



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

April 5, 1991

The Honorable George Miller, Vice Chairman
Committee on Interior and Insular Affairs
United States House of Representatives
Washington, DC 20515

Dear Mr. Vice Chairman:

Enclosed are responses to questions from Dr. Henry Myers of your staff,
dated March 5 and March 15, 1991, concerning Seabrook welds.

Sincerely,

A handwritten signature in cursive script that reads "Dennis K. Rathbun".

Dennis K. Rathbun, Director
Congressional Affairs
Office of Governmental and
Public Affairs

Enclosures:
As Stated

cc: The Honorable Don Young

CCSR
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ENCLOSURE 1

RESPONSE TO CONGRESSIONAL STAFF QUESTIONS

Question 1

Why did the staff not seek in its February 22 request the number of weld radiographs that [were] actually on file?

Response

The staff did not request that the licensee define the number of weld radiograph packages that are on file because that information has already been provided by the licensee. The data presented in the second column of the table on page 14-2 of NUREG-1425 is, according to the licensee, the number of radiograph packages, by unique weld, which are stored in the Seabrook QA records vault. This number is 4177.

Instead, the licensee was asked to quantify the number of Pullman-Higgins weld radiograph packages which should be on file. This is important because it defines the licensee's expectations of what is required to be in the QA vault. The response to Question 3 (below) discusses concerns which the staff has in this area and how this point of information is being pursued further with the licensee.

Question 2

What documents provide the data that is the basis for the entries in the second column in NUREG-1425?

Response

The documents from which the second column of the Table on page 14-2 of NUREG-1425 was prepared were the index cards maintained by the licensee as an index of the Pullman-Higgins radiographs in the QA records vault. Specifically, the NDE Supervisor for the licensee chronologically categorized the index cards according to their YAEC acceptance dates, thus providing an index of when radiographs were accepted (and the RIR approved) by YAEC from Pullman-Higgins.

The data was collated from records which the licensee had "on-hand"; no requests were made for new or independently generated information. The additional information presented in the table (columns 3 - 5) was provided as a point for qualitative comparison. It was not intended to be quantitative data from which a total work load between P-H and YAEC could be surmised.

Question 3

What documentary evidence exists to show that all radiograph packages compiled and reviewed by Pullman-Higgins ultimately were passed on to YAEC?

Response

The licensee's description of the radiographic controls at Seabrook highlights the processes and documentation available to verify that appropriate records were developed and passed on from Pullman-Higgins to YAEC. The documentation which is available to confirm that radiograph packages were compiled are the ASME N-5 Code Data Reports. These reports were prepared by both Pullman-Higgins and the Architect-Engineer, United Engineers and Constructors (UE&C). Supplementing the N-5 Code Data Reports were the licensee's Records Receiving Checklists. These checklists listed the specific documents transmitted for final records retention.

However, based upon the fact that one weld radiograph package (film and associated hard-copy RIR) was discovered to be missing from the licensee's QA records vault, the NRC requested additional information concerning the Seabrook systems turnover process. On February 22, 1991 and, in followup, on March 5, 1991, the licensee was asked to provide their justification for reaching the conclusion that the missing radiograph was nothing more than an isolated incident. The licensee provided their responses to the NRC on March 5 and 11, respectively.

After reviewing the licensee's responses, the NRC was not satisfied that New Hampshire Yankee had identified the actual root cause of the missing weld radiograph package. Therefore, on March 19, 1991, the licensee was requested to review their as-built isometric drawings to identify all Pullman-Higgins field welds for which radiography was a code-established requirement and, subsequently, to determine whether the required radiographs and RIRs are on file in the QA records vault. This review should conclusively show whether all of the code-required radiographs and RIRs have been fully processed and retained. The licensee responded to this request on March 25, 1991 (NYN-91050), a copy of which is enclosed. The staff is evaluating this response.

On March 20, 1991, NRC inspection identified a weld radiograph package (RH-151-01, F0102) for which the YAEC approval signature was not annotated on the Radiograph Inspection Report (RIR). During the follow-up investigation of the radiograph review process for this particular weld, the licensee identified another weld (CBS-1201-01, F0103) for which the YAEC approval signature was not annotated on the RIR. These welds are in the Residual Heat Removal (RH) system and the Containment Building Spray (CBS) system. Both

welds are ASME Code, Section III, Class 2 safety-related welds.

An independent reviewer from the YAEC corporate staff subsequently reviewed the film for both of these welds and determined that they were satisfactory. The Congressional staff will be provided with the results of the staff's continuing review of this matter.

Question 4

The flow chart on NUREG-1425, page 2-5, shows a path by which radiographs can go to permanent storage without review by YAEC. What information does the NRC have concerning the use or non-use of this path?

Response

The upper portion of the chart on page 2-5 does, in fact, show a flow path where records developed by a welding sub-contractor could be placed in a licensee's QA records vault without licensee review. However, as was noted in the NUREG, that path was a representation of what was minimally specified by the applicable ASME Code - it was not a representation of the process that was used at the Seabrook Station, either prior to, or after, May 1984.

The flow path below the dotted line on the chart represents the additional process which was implemented at Seabrook. Prior to May 1984, by practice of the YAEC QA Department, and after May 1984, through the New Hampshire Yankee procedures governing weld review and acceptance, utilization of the below-line process was the methodology for weld review and acceptance at the Seabrook Station. As discussed in the response to Question 3 (above) the NRC is inspecting the apparent discrepancies to this process that have been identified.

ENCLOSURE 2

RESPONSE TO CONGRESSIONAL INQUIRY XLIV

QUESTION 1

Apparently, the Seabrook licensee has been unable to specify the number of Pullman-Higgins field welds for which radiographic testing was required.

- a. What is the number of such welds that would be expected to exist in Westinghouse plants of similar design and capacity?
- b. Would the NRC expect other licensees to be able to specify the number of such welds using a computer data base or other readily retrievable records?

RESPONSE

There is not a specific number of welds for which code requires radiography. The number is dependent upon the particular plant's final design and construction. For a comparable plant (D loop, 1100 MWe, Westinghouse), estimates from experienced members of the staff indicate that 3000-4000 welds could be expected.

There is no requirement for a licensee to be able to specify the number of such welds from a computer data base. However, it is expected that a licensee could generate this data (a list of welds for which radiography was code-required) from the QA records which are maintained. There is no definitive expectation concerning how quickly this data should be able to be generated.

QUESTION 2

It appears that the licensee has been unable to compile a listing of Pullman-Higgins field welds at Seabrook for which radiographic testing was required.

- a. Is it true that such a listing cannot be compiled from a computer data base or other readily retrievable records?
- b. Is it standard practice at other nuclear plants to maintain a computer data base that can be used to generate listings of safety-related piping field welds?

RESPONSE

The staff knows of no computerized data base being maintained at Seabrook from which a listing of Pullman-Higgins field welds which required radiography could be compiled. However, Region 1 has requested New Hampshire Yankee to generate such a listing (Martin to Feigenbaum, March 19, 1991) from the retrievable QA records for the plant.

The staff's experience with other nuclear power plants indicates that the maintenance of a computer data base is not standard practice.