

ORIGINAL

OFFICIAL TRANSCRIPT OF PROCEEDINGS

Agency: U.S. Nuclear Regulatory Commission

Title: New Hampshire Yankee Presentation to NRC
Staff on Pullman-Higgins Field Weld Records
Re-Verification Project

Docket No.

LOCATION: Rockville, Maryland

DATE: Wednesday, April 10, 1991

PAGES: 1 - 53

ANN RILEY & ASSOCIATES, LTD.

1612 K St. N.W., Suite 300

Washington, D.C. 20006

(202) 293-3950

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION
3
4

5 - - - - -
6

7 NEW HAMPSHIRE YANKEE
8 Presentation to NRC Staff
9 on
10 Pullman-Higgins Field Weld
11 Records Re-Verification Project
12

13 April 10, 1991
14

15 - - - - -
16

17 NRC
18 One White Flint North
19 Room 16 B 11
20 11555 Rockville Pike
21 Rockville, Maryland 20852
22

23 The conference in the above matter convened at
24 1:02 p.m.
25

1 PRESENT FOR THE NRC STAFF:

2

3 J. Sniezek

4 T. Martin

5 J. Partlow

6 G. Edison

7 R. Wessman

8 W. Bateman

9 T. Cerne

10 E. McCabe

11 L. Chandler

12

13 PRESENT FOR NEW HAMPSHIRE YANKEE:

14

15 N. Pillsbury

16 T. Feigenbaum

17 T. Harpster

18 E.Desmarais

19

20

21

22

23

24

25

P R O C E E D I N G S

MR. SNIEZEK: My name is Jim Sniezek. I am the Deputy Executor for Nuclear Reactor Regulations, Regional Operation and Research.

The purpose of this meeting is for the NRC Staff to discuss and develop a good understanding of the New Hampshire Yankee plans to conduct a re-review of the quality records associated with the Pullman-Higgins field welds at Seabrook Nuclear Plant.

I'm speaking of those welds which require radiography pursuant to the industry codes.

Because of the recent discovery that some require radiograph records or portions thereof were missing, the NR Staff determined that this re-review is necessary in order to conclusively determine whether all the code required radiographs and radiograph inspection records for Pullman-Higgins field welds have been fully processed and retained as quality records.

This re-review was requested by NRC letter dated March 19, 1991. By letter dated March 25th, 1991, New Hampshire Yankee committed to complete the effort by August 31st of this year.

I should also mention that this meeting is being transcribed. Therefore, it is requested that all speakers identify themselves.

1 I will now turn the meeting over to Tim Martin,
2 the regional administrator for Region I.

3 MR. MARTIN: Ted, the purpose of the meeting is
4 really to have you describe the activity that you are going
5 to engage in to confirm that the radiographic packages and
6 review forms that you have are really a comprehensive set
7 that cover all the required radiographs.

8 I'm going to turn it over to you for the
9 presentation. However, at some point during this
10 discussion, we will want to discuss some additional
11 commitments that I am going to seek from you relative to
12 reporting identified deficiencies in real time as they are
13 discovered.

14 So we will not finish up until that has occurred.
15 But I guess if there are no other comments, I would ask you
16 to get on with the presentation.

17 MR. FEIGENBAUM: Thank you, Tim.

18 Good afternoon. I am Ted Feigenbaum, and I am the
19 President and Chief Executive Officer of New Hampshire
20 Yankee, and New Hampshire Yankee is the managing agent for
21 the Seabrook Station.

22 With me this afternoon are Neal Pillsbury on my
23 right. He is the Director of Quality Programs. Terry
24 Harpster on my left here, who is the Director of Licensing
25 Services at Seabrook. And Ed Desmarais on my far left, who

1 is the Manager of our Independent Review Team.

2 We appreciate this opportunity to summarize for
3 you today the welding records reverification project which
4 we recently have begun.

5 The goal of this project is to ensure that this
6 recounting of code and regulatory required documentation is
7 completed using a process that will leave no doubt about th
8 completeness of final weld records and their acceptability.

9 Through the quality assurance programs that were
10 in place during the construction and testing of Seabrook
11 Station, a great deal of emphasis was directed at assuring
12 that Pullman-Higgins nuclear safety-related field welds met
13 or exceeded the code and regulatory requirements.

14 Based on our knowledge of these programs and the
15 extensive reviews and investigations conducted to date, we
16 are confident that the welds in question meet technical
17 requirements.

18 We fully appreciate, however, the importance of
19 your request that we re-verify the existence of certain
20 radiographic examination quality documents against the
21 master list of welds which requires such documentation.

