when, ..." It further noted that the allegations reveal "no new safety issue that has not been previously reviewed and resolved, or that is material to the full power licensing of Seabrook." The Commission was scheduled and did conduct a meeting on the Seabrook full power license the next day, March 1, 1990.
4. Finally, extensive followup on the Seabrook welding issues was provided to the Commission in staff memoranda dated October 4 and November 1, 1991. These memoranda, encompassing the results of both licensee reviews and NRC inspections, affirmed that at the time of licensing, no safety problems existed in pipe field welds at Seabrook.

Original Signed By:

James M. Taylor

James M. Taylor  
Executive Director  
for Operations

Enclosures:

1. Final Staff Response to OIG  
Report 90-31H
2. March 6, 1992 Transcript

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OGC OCA

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STAFF RESPONSE  
TO  
OIG REPORT 90-31H



## I. The 20% Reject Rate of Weld Radiographs

### FINDING I.1

The OIG investigation was unable to determine who wrote the statement, "Our assessment is that a 20% reject rate of radiographs during the first review by a Level III examiner is not unusual." The lack of knowledge within Region I concerning who wrote the statement is indicative of a vulnerability in the review and concurrence process for the RUSSELL memorandum.

### RESPONSE

The quotation in this finding was contained in a memorandum of February 28, 1990 from William T. Russell to Dr. Thomas E. Murley and was not intended to be the basis for a final response to Senator Kennedy's initial set of questions and concerns. The memorandum dealt with late-filed allegations. NRC Manual Chapter (MC) 0517 "Management of Allegations" provides the method for dealing with late-filed allegations. The method includes a review of the late-filed allegations to determine whether the allegations, if true, are material to the licensing decision. If the NRC determines that an allegation is material to the licensing decision, it then determines if the information presented raises a matter not previously considered and determines its significance to safety.

At the time Senator Edward M. Kennedy submitted his allegations (February 27, 1990), the Director, Office of Nuclear Reactor Regulation, was reviewing the information from Region I regarding the status of the plant in preparation for a decision on a full power license for Seabrook in early March 1990. The staff handled these allegations in accordance with the NRC process for late-filed allegations and Region I was assigned to respond to these allegations. The February 28, 1990 memorandum from Russell to Murley states that with respect to these allegations "Senator Kennedy has raised no new safety issue that has not been previously reviewed and resolved, or that is material to the full power licensing of Seabrook." This memorandum further stated that Region I staff had "not had time to develop detailed answers to the contained (Senator Kennedy) 15 questions and currently lack complete knowledge of answers to who knew what when." The formal response to Senator Kennedy's letter was transmitted as an enclosure to a March 15, 1990 letter from the former Chairman, Kenneth Carr.

It is agreed that the individual who first authored the "not unusual" statement in the February 28, 1990 memo from Russell to Murley could not be identified. Despite the fact that the Region I staff is unable to identify the author of the subject statement, Mr. Thomas T. Martin, then Deputy Regional Administrator, who signed the memorandum which included the statement, was convinced the statement was accurate and takes full responsibility for the statement.

It needs to be emphasized that the primary purpose of the Russell memorandum was to address whether there was a safety issue that should delay proceeding with a licensing decision. The staff was confident that it had enough

information to render a judgment that no new safety issue had been raised that had not been previously reviewed and resolved. For example, the staff was familiar with the licensee's substantial review of the welding activities at Seabrook, results of in-service inspections, results of hydrostatic tests, and results of extensive NRC inspections. This allowed the staff to continue to conclude that no new issues material to the licensing of Seabrook were involved. Moreover, subsequent analysis of the radiographic review history at Seabrook has confirmed the stated assessment by Region I to be correct.

The OIG finding regarding the possibility of a flawed concurrence process for the Russell memorandum indicates that the NRC should emphasize to management and staff the need for diligence in preparing and concurring in documents. Consequently, the EDO will reexamine the current staff guidance on concurrence and revise it to provide greater assurance that staff documents are accurate.

## FINDING 1.2

The NRC officials who reviewed this statement provided the OIG with little factual support for their concurrence.

### RESPONSE

The staff presented to OIG their recollection of the facts supporting the concurrence of NRC officials who reviewed the statement that "Our assessment is that a 20% reject rate of radiographs during the first review by a Level III examiner is not unusual," as evidenced in the details of the OIG report. The NRC staff agrees that most of the factual support consisted of the staff's undocumented technical judgment.

The NRC officials who developed, reviewed, modified and finally concurred in the Russell memorandum developed confidence in its accuracy through discussions with knowledgeable members of the staff and through review of records and data which those staff members presented. In particular, Mr. Harry Kerch, the since-retired NRC nondestructive examination (NDE) Level III examiner who was responsible for the NRC's national mobile NDE Laboratory, asserted in his interview with the OIG that Wampler's 20% reject rate of radiographs was not unusual. This assessment, according to the OIG interview, was based upon Mr. Kerch's knowledge of the weld radiograph review history and reject rates at Seabrook, coupled with his experience with the welding programs at 95 other nuclear power plants at which he had conducted inspections.