22 This document and reverification effort will
23 enable us to reconfirm the associated record set and fully
24 evaluate any record discrepancy that may need further
25 analysis.

1 To accomplish this project in a comprehensive,
2 efficient and expeditious manner, we have assigned some of
3 our most capable personnel to work on this project. In a
4 moment I will turn this presentation over to the assigned
5 project manager, Ed Desmarais, who will be summarizing the
6 scope of the work, the selection of an independent
7 contractor, the methodology for the reverification of
8 records, and the project schedule.

9 Before Ed begins his presentation, I would just
10 like to take a minute to explain how Ed's position fits int
11 the New Hampshire Yankee organization.

12 Ed is the manager of our Independent Review Team.
13 In summary, the Independent Review Team is a small, multi-
14 disciplined team of highly qualified professionals, who
15 independently evaluate and report on issues of importance t
16 New Hampshire Yankee senior management. They are
17 independent of any New Hampshire Yankee line organization,
18 such as Production, Engineering, and Quality Assurance.
19 They are flexible in composition, in that they accomplish
20 their evaluations using the most highly qualified resources
21 that can be made available to carry out any given, in-depth
22 assignment.

23 For example, in the case of the records
24 reverification project, I directed Ed to solicit bids from
25 three highly qualified nuclear industry contractors. From

1 that project specification, bid solicitation and bid
2 submittal analysis process, a single vendor, Nuclear Energy
3 Services, Inc., was awarded a contract recently to perform
4 this reverification under Ed's administrative coordination
5 and facilitation.

6 We have been very careful in selecting potential
7 contractors to work on this project. Among the requirement
8 we imposed on the reverification was that the contractor ha
9 had no prior responsibilities over these Pullman-Higgins
10 field weld programs; and we insisted that the contractor
11 supply personnel who had not had any Seabrook Station or
12 Yankee Atomic Electric Company quality assurance
13 responsibilities over these construction welding programs o
14 records.

15 During the course of this reverification, Ed
16 Desmarais will follow all New Hampshire Yankee reporting
17 procedures for both internal and external communications.
18 If a contractor identifies an issue for further analysis, E
19 is going to be responsible for facilitating and coordinatin
20 the accomplishment of that analysis and any documentation
21 required.

22 Any formal licensee to NRC reporting requirements
23 will be carried out in accordance with our normal operating
24 procedures and programs.

25 We expect to have a final report completed on or

1 before August 31st 1991, and throughout this project Ed
2 will report directly to Neal Pillsbury, who in turn reports
3 directly to me.

4 We assure you that this project team has the
5 resources necessary to accomplish the project scope and
6 schedule which Ed is now prepared to summarize for you.

7 Ed, I will turn it over to you.

8 MR. DESMARAIS: Thank you, Ted.

9 I am Ed Desmarais. I am the Independent Review
10 Team manager and also the Project Manager for this
11 reverification effort.

12 Let me get this set up and I will continue.

13 Our presentation today will outline our efforts i
14 response to the NRC's March 19th letter. Specifically I
15 will discuss the purpose, the scope, the approach, with
16 examples, the schedule, and the outline of what our final
17 report contents will entail.

18 I would ask that you hold questions until I finis
19 my presentation, because I anticipate that some of them wil
20 be answered as I go along.

21 This is the purpose. The first effort is to
22 identify all Pullman-Higgins field welds that require
23 radiography by code.

24 I will refer to this particular report as Task No
25 1 as I get further into the presentation.

1 The second effort is to verify that New Hampshire
2 Yankee has the quality documents, the radiographic
3 inspection reports, or RIRs, and the radiographs.

4 As part of that verification effort, we will also
5 confirm the Yankee radiograph review.

6 The third part of this effort will include the
7 identification of YAEC radiograph review.

8 [Pause.]

9 MR. DESMARAIS: I think I am still on Item No. 4.
10 That is to identify and report records anomalies that may
11 arise as a result of either the Task 1 or Task 2 efforts.
12 That process I will describe during the course of the
13 presentation.

14 And the last of the purpose of this project will
15 be to report on the results of this overall effort.

16 The scope of Task 1 begins with the applicable
17 codes requiring radiography, and those are the American
18 Society of Mechanical Engineers and the American National
19 Standards Institute B 31.1 for piping.

20 Both codes that are applicable to Seabrook are th
21 1977 edition, winter of '77 addenda.

22 As an example of the type of requirements from th
23 ASME Code, radiography requirements, that apply for piping,
24 specifically, are extracted from these particular sections
25 of the code which indicate the requirements for RT for thes

1 specific classes of welds, ASME classes, and the weld join
2 configuration.

3 The radiography requirments for B 31.1 are of a
4 similar nature, but there are two separate classifications;
5 one with systems that are greater than 750 degrees
6 Fahrenheit -- again, you have got the same weld joint
7 configuration tha' would determine the radiography
8 requirements -- and the second criteria, systems with
9 temperatures, design temperatures greater than 350 degrees
10 Fahrenheit, but less than or equal to 750 degrees
11 Fahrenheit, and a design pressure greater than 1025 PSIG.

12 Our approach to this effort covers five lead
13 points, the first being independence. We have selected, as
14 Ted has mentioned, a contractor that has had no prior
15 Pullman-Higgins welding experience or during the
16 construction of Seabrook.

17 In addition to that, we have specified that the
18 personnel that the contractor would supply for the project
19 also have no direct experience with the welding that was
20 done at Seabrook by Pullman-Higgins.

21 In addition to that, the third facet of
22 independence is that this particular contractor is separate
23 and distinct from the previous New Hampshire Yankee efforts
24 that reviewed the radiography documentation and the
25 engineering efforts.

1 The second factor is accuracy and control. The
2 contractor is preparing three separate procedures to govern
3 the separate tasks of work that they will be performing.
4 New Hampshire Yankee will be reviewing and approving those
5 procedures prior to the contractor starting work.

6 The contractor for each of the tasks will leave a
7 fully auditable record documentation.

8 In addition, the contractor is supplying
9 independent quality assurance oversight, as is New Hampshir
10 Yankee, and the contractor is working under the New
11 Hampshire Yankee quality assurance program.

12 MR. SNIEZEK: Just a second.

13 [Pause.]

14 MR. DESMARAIS: I am just going to pick up where
15 left off at No. 2.

16 Now No. 3, the qualifications.

17 In selecting the contractors and the personnel wh
18 were assigned, we recognize engineering, quality assurance,
19 and nondestructive examination experience, specifically wit
20 ISI programs in welding, and the engineering that supports
21 that.

22 The fourth bullet addresses reporting. In any
23 time during this effort, either the Task 1, 2 or 3 efforts
24 by the contractor, there may be items that arise. Our
25 approach will be to have the contractor document those,

1 formally transmit those to New Hampshire Yankee, using the
2 existing mechanisms that we have in-house.

3 For example, we have a request for engineering
4 services procedure. During the field weld tabulation, if a
5 anomaly arises, the contractor will document that on the
6 RES, the request for engineering services, and we will
7 formally transmit that to -- that request to engineering fo
8 disposition.

9 New Hampshire Yankee will have the responsibility
10 for dispositioning that request.

11 The fifth area addresses checks and balances, in
12 that each task internal to the task performance itself has
13 check and balance, and Task 1 and 2 serve as checks and
14 balances on themselves. For Task 3, New Hampshire Yankee
15 will perform a separate check and balance for the
16 contractor's effort on Task 3.

17 This slide shows the methodology that we will be
18 using for the performance of this effort.

19 There are three separate tasks that are shown
20 here; Task 1, which is on the left-hand column; Task 2 here
21 and Task 3 in the center.

22 I will cover each task separately. I am coming
23 back to this slide as I go through the examples.

24 What I would like to do is to cover Task 1 first,
25 recognizing that Task 1 and Task 2 will be performed in

1 parallel for the system list, so that we will select one
2 particular system, and Task 1 and Task 2 in parallel with
3 perform their respective efforts for those tasks.

4 This overhead is one half of an isometric that wa
5 used during the construction of Seabrook. I have the other
6 half which I will put up in a minute.

7 This is a particularly good starting point for th
8 field weld tabulation, in that this, along with the
9 engineering change documents that were used during the
10 construction of the project, is the manner in which the
11 field welds were themselves tracked and accounted for
12 throughout the effort.

13 The second factor is that this is the as-built
14 isometric at the time at which Pullman-Higgins finished
15 their effort and in essence submitted the N-5 data report.

16 The second half of this isometric shows the field
17 weld tabulation, and specifically it shows which ones would
18 require RT. In this particular case it says 100 percent
19 field weld radiography required, for the following specific
20 field weld, and it gives the reason why. These are butt
21 welds.

22 In addition to that, although it is not entirely
23 legible by virtue of the reproduction of the overheads, thi
24 indicates which field welds would require liquid penetrant
25 examination, and this corresponds to the radiography

1 requirements as determined by code and as indicated on one
2 of the prior slides.