Mr. Martin, the Deputy Regional Administrator, who signed the document for Mr. Russell (the latter did not participate in its development due to his absence), was actively involved in directing its development, assuring staff had a logical basis for various statements, and confirming that revisions did not invalidate previous concurrence. These steps to assure accuracy of various statements included a call to Mr. Antone Cerne, the former Senior Construction Resident Inspector for Seabrook, who was then on vacation.

Mr. Cerne's recollection is that Mr. Martin told him of the Russell memorandum written to respond to the Wampler issues and asked him a question regarding one section of the prepared memorandum. Neither Mr. Cerne nor Mr. Martin recall the question raised or the statement reviewed, but Mr. Cerne does recall expressing no negative comments to the statements questioned. Although the facts that Mr. Cerne recalled may not pertain to the specific statement in question, the fact that Mr. Martin called Mr. Cerne while on vacation to confirm certain factual statements illustrates the efforts to confirm or to clarify statements about which he had questions with knowledgeable staff members.



### FINDING I.3

The assumption made by Region I that WAMPLER'S review was the first NDE Level III review of the backlogged radiographs proved incorrect. Some of the radiographs were previously examined by a Level III.

### RESPONSE

The NRC staff agrees with this finding based on information now known by the staff. The specific section of the Russell memorandum that was investigated by the OIG in this regard follows:

Our assessment is that a 20% reject rate of radiographs during the first review by a Level III examiner is not unusual. The Level III NDE examiner review follows the preliminary, Level II review, and is much more thorough.

As documented in the OIG report on page 16, "the IRT [Independent Review Team] determined that some of the backlogged weld packages that Wampler reviewed had previously been examined by a Pullman-Higgins NDE Level III." This Level III review was generally not in addition to the Level II review quoted above in the Russell memorandum, but rather, in place of it. In other words, in some cases the initial Pullman-Higgins review of radiographs was performed by a person possessing Level III certification despite the fact that only Level II certification was required by the ASME Code to perform this function. Either a Level II or a Level III examiner may perform the acceptance function for weld radiographs and only one such review is required by the ASME Code. Thus, in all cases Mr. Wampler's review did follow a preliminary review, but this first review was at times conducted by a Level III certified individual.

The NRC staff who prepared the Russell memorandum were not aware at the time that in some cases the initial review of the radiographs was performed by a Level III certified individual. However, the NRC was aware that the reviews by Pullman-Higgins preceded a review by the licensee which was to include 100% of all safety-related welds. Therefore, while more detailed information on the two levels of review should have been documented, this would not have altered the conclusions of the Russell memorandum, i.e., no new safety issues were raised.

It is worthy of note that in his letter of February 27, 1990, Senator Kennedy states that "Wampler claimed that in the course of his review of approximately 800-900 radiographs of safety-related welds, he has rejected about 20%." However, the NRC Independent Review Team found that the rejection rate of Mr. Wampler was actually less than 20%. The percentage of weld radiographs (out of the 787 welds listed in Mr. Wampler's logbook) rejected by Mr. Wampler for all reasons (radiographic technique as well as weld quality) was approximately 8%. The percentage of weld radiographs rejected for weld quality was approximately 6%.

#### FINDING 1.4

The statement was also unclear about whether the assessment of the reject rate was based on industry wide statistical data or related to past inspection experience at Seabrook Nuclear Station. It was also unclear whether the reject rate assessment was based on weld defects or included film quality and administrative errors.

#### RESPONSE

The NRC staff agrees with this finding. The February 28, 1990, Russell memorandum was one of many inputs to the NRR Office Director's decision to issue the full power license. The level of detail implied to be necessary by the OIG's finding was never intended to be provided in the memorandum. In reviewing the late-filed allegations regarding a 20% radiograph reject rate, the staff followed its process for dealing with late-filed allegations. The question before the NRC staff was whether the assertion contained in the Wampler statement regarding a 20% radiograph reject rate raised a new safety issue that had not been previously reviewed and resolved. The staff responded based on its knowledge of recent and past inspections of welding programs at Seabrook and other sites.

The OIG report acknowledges that the Region I staff had performed inspections of welder qualifications and weld reject rates prior to the Seabrook investigation and had records indicating weld radiograph reject rates greater than 20% for other construction facilities. High weld radiograph reject rates had been documented in an early Seabrook SALP report assessment of the piping area, and licensee corrective actions were discussed in subsequent inspection reports. The relevant details of this publicly available information regarding the Seabrook weld radiograph reject rates were transmitted by a March 15, 1990, letter to Representative Kostmayer in response to his March 7, 1990 inquiries. The inspections and record reviews of the Seabrook welding program performed before station licensing concluded that the piping welds at the Seabrook station met the American Society of Mechanical Engineers standards and NRC requirements for structural integrity. This conclusion has been substantiated by extensive licensee and NRC records reviews and reradiography of certain welds subsequent to issuance of the Operating License.