3 Now going back to this isometric, what I have don
4 is indicate that field welds would require radiography are
5 the ones that are highlighted in yellow. And the field
6 welds that would require liquid penetrant examination are
7 the ones that are circled in blue.

8 The contractor will go through each isometric,
9 including the appropriate -- the outstanding change
10 documents, and list all of the field welds on each
11 isometric.

12 In addition to that, they will specify which fiel
13 welds require radiography and the requirement applicable to
14 field welds that do not require radiography. So that in th
15 case of field weld 109, it would indicate that it did not
16 require radiography because it was a fillet weld.

17 Now the method of an internal check and balance
18 for this field weld tabulation will be to do a line segment
19 confirmation. Each isometric captures one specific line
20 segment. On our design level P&IDs, as a separate check an
21 balance for the field weld tabulation, to be sure that we
22 have covered all the line segments, we will highlight -- an
23 this refers to the segment -- the line segment -- we will
24 highlight on the design level P&IDs the boundaries that are
25 covered by this isometric. So that although I showed an RH

1 isometric, and this is a CDS system graphic representation,
2 if this was an RHR line, what we would show is that this
3 particular isometric line shown by coloring this in, and
4 then the line segment -- in this manner, by going through
5 all of the D level P&ID's, we will ensure that we will cover
6 all of the line segments captured between the code breaks.

7 In confirming all of the line segments, the
8 contractor will be responsible for providing Yankee with a
9 list of the field welds for that particular system.

10 New Hampshire Yankee, in turn, will enter that
11 data into an electronic data base for subsequent effort,
12 which is -- will be Task 3. I'll cover that in a minute.

13 They will retain their original data extraction s
14 that they in turn will be able to perform Task 3 separately
15 and independently from New Hampshire Yankee.

16 I will now move on to Task 2, recognizing that
17 Task 2 is being performed in parallel with -- by the
18 contractor, using a separate set of people. This entails
19 the radiographic inspection report review, and confirming
20 that the radiographs were on file.

21 This is a reproduction of an original radiograph
22 inspection report from Seabrook generated by Pullman-
23 Higgins. The information that we will capture from these
24 RIRs will include the system, the line number, the isometri
25 number and, again, this line number and isometric number

1 correspond directly to the isometric that I showed
2 previously.

3 MR. PARTLOW: Point to them again, please.

4 MR. DESMARAIS: The system number? Okay. The
5 line number and ISO numbers. The line number and the ISO
6 number refer specifically to -- they will correlate directl
7 with that ISO number, so that the -- if I can overlay these
8 together -- the line number and ISO number correlate
9 directly with the isometric reference number. We have the
10 line number here and then the segment number.

11 MR. PARTLOW: Okay.

12 MR. DESMARAIS: Okay. And that also corresponds
13 with this number right here, shown on the D level P&IDs.

14 In addition to capturing the field weld number an
15 its revision level, we will capture the specification,
16 whether it's ASME B 31.1 or ASME Section 8, we will capture
17 the date of the exposure for the radiograph. We will also
18 capture the station number, whether it was accepted or
19 rejected, whether it was within code, and we will
20 specifically capture -- I'll move this up, so you can see
21 that -- we will capture Pullman-Higgins signatures and in
22 this particular case, there is one, two, three Pullman-
23 Higgins signatures and the dates at which it was reviewed b
24 Pullman-Higgins.

25 We will also capture the review and approval by

1 the authorized nuclear inspector which would be in this
2 particular block here, and we will capture the Yankee Atom
3 signature and the date of approval.

4 The station number specifically -- let me explain
5 what that is for those who are familiar with radiography.

6 Looking at the panoramic view right here, on this
7 RAR, this specifically covers the review and approval of a
8 radiograph for stations 2 through 3, and 3 to zero. So tha
9 the zero position will be at the top, there will be a 1, 2,
10 3, and back to zero.

11 In this particular case, we have 2 to 3 and 3 to
12 zero radiograph covered by this particular RAR. We will
13 capture each radiograph inspection report in this fashion.

14 Now as a check and balance on the radiograph
15 inspection report, separate and distinct from that effort,
16 we will go through all of the film packages and verify that
17 we have the radiographs that cover the stations that were
18 approved by -- as indicated by the radiograph inspection
19 report.

20 The radiograph film package shows the field weld
21 number, and the date that it was shot, which corresponds to
22 the information that goes -- that was captured on the RAR.