FINDING 1.5

This investigation developed no information to indicate that the Region I assessment was an attempt to mislead the Congress by providing false or inaccurate information.

RESPONSE

The NRC staff agrees with this finding.

## II. The Joseph Wampler Settlement Agreement

### FINDING II.1

The primary basis for the NRC conclusion concerning the restrictiveness of the settlement agreement was from information supplied by Mark BROTH, the attorney for Pullman-Higgins in the WAMPLER matter. Region I did not obtain an independent analysis from their own NRC legal counsel.

### RESPONSE

The findings in issue II relate to the response to question 13 attached to the letter, dated March 15, 1990, from former Chairman Kenneth Carr to Senator Edward M. Kennedy. The NRC staff agrees that Region I did not obtain an independent analysis from its NRC regional counsel concerning the restrictiveness of the settlement agreement. The regional counsel was out of the office because of unforeseen circumstances around the dates of the correspondence to which Region I staff contributed (February 28, 1990, memorandum from William T. Russell to Dr. Thomas E. Murley and March 15, 1990, letter with enclosures from former Chairman Kenneth Carr to Senator Edward M. Kennedy). In retrospect, in the absence of the Region I counsel, Region I should have contacted OGC to obtain a legal review.

While Mr. Mark Broth's statements were valuable information for the staff's assessment, they were not the primary basis for the staff's conclusion. If, as reported, Mr. Broth concluded that the Agreement was not restrictive, the NRC technical staff did not accept this conclusion, as can be seen from the March 14, 1990, letter from Richard Wessman to Mr. Wampler. The NRC technical staff wrote this letter to assure that Mr. Wampler was aware of the NRC's position that the terms of his settlement agreement cannot restrict his communication with the NRC. Although the OGC reviewers of the March 15, 1990 response to Kennedy were not aware of the March 14, 1990 letter from Wessman to Wampler, one of the OGC reviewers of the March 15, 1990 response (Scinto) was aware of and had been involved in discussions in early March 1990 concerning whether the Wampler settlement agreement contained language that might be considered restrictive. These discussions formed part of the background for the issuance of the March 14, 1990 letter to Mr. Wampler.

Furthermore, the response to Question 12 enclosed with the March 15, 1990 letter from former Chairman Carr to Senator Kennedy, indicated that:

The transcript (pp. 205, et seq.) of the DOL hearing contains a discussion of negotiations of a settlement agreement between Mr. Wampler and Pullman-Higgins. Mr. Wampler's attorney denied that there was any offer to fail to report any safety violations (pp. 206, 216-18). Mr. Wampler further testified under oath (pp. 219-220) that he was not aware of any violations other than those concerning crossing radiation safety barriers.

Despite these statements, the NRC nonetheless wrote to Mr. Wampler on March 14, 1990 to assure that Mr. Wampler was aware of the NRC's position that the terms of the settlement agreement cannot restrict his communication with the NRC.

As related to the correctness of the Region I technical staff conclusion regarding this matter, please refer to the response to Finding II.3 which indicates the staff's belief that the subject of the Wampler settlement agreement did not concern radiographic records or weld adequacy, but rather, radiation safety practices.



## FINDING II.2

The review of the NRC response to Senator KENNEDY by the Office of General Counsel at NRC Headquarters did not include consideration of basic documents needed for a legal review.

### RESPONSE

Both the technical staff and the OGC reviewers of the March 15, 1990 response to Senator Kennedy reviewed the Wampler settlement agreement and the attached complaint. A copy of the settlement agreement and the complaint were attached to the March 15, 1990 response to Senator Kennedy. Although these documents did not indicate a restriction relating to radiographic records (see also the Response to Finding II.3), the OIG investigators questioned whether the transcript of the Wampler Department of Labor proceeding had been reviewed. The OGC reviewers of the March 15, 1990 response to Senator Kennedy reviewed the settlement agreement and the attached DOL complaint but did not review the transcript of the DOL proceeding. Technical staff members did review the transcript of the DOL proceeding and reached the conclusion set forth in the response to question 12 (attached to the letter dated March 15, 1990 from Chairman Carr to Senator Kennedy).

We agree that in the circumstances of this case, there should also have been OGC review of the DOL transcript before the Kennedy letter was dispatched.

### FINDING II.3

The representations in the NRC letter to Joseph WAMPLER on March 14, 1990, were inconsistent with the statements in the NRC response to Senator KENNEDY on March 15, 1990. The letter to WAMPLER stated that the NRC believed the language in his settlement agreement could be interpreted to restrict his ability to freely communicate with the NRC. The letter to Senator KENNEDY stated that the agreement did "not prohibit the plaintiff from reporting or discussing his findings regarding radiographic records."

### RESPONSE

The response to Senator Kennedy and the letter to Mr. Wampler should have been clearer by pointing out the difference in the predicate for the two statements. The settlement agreement contained language that could be interpreted as restrictive of Mr. Wampler's ability to communicate with NRC with respect "to the facts of the case." The technical staff's review of the settlement agreement and the complaint and the transcript of the DOL proceeding led the technical staff to conclude that the facts of the DOL case concern crossing radiation safety barriers, not radiographic weld records (see the answer to question 12 of Kennedy response). The OGC reviewers of the March 15, 1990 letter to Senator Kennedy reached the same conclusion on the basis of the settlement agreement and attached complaint, but had not reviewed the transcript of the DOL proceeding (see also response to Finding II.2). Thus, the response to Senator Kennedy indicated that the settlement agreement did not prohibit Mr. Wampler from reporting or discussing his findings regarding radiographic weld records. On the other hand, to the extent that the settlement agreement could be interpreted to prohibit him from discussing the facts of the case (that is, issues relating to crossing of radiation safety barrier), the letter to Mr. Wampler was sent to assure that he was aware of NRC's position that licensees were instructed to inform their employees or former employees that clauses in settlement agreements which in any way restrict providing information about potential safety issues to NRC should be disregarded.

Although the staff provided a copy of the settlement agreement as part of its response, the response to Senator Kennedy's question 13 would have been clearer if it had pointed out that, while there was language in the settlement agreement that could be interpreted as restrictive, NRC did not believe that this language was applicable to concerns that Mr. Wampler may have had about radiographic weld records and that, in any case, NRC had informed Mr. Wampler of NRC's position that such restrictions are not binding with respect to communications with NRC. This would have eliminated any seeming inconsistency between the response to Senator Kennedy and the letter to Mr. Wampler.

In summary, we agree that there should have been better internal coordination by both OGC and the staff between the preparation of the letter to Mr. Wampler and preparation of the response to Senator Kennedy.

On April 12, 1990, within one month of the NRC's March 14, 1990 letter to Mr. Wampler, his attorney requested the Department of Labor to reopen Mr. Wampler's case on the grounds that his settlement agreement with Pullman-

Higgins prevented him from communicating safety concerns to the NRC. On January 23, 1992, the Secretary of Labor issued an order directing the parties to submit a copy of the settlement agreement for review.

It should be noted that the Wampler allegation regarding crossing radiation safety barriers was referred by Region 1 to the State of New Hampshire when this allegation was first raised in January 1984. New Hampshire is an Agreement State with respect to the regulation of 10 CFR 34 radiography licenses and the safety requirements therein. The NRC staff included these facts in its responses to the Congressional staff inquiries related to the Wampler allegations.

III.A. 100% Review of Weld Radiographs - RUSSELL Memorandum  
FINDING III.A.1

YAEC did not begin the 100% review of radiographs after WAMPLER'S termination from the Pullman-Higgins Company. This review of Pullman-Higgins radiographs was already ongoing at the time of WAMPLER's termination.

**RESPONSE**

The NRC staff agrees with this finding. The Russell memorandum, dated February 28, 1990, stated that the Yankee Atomic Electric Company (YAEC) performed a 100% check of the radiographs after Mr. Wampler departed the site. This is not correct.

The Russell memorandum was from the Regional Administrator, Region I, to the Director of the Office of Nuclear Reactor Regulation to document the results of an "expedited review" of Mr. Wampler's concerns to determine if any "conditioned material to full power licensing are involved." As discussed in the Response to Finding I.1, the Region I staff concluded that no new safety issue had been raised, while at the same time indicating that the complete and detailed answers to Senator Kennedy's question had not yet been developed. The conclusion, documented in the Russell memorandum, i.e., no new safety issues were raised, is not affected in any way by the statement questioned by the OIG as to when the YAEC 100% review commenced.

On March 5-9, 1990, Region I conducted an inspection at the Seabrook Station to obtain detailed information for responses to Congressional inquiries and documented this inspection in inspection report (IR) 50-443/90-07. These Congressional inquiries included a February 27, 1990, letter from Senator Kennedy to Chairman Carr, which had been referenced in the Russell memorandum, and a March 7, 1990, letter to Chairman Carr from Representative Kostmayer.

In discussing the 100% weld radiograph review program documented in Section 4.3 of IR 50-443/90-07, the staff noted that, before 1984, YAEC was informally conducting weld radiograph reviews for all contractor radiography, establishing that such reviews were in progress before Mr. Wampler's employment was terminated. As was the intent of the inspection documented in IR 50-443/90-07, these findings as well as others related to the pipe welding and radiography programs, were then used to document the staff responses to the Senator Kennedy and Representative Kostmayer inquiries. Chairman Carr responded to Senator Kennedy and Representative Kostmayer, by separate letters dated March 15, 1990 and enclosed the appropriate NRC staff responses.