23 Upon completing the data package for a given
24 system, again the contractor will provide a data package
25 tabulation to New Hampshire Yankee -- will provide a copy o

1 that data package tabulation to New Hampshire Yankee, and
2 New Hampshire Yankee will then enter into a data base, as
3 will the contractor, and we will independently do a match-u
4 of the two data bases. So that from Task No. 1, we have a
5 list of the field welds that require radiography, and from
6 Task No. 2, we have confirmation that we have the
7 radiographs for those field welds requiring radiography.

8 The last slide that I have shows the schedule for
9 this effort.

10 As Ted indicated, we have awarded a contract to
11 Nuclear Energy Services. That was done last Friday, on
12 April 5th. The contractor arrived on site this past Monday
13 Their initial efforts over the upcoming weeks will be to go
14 through site orientation, which they have already completed

15 We are also in the process of writing procedures
16 for subsequent review and approval by New Hampshire Yankee,
17 and they are beginning to assemble all of the data packages
18 so that they will be able to do their weld tabulation.

19 New Hampshire Yankee is committed to review and
20 approval procedures by April 19th. The contractor will
21 start work after those procedures are approved.

22 We anticipate that the contractor will actually
23 begin Task 1, which is the weld tabulation, and Task 2,
24 which is the RAR and radiograph film package review on Apri
25 22nd.

1 By May 30th, we propose to a status report on thi
2 project to the NRC, specifically to the residents on site.

3 And on June 28th, we anticipate that the
4 contractor will have completed the weld tabulation and the
5 RAR review.

6 That is again Task 1 and Task 2.

7 The contractor will finish the comparison of the
8 weld data list from each system and the RARs on July 5th,
9 and they will provide their report to us on July 31st.

10 We propose to have a second status report meeting
11 on July 31st.

12 As required, New Hampshire Yankee will complete a
13 root cause analysis for those anomalies that may have come
14 up as a result of these efforts, and we propose to complete
15 that by August 23rd, in order to include that as part of th
16 final report on August 30th, 1991.

17 That report will cover the results of the field
18 weld tabulation, results of the RAR document review, the
19 results of the radiograph code inspection review
20 verification, and it will also cover records anomalies as
21 necessary, specifically addressing the resolution, the root
22 cause analysis, and the safety implications that it may
23 indicate, and plan for completing compensatory actions and,
24 if necessary, a schedule for the completion of compensatory
25 actions.

1 I will now entertain any questions that you might
2 have related to this effort.

3 MR. PARTLOW: If this is primarily a records chec
4 then --

5 MR. DESMARAIS: Yes, sir.

6 MR. PARTLOW: -- if there is a case out there
7 where the wrong shot got taken, or for some reason it isn't
8 really the weld radiograph in the package that the records
9 seem to say it is, this is not going to catch that. Is tha
10 right?

11 Let's say for some reason back in 1984, they went
12 out and mis-shot the wrong weld. They meant to go out and
13 do F-1025 and they went out and did F-1026, and it didn't
14 get caught, and so far there's never been a real look at F-
15 1025, but this one got filed as F-1025.

16 MR. DESMARAIS: I'm not sure I understand your
17 question.

18 MR. PARTLOW: Okay. Let me -- I envision this as
19 a file, and Task 1 will say you should have 5000 files.

20 MR. DESMARAIS: Okay.

21 MR. PARTLOW: And so now you are going to go out
22 and look, and if there is something in each of these files,
23 no empty files, then you say okay, we must have done 100
24 percent of our -- we have radiographed everything that we
25 should have.

1 I'm asking, does this task cover such things that
2 could happen as having the wrong information in file No.
3 3000? For example, shooting the wrong weld. Shooting that
4 pipe over there when it was supposed to make a record of
5 this pipe over here.

6 Does that help?

7 MR. DESMARAIS: Not exactly. How would the
8 radiograph of field weld 0104 be identified as the
9 radiograph of field weld 104 when it's in the package? How
10 do you know that that's the right radiograph from that
11 package?

12 MR. PILLSBURY: Neal Pillsbury, Director of
13 Quality Programs.

14 When you look at the radiograph, there are lead
15 block numbers and date information and station start to
16 station finish information directly on the radiograph, and
17 that is information that will be taken off.

18 Now if that information is incorrect, this proces
19 will not discover that. However, you would have to have a
20 number of errors occur for that to occur. And we feel that
21 this is a reasonable starting point, because that was
22 checked at multiple levels of QA and QC over the
23 construction project to ensure that that information was
24 accurately captured on the radiograph.

25 MR. PARTLOW: Okay. So a simple misfiling will

1 get caught, then?