Thus, although the Russell memorandum was in error regarding when the YAEC 100% radiograph review effort commenced, an NRC inspection was conducted on site in early March 1990 (prior to granting the Seabrook full power license) to obtain additional information beyond that contained in the expedited review documented in the Russell memorandum. The staff used this new information in the responses to both Senator Kennedy and Representative Kostmayer in separate letters dated March 15, 1990. Thus, the information provided by the NRC to both Senator Kennedy and Congressman Kostmayer with respect to YAEC's 100% review of radiographs was accurate.



#### FINDING III A.2

The process for the review and concurrence of the RUSSELL memorandum was flawed. The inaccuracy regarding the review being conducted after WAMPLER's departure occurred when the author's draft was altered without his knowledge. The investigation was unable to determine who made that change.

#### RESPONSE

As discussed in the staff's response to Finding I.1, the EDO will reexamine the current staff guidance on concurrence and revise it to provide greater assurance that staff documents are accurate.



### FINDING III A.3

Inspection Report 90-80 mischaracterized statements in Inspection Reports 85-31 and 84-07. Contrary to representations in Inspection Report 90-80, these inspection reports do not substantiate that a 100% review of radiographs was conducted by YAEK.

#### RESPONSE

The OIG report is correct that Inspection Report IR 84-07 does not substantiate that a 100% review of radiographs was conducted by YAEK and IR 85-31 is not clear on this point.

The section of inspection report (IR) 90-80 that is the subject of the above finding was written to respond to the following allegation:

It was common knowledge on the site that an inspector was caught using the same x-ray on different welds.

In IR 90-80, the staff stated that this allegation lacked credibility because separate pieces of film must be exposed for each weld, precluding the use of the same set of film to inappropriately represent several welds. In pointing out the fact that this subject had been dealt with in previous NRC inspections, IR 90-80 further indicated that:

Also, 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.

While discussing weld radiographs in response to this allegation, the staff also states in IR 90-80 that the licensee "...also reviewed these films after the contractor completed their (sic) reviews." While the reference to the contractor reviews implies a 100% review since such radiograph examination is required by code, this statement does not clearly state that a 100% YAEK review of all RT film was done.

Inspection Reports 84-07 and 85-31 are mentioned in IR 90-80. Inspection Report 85-31 (page 12) does discuss a licensee overview of "virtually all vendor supplied radiographic film." Inspection Report 84-07 does not explicitly discuss the licensee's 100% review.

On page 27 of the OIG report, the investigators discuss an interview with Mr. Edwin Martindale, one of the CAT inspectors, and document a quote by Mr. Martindale from a draft version of IR 84-07, as follows:

The CAT inspector feels that, due to the numerous findings on radiographs that have not received YAEK review, there is a need to continue a 100% overview program on contractor and vendor film.

Mr. Martindale is further quoted in the OIG report from his draft version of IR 84-07 as stating:

The procedures do not specify the amount of time the 100% contractor review will continue or any intent to perform vendor review.

However, despite Mr. Martindale's valid concerns at the time of CAT inspection 84-07, later evidence shows that the 100% YAEC inspection of Pullman-Higgins weld radiographs did continue to completion of the field welding. This was verified by the licensee and inspected by the staff. In addition, as discussed in the response to Finding III.B.2, the licensee's procedures for YAEC review of radiographs did include review of both vendor as well as site-generated radiographs.

Thus, although the staff in the Russell memorandum incorrectly cited a reference as documenting a 100% licensee review of contractor radiographic film, as discussed in the staff's response to Finding III.B.2, a procedural requirement for vendor and site-generated YAEC review of radiographs did exist and the staff responses to both Congressman Kostmayer and Senator Kennedy (March 15, 1990) on this point are accurate. Nonetheless, in the May 18, 1990, letter from the former Chairman Carr to Senator Kennedy, the staff acknowledged in response to Question 1 that the 100% radiography review by the licensee is not clearly documented in NRC inspection reports so that a reader is able to independently and unequivocally determine that it was done.

The staff has concluded, as a lesson learned from this matter, that there is a need for additional and clearer documentation in construction inspection reports and will take steps to assure that the appropriate improvements are implemented.

### III.B. 100% Review of Weld Radiographs - Congressman KOSTMAYER

#### FINDING III B.1

The OIG investigation determined that Inspection Report 84-07 did not support the NRC's representation to Congressman KOSTMAYER about the 100% review of all safety-related weld radiographs.

#### RESPONSE

The NRC staff agrees with the OIG finding that, as discussed in the response to Finding III A.3, IR 84-07 does not substantiate that a 100% review of radiographs was done by YAEC.