2 MR. PILLSBURY: Absolutely.

3 MR. PARTLOW: Okay. I understand.

4 MR. SNIEZEK: Jim Sniezek. I have a couple of
5 questions.

6 You talked about qualifications. Would you run
7 through again what the contractor's qualification criteria
8 are they have to meet?

9 MR. DESMARAIS: We specifically, in our bid
10 specification, requested that the personnel that they suppl
11 have code experience, nondestructive examination experience
12 both technical knowledge, as well as professional working
13 experience in that field.

14 MR. SNIEZEK: Would they essentially meet the
15 level of qualification equivalent? Do they need to be a QA
16 inspector in those areas that they are going to be
17 examining? I'm looking to understand a little more clearly
18 exactly what the qualifications are.

19 MR. DESMARAIS: Some of the people that the
20 contractor is proposing satisfy the SNTC criteria.

21 MR. SNIEZEK: Okay. But you are really not askin
22 for NDE Level 3s, or anything like that, because they will
23 not be interpreting radiographs; is that correct?

24 MR. DESMARAIS: They will not be interpreting
25 radiographs. But we do want them to have an appreciation o

1 the significance of the material that they are dealing with
2 and that is one of the reasons why we impose that criteria
3 on the contractor.

4 MR. SNIEZEK: The question on the methodology.
5 When we looked at the second isometric, the one that had th
6 verbiage on it, when the contractor picks the welds that
7 require radiography, are they just taking the weld numbers
8 off the ISO sheet as they are listed?

9 For example, on your viewgraph, you list F0101,
10 102, 103, 104, and 106, and the reason is butt welds.

11 Are they just going to pick that off, or is there
12 a different way in which they are going to construct the
13 record of welds that require radiography?

14 MR. DESMARAIS: The contractor's procedure is not
15 finalized, and I am speculating to a certain extent on what
16 their efforts will entail. But they will take the isometri
17 and they will take the field welds, all of the field welds
18 off a given isometric.

19 MR. SNIEZEK: Okay.

20 MR. DESMARAIS: They will also review any design
21 change documentation that has not been incorporated in a
22 particular isometric.

23 For example, there may be an engineering change
24 authorization that has not been incorporated in one of the
25 revisions. They will review all the outstanding design

1 change documents that existed against this document, the
2 isometric, at the time it was turned over for completion of
3 the N-5 process.

4 From that, all of that design and engineering
5 information, they will come up with a list of all the field
6 welds. Separate and distinct from that, they will identify
7 which field weld would require radiography.

8 MR. SNIEZEK: Now how will they do that?

9 MR. DESMARAIS: They will do that, one, from the
10 -- one method will be to do it through this process right
11 here, which ones are butt welds and which ones are field
12 welds. There are other means available to them.

13 MR. SNIEZEK: So you'd be going based on whoever
14 made that classification iso originally, you'd be taking
15 that as gospel, is what I hear you saying.

16 MR. DESMARAIS: In some instances, yes.

17 MR. CERNE: Was there intent to go back to the
18 slides, to go back to your slide that says the type of weld
19 that required radiography, and balance those welds against
20 those requirements to determine what required radiography?
21 In other words, not just rely on the isometric specificatio
22 of what was required, but whether the code actually require
23 it?

24 MR. BATEMAN: In other words, the four welds that
25 were listed there as not required, are those going to be

1 verified that that was an accurate assessment? That that i
2 true, yes, those weren't required when that decision was
3 made?

4 MR. DESMARAIS: That is not our intent at this
5 time.

6 Now we will -- when this information is not
7 specified, and in some cases, specific information such as
8 fillet welds is not always indicated on these isometrics.
9 And in those particular instances, we will have to go back
10 and verify the joint configuration to ensure that it does
11 meet this criteria.

12 Now there is another data package that I use as
13 part of my initial scoping efforts with the contractor, tha
14 goes back to the ring header for the CBS system, and
15 specifically the nozzles that are shown on the isometric
16 indicate that they do not require radiography.

17 There is a separate reference to a Pullman-Higgin
18 field procedure that indicates that that is a socket weld.
19 And in that particular instance, none of the nozzles that
20 are shown on the ring headers would have required
21 radiography.

22 So there are instances in our generic application
23 that would not be listed specifically on our isometric, but
24 you would have to go to some other design document that
25 would indicate how the requirements were developed and then

1 subsequently imposed.

2 MR. CERNE: Could you be a little more specific?
3 The contractors are knowledgeable people, and they
4 understand fillet welds don't require radiography and they
5 understand circumferential butt welds do require
6 radiography. If, for example, a circumferential butt weld
7 or a piece of piping is listed, but didn't require
8 radiography, they will or will not investigate?

9 MR. DESMARAIS: We will investigate that, and tha
10 is one of the types of anomalies that can come up where the
11 contractor may not have sufficient information to come to a
12 conclusive determination that radiography was or was not
13 appropriately applied.

14 In that particular instance, he would document
15 that situation on a request for engineering services,
16 transmit it to New Hampshire engineering for resolution.

17 MR. CERNE: Okay. So going back to Mr. Snizek's
18 question, they are in fact looking at not only the ISOs
19 forward, but the ISOs back? In other words, if the ISOs ar
20 specifying the correct type of NDE or the type of weld that
21 is listed?

22 MR. DESMARAIS: Yes.

23 MR. BATEMAN: I'm confused. It's my understandin
24 that your ISO has specified on it -- Bill Bateman, ARC --
25 that your isometric has specified on it the field welds tha

1 are butt welds and the field welds that are fillet welds,
2 and you won't be doing any research to verify whether those
3 classifications are correct. The only time you will be
4 doing any research to determine if there was a question is
5 if those specifications weren't on the ISO?

6 MR. DESMARAIS: Yes.

7 MR. BATEMAN: Okay. So I think the answer to Mr.
8 Sniezek's question is for those ISOs that have the
9 information on them, you're not going to be verifying that
10 the information is accurate?

11 MR. DESMARAIS: Well, we won't be reverifying tha
12 the information is accurate, because this information was
13 captured as part of the review and approval process --

14 MR. BATEMAN: Oh, I understand.

15 MR. DESMARAIS: -- for the drawing. So we are no
16 going to repeat --

17 MR. BATEMAN: What percentage of your ISOs don't
18 have that type of information on them, do you know?

19 MR. DESMARAIS: I don't know that.

20 MR. SNIEZEK: Those are the only questions I have
21 so far.

22 MR. BATEMAN: I have one question. Bill Bateman,
23 NRC.

24 You showed an RAR up there which only was a
25 partial, indicated a partial RT of that particular joint.

1 Now there were two stations that were not RT'd, that's
2 indicated on that RAR. How do you keep track to know that
3 you have all the RARs together for a particular weld before
4 you check that weld package off?

5 It's not going to be a simple match-up of one RAR
6 per field weld. You know, you're not going to have 5001
7 field welds and then 5001 RARs. You don't know how many
8 RARs you're going to have. So my question is how do you
9 know when you have all the RARs together for a given field
10 weld? How do you keep track of that?

11 MR. DESMARAIS: The tracking mechanism is by field
12 weld, so that you would have -- for a given field weld,
13 there may be five stations.

14 What we will do as part of this review effort, and
15 the RIR review specifically, is to ensure that we have -- we
16 will capture all of the existing RARs, regardless of how
17 many, whether there was a Rev Zero or Rev 1, or how many
18 times that particular weld or station was re-shot. We will
19 capture all of those.

20 The intent is that at Task Step No. 3, which is
21 the comparison, that we indeed have radiograph inspection
22 report and film that shows an approved radiograph for each
23 station on that weld.

24 MR. BATEMAN: That RAR only has half the weld. A
25 I right?

1 MR. DESMARAIS: Yes.

2 MR. BATEMAN: The way I read that? Okay.

3 So you've got to have another RAR that will have
4 different identification number or something on it.

5 MR. DESMARAIS: It's captured by the field weld
6 number.

7 MR. BATEMAN: Yes, but that's a separate piece of
8 paper.

9 MR. DESMARAIS: That is true.

10 MR. BATEMAN: So my question is, how are you goin
11 to keep track of the fact that you've got all the RARs you
12 need for a given weld before you say, okay, I've got all th
13 paper for that weld?

14 MR. DESMARAIS: Go ahead.

15 MR. PILLSBURY: Neal Pillsbury, New Hampshire
16 Yankee.

17 We will capture the information off of each RAR
18 that pertains to that particular field weld. We will also
19 capture the information off of the radiographic film itself
20 and use the electronic data base to sort out that we have
21 all the acceptance stations that we need for that particula
22 weld. And there is also a total index of what we have for
23 RAR and radiographic film in our records vault, some of
24 which is not required. But we will be able to sort out tha
25 we have acceptance shots accepted by the piping contractor,

1 accepted by A&I, if applicable, accepted by Yankee Atomic,
2 if applicable.