In responding to Congressman Kostmayer's request to provide those portions of IR 84-07 which documented the licensee's review of all film stored onsite, the staff instead discussed which portions of IR 84-07 described the YAEC film review process. The staff explained that, although there were discrepancies in the radiographs not yet reviewed by YAEC, these were not of a concern to the inspectors because they knew that YAEC would review all of them, and further, no discrepancies had been found during the inspection in radiographs which had been previously reviewed by YAEC.

The quote from Mr. Martindale's draft version of IR 84-07, as discussed in page 27 of the OIG report, and repeated in response to Finding III A.3, in conjunction with the discussion of a YAEC 100% review of contractor radiographs documented in an NRC memorandum written in January 1984 (Exhibit 39 of the OIG report) reaffirms the fact that some inspectors participating in the IR 84-07 inspection were aware that a 100% YAEC review was ongoing. On the other hand, the testimony of some of the inspectors on the CAT inspection indicates they were not aware of the 100% YAEC review.

In an enclosure to a letter from Chairman Carr, dated May 18, 1990, responding to a request from Senator Kennedy of March 12, 1990, the NRC stated:

The staff agrees that the 100% radiography review by the licensee is not clearly documented in NRC inspection reports so that the reader is able to independently and unequivocally determine that it was done.

Ultimately, such evidence was provided by the licensee's weld records, which substantiated that YAEC had implemented a process for the 100% review of safety-related weld radiographs. While this process was not perfectly implemented (i.e., greater than 99.7% of the weld radiograph records provided evidence of the licensee review), the NRC representation to Congressman Kostmayer that the licensee developed and implemented "a program of review of all safety related radiographic film" was an accurate statement, which has been confirmed by subsequent records inspections. Furthermore, in response to a Congressman Kostmayer question (Question H) citing IR 84-07, the staff stated that:

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.

This statement, included in the NRC staff enclosure to former Chairman Carr's March 15, 1990, letter to Congressman Kostmayer, illustrates that the NRC understood and informed Congress that the 100% review was not explicitly stated in IR 84-07.



### FINDING III B.2

Contrary to the NRC's response to Congressman KOSTMAYER, the OIG investigation found that during NRC Inspection 84-07, YAEC did not have a written procedure that required the review of all safety-related vendor and site generated radiographs.

#### **RESPONSE**

This finding is correct from the standpoint that during the period of time that inspection 84-07 was conducted (i.e., April 23 - May 25, 1984), no licensee procedure explicitly required the review of all safety-related vendor and site-generated radiographs. However, the procedure referenced in the NRC staff responses to Representative Kostmayer's request of March 7, 1990 (the YAEC Procedure Number 5, "Quality Engineering Group-QEG NDE Review Group"), documented the program for YAEC review of vendor and site generated radiographs. Revision 0 of this procedure was prepared on April 10, 1984 (i.e., prior to the CAT inspection documented in IR 84-07) and issued on May 14, 1984 with the following language, in part, describing the purpose and scope of the procedure:

It describes the methods utilized to perform review of vendor and site generated radiographs.

On July 5, 1984, Revision 1 to the YAEC QEG NDE Review Group Procedure Number 5 was issued with the wording modified as follows:

It describes the methods utilized to perform review of all safety related vendor and site generated radiographs. (emphasis added)

Therefore, the OIG is correct in determining that a procedural requirement for the 100% review did not exist until July 1984, after the CAT inspection was complete. However, Exhibit 39 of the OIG Report indicated that, as early as January 1984, the NRC knew that YAEC was reviewing all contractor radiographs.

The issuance of Revision 0 of YAEC Procedure Number 5 addressed the governing provisions of a 100% review even though the word "all" was not incorporated into the procedure until Revision 1 was issued.

This OIG finding implies that the NRC's response to Representative Kostmayer specifically was in error regarding when YAEC had issued a procedure that required the review of all safety-related vendor and site generated radiographs. However, the NRC responded to Representative Kostmayer's request (Question I.F) to provide a copy of those portions of IR 84-07 which the staff believes documents the licensee's -- review of all RT (radiography) film stored on site as follows:

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.



The answers to questions I.A and I.D discuss the performance by YAEC of a 100% radiographic review and indicate that the licensee adopted a procedure to formalize the process on May 14, 1984, when the QEG NDE Review Group Procedure Number 5 (Revision 0) was implemented. Therefore, the statement to Representative Kostmayer, that the heretofore informal process of YAEC 100% film review was formalized in a procedure and program that were in place at the time of the CAT inspection, is a correct statement. While the formal procedural requirement, using the word "all" was not in place until July 1984, the programmatic process implementing this review was in place in May 1984.

Additionally, the former NRC Senior Construction Resident Inspector at Seabrook discussed this issue with the lead YAEC Quality Assurance Engineer responsible for implementation of the YAEC QEG NDE Review Group Procedure Number 5. The NRC inspector questioned the reason why the words "all safety related" were added to the purpose and scope statement in Revision 1 of the procedure. The YAEC QA Engineer, a film reviewer involved in the licensee review of radiographs from 1980 through the completion of construction, informed the NRC inspector that the revised wording was intended to clarify the 100% review as a requirement for only safety related radiographs. He indicated that the Revision 0 wording might be interpreted to include nonsafety weld radiographs in the required review. Therefore, Revision 1 was written to document the intent that all safety related radiographs (and not nonsafety film) were covered by this procedural requirement. The YAEC QA Engineer also informed the NRC that the program governing the YAEC radiograph review process remained unchanged by the procedure Revision 1 which limited the scope of review.

#### IV. Joseph WAMPLER'S 16 Nonconformance Reports

##### FINDING IV

The OIG investigation determined that the NRC did not identify 14 of the 16 potential NCRs [noncompliance reports] mentioned by WAMPLER. NRC personnel made the decision to focus instead on the records turnover process following WAMPLER's termination which should have included NCRs being processed. Senior Construction Resident Inspector (SCRI) CERNE explained that his reason for this decision was the existence of an NRC policy not to disclose an alleged's identity. The information concerning the 16 NCRs was of a singular nature and would have identified WAMPLER. During this period CERNE had been told by WAMPLER not to inform Pullman-Higgins of his contact with the NRC. CERNE's efforts during Inspection 83-22 and 83-15 to review the records turnover process were in response to concerns raised by WAMPLER about the 16 NCRs.

##### RESPONSE

The NRC staff agrees with this finding. However, in order to gain assurance that the information on these potential NCRs (and any other information from Mr. Wampler) was complete, during the transcribed interview with Mr. Wampler, documented in NUREG-1425 (page 34, Appendix 4), the staff asked and received permission to copy Mr. Wampler's log book. The staff has provided information on this issue in Sections 8 and 19 of NUREG-1425, "Welding and Nondestructive Examination Issues at Seabrook Nuclear Station." Section 8 includes the following statement:

[The NRC independent review] team identified 27 backlog welds listed in Wampler's logbook for which he should have initiated corrective action, including issuance of NCRs in several cases. However, these weld discrepancies had apparently not been formally reported to Pullman-Higgins (P-H) personnel at the time Wampler left Seabrook. The team concluded that these welds constituted the complete population of welds on which Wampler intended to write the 16 NCRs.

The following conclusion is documented in the Executive Summary of NUREG-1425:

The licensee took adequate action regarding all the welds Wampler was planning to write NCRs on at the time he left Seabrook. Since discrepancies noted by Wampler had been effectively removed or reworked for all of these welds, there were no missing NCRs associated with weld discrepancies discovered by Wampler.

Therefore, while it is correct that in 1984 the NRC did not identify 14 of the 16 potential nonconformance reports (NCRs) mentioned by Mr. Wampler, subsequent NRC inspection identified all of the welds that might have been the subject of these potential NCRs. This independent NRC inspection activity, documented in NUREG-1425, confirmed that the records turnover process and coordination of transfer of NDE Level III functions, as implemented by Pullman-Higgins and inspected by the NRC in 1984, were effective in assuring proper disposition of all of the potential nonconforming conditions questioned by Mr. Wampler.

## V. The Informal Return of Radiographs

### FINDING V.1

The investigation determined that in various ways, YAEC was informally returning radiograph packages to Pullman-Higgins.

#### RESPONSE

The NRC staff agrees with this finding. The following excerpts from NUREG-1425 indicate that the NRC's IRT had made similar findings regarding the YAEC radiographic review program, as it was implemented in its early phases:

From the start of the piping fabrication and NDE processes to about mid-1982, P-H pipe weld film packages found unacceptable during YAEC review of film for acceptance were informally returned to P-H for correction. (Section 2)

In addition, in the early phases, YAEC appeared to return unacceptable film to P-H on an informal basis. Documentation of the review process became more formal starting in 1982. (Section 3)

For the period preceding 1982, the licensee handled the review of radiographic film in a less formal manner. (Section 14)

These IRT findings, documented in NUREG-1425, all indicate that the informality of film package returns was a practice that existed until about mid-1982. Mr. Wampler, who was on-site at Seabrook Station during the latter part of 1983, stated to the OIG that informal returns by YAEC to him occurred in 1983. Therefore, it is not clear whether the investigation either confirmed or refuted this contention. NUREG-1425 also documented in Section 2 the following:

After mid-1982, P-H pipe weld film packages, found unacceptable during YAEC review for acceptance, were returned to P-H for correction, and a DR or deviation notice (DN) was routinely issued in most cases. The exceptions to this included some administrative-type rejects that were easily correctable under the P-H program.

This quotation appears to be consistent with most of the interview excerpts documented on pages 37-39 of the OIG report, in which the licensee's interviewees admitted to making informal returns for minor problems or paperwork errors. Therefore, even after 1982, depending upon the severity of the problem that was identified by YAEC, the informal return of radiographic packages to Pullman-Higgins continued. (See the Response to Finding V.2 for a continued discussion of this issue.)

## FINDING V.2

The practice of informally returning radiographs without documentation is a violation of 10 CFR 50, Appendix B.

### RESPONSE

The NRC staff agrees with this finding as it relates to the informality with which radiograph returns were handled prior to mid-1982. However, as discussed in the response to Finding V.1, in cases involving the "administrative-type rejects" documented in section 2 of NUREG-1425 or the minor problems or paperwork errors discussed in the OIG report interview excerpts, after mid-1982 this practice continued but was authorized by YAEC Field Surveillance Procedure No. 3. This procedure, covering the period of time from mid-1982 until 1984, required the following:

Deficiency(ies) found during surveillance and not transferred to the contractors QA/QC Program or not corrected immediately, shall be reported by the individual finding the deficiency.

This procedural requirement allows for the undocumented return of records (radiographic packages) in which deficiencies were found if either of the two following conditions were met: (1) the affected contractor's program documented the deficiency or (2) the deficiency could be corrected immediately, such as minor administrative or paperwork error.

A March 15, 1990, memorandum from Dr. Henry Myers of the Congressional staff to the NRC Director of Congressional Affairs asked the following question, to which the following response from the NRC staff was transmitted to Dr. Myers:

11.C If YAEC reviewers had rejected radiographs and returned them to Pullman-Higgins without documenting the rejection and the return, would this have violated applicable procedures?

### Response

The defined program for recording deficiencies identified by the YAEC Nondestructive Examination (NDE) Review Group was the Deficiency Report (DR) system. The licensee has indicated to the NRC, through the recollection of YAEC personnel involved in the NDE Review Group, that in some cases editorial errors or legibility concerns were handled without a DR being generated. Licensee personnel have also stated that, on occasion, YAEC NDE reviewers accomplished their review at the Pullman-Higgins offices immediately after Pullman-Higgins reviewers had completed their review of the radiographs. In these cases also, a DR may not have been generated because the YAEC personnel were accomplishing an overview surveillance function while the radiographs were in-process, prior to formal transmittal to YAEC for review.

Whether rejection and return of radiographic records without documentation on a DR constituted a procedural violation remains to be determined. This issue and activities of the YAEC NDE reviewers will be

re-examined by an NRC Independent Review Team as part of the additional NRC efforts discussed with Dr. Myers and Mr. Paine on April 30, 1990.

The stated follow-up by the NRC IRT was documented in NUREG-1425, as evidenced by the quoted excerpts discussed in the response to Finding V.1. The Executive Summary in NUREG-1425 documents as one conclusion the following:

In some instances, records and procedural adherence-type problems of lesser safety significance may have violated NRC requirements during the construction period. These problems were investigated to the depth necessary to reach a conclusion regarding their safety significance.

In the letter of August 6, 1990, forwarding NUREG-1425 to the licensee, the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, stated the following:

On the basis of my evaluation of the team's report, which considered the types, significance, and age of the problems identified and the corrective actions you have taken, I have determined that no response to the NRC regarding the matters covered by this report is required.



### FINDING V.3

The investigation did not develop any evidence to indicate the NRC was aware of this practice during the period of construction.

### RESPONSE

This finding supports the NRC staff's response to a question from Dr. Myers, written in his memorandum of March 15, 1990, to the Director of Congressional Affairs, as follows:

- II.D Did NRC inspectors know whether YAEC reviewers had rejected radiographs and sent them back to P-H without documenting the rejection and return to P-H?

### Response

No. Based on our review of this matter with the current NRC staff, we have no such knowledge.

## VI. Construction Deficiency Reporting Requirements

### FINDING VI

The OIG investigation found no evidence to substantiate WAMPLER's allegation.

### RESPONSE

As stated in an interview conducted by the NRC IRT on April 24, 1990, and documented in the OIG report, Mr. Wampler's allegation is as follows:

Wampler alleged that YAEC intended to issue a 10 CFR 50.55(e) notification concerning the high reject rate of weld radiographs and then failed to do so.

During an inspection at Seabrook on March 5-9, 1990, the NRC reviewed this issue of proper processing, in accordance with 10 CFR 50.55(e), of the information pertaining to the alleged high weld reject rate. The NRC documented this inspection in IR 50-443/90-07 and listed this 50.55(e) processing question as an unresolved item. Thus, the NRC staff was reviewing this issue before Mr. Wampler raised it as an allegation.

The IRT also reviewed this issue, documenting NRC findings on this subject in NUREG-1425, specifically sections 14 and 17. Based upon both the IRT conclusions and additional NRC inspection onsite in August 1990, the unresolved item was closed in IR 50-443/90-16. Both the IRT and a separate Region I inspector review concluded that the identified deficient conditions were not reportable under the provisions of 10 CFR 50.55(e).