3 MR. BATEMAN: Are all your RARs filed by field
4 weld number?

5 MR. PILLSBURY: That is correct.

6 MR. BATEMAN: So if you pull a file for a field
7 weld, you will have -- you may have three or four RARs,
8 which should add up to the --

9 MR. PILLSBURY: Yes. We may have several more
10 than are required to meet the code.

11 MR. BATEMAN: Well, will you know if you don't
12 have any?

13 MR. PILLSBURY: Yes, because we will be missing
14 an acceptance shot for station X-Y.

15 MR. BATEMAN: So somebody will be checking off th
16 station locations to verify that they have got radiographs
17 per station?

18 MR. PILLSBURY: Yes, and we are simply using the
19 computer as an electronic sort of mechanism, an indexing
20 mechanism, and to be able to cross-check against the list o
21 welds that require radiography.

22 MR. BATEMAN: My question is I just want to be
23 sure you have some way you are keeping track of each statio
24 that you are supposed to radiograph?

25 MR. PILLSBURY: Yes. When you do the two

1 electronic list comparisons, you will come up with a
2 potential number of anomalies. In other words --

3 MR. FEIGENBAUM: I think what they are talking
4 about, I think the question is how will you know you've got
5 the total number of stations that are required for a
6 particular weld?

7 MR. PILLSBURY: Because that's stated on Rev Zero
8 of the RAR which has to be there, and it will reflect
9 whether there are two stations to this particular weld, or
10 three or five or 10.

11 MR. BATEMAN: So Rev Zero then will have all
12 stations on it?

13 MR. DESMARAIS: Yes.

14 MR. BATEMAN: In other words, you have Zero to 1,
15 1 to 2 --

16 MR. DESMARAIS: 2 to 3.

17 MR. BATEMAN: And 3 to 4.

18 MR. DESMARAIS: 3 to Zero. You always return bac
19 to the Zero.

20 MR. BATEMAN: So this is a Rev 1, it will have al
21 stations, and that eventually will be -- will have an
22 acceptance check for all stations by the time you have the
23 Rev Zero or --

24 MR. DESMARAIS: Yes.

25 MR. BATEMAN: -- with the acceptable data on all

1 stations?

2 MR. DESMARAIS: That is correct, and that is the
3 internal check and balance for Task No. 2. So that after
4 going through the radiographs, the inspection reports, and
5 listing all the stations, separate and distinct from that,
6 there will be reviewing of the film packages, ensuring that
7 they have an acceptable film for each one of the stations
8 that was approved. And the information that you extract
9 from the film itself indicates the field weld number and the
10 date it was shot. So you have information that should
11 correspond.

12 MR. CHANDLER: Excuse me, Larry Chandler, OGC.
13 Are your efforts going to include reviewing the
14 radiograph quality as well?

15 MR. DESMARAIS: We are reviewing the films to
16 ensure that we have the radiograph that was shot that
17 corresponds with this inspection report.

18 MR. CHANDLER: You used the word "acceptable."
19 That's why I was raising it.

20 MR. DESMARAIS: We are not reinterpreting the
21 film.

22 MR. BATEMAN: Are you checking the film?

23 MR. DESMARAIS: We are not -- we are only
24 extracting information from the film that indicates the
25 station number, the field weld number, and the date it was

1 shot.

2 MR. CHANDLER: "Acceptable," then, in those terms

3 MR. DESMARAIS: Yes. We are just identifying
4 information that is on the films.

5 MR. CERNE: Let me make a statement. You can
6 correct it if it is wrong. I want to clarify one of Mr.
7 Bateman's questions.

8 The radiograph you have up there may be an exampl
9 of a re-shot of two sections of that weld that had to be
10 done over. So the original RAR would show station Zero to
11 1 to 2, and 2 to 3, and 3 to Zero. Two of those shots may
12 have been rejected, and repairs may have had to have been
13 done, and now this is the re-shot of two of those stations.
14 So the final vault records would be not a correction to the
15 original RAR, but this, in addition to the original RAR,
16 showing that you have complete coverage of the weld; is my
17 understanding correct?

18 MR. DESMARAIS: Yes.

19 MR. PILLSBURY: That's correct.

20 MR. DESMARAIS: Yes, and as we go through, we wil
21 also be capturing which stations were rejected as a means o
22 signaling that we should be looking for another radiograph
23 inspection report that shows an acceptance for a particular
24 station.

25 For example, if this was Rev Zero and it indicate

1 that stations 2 to 3 and 3 to Zero were rejected,
2 hypothetically if that's the case, we would have to be
3 looking for this particular radiograph inspection report
4 which shows that those stations were re-shot, and that the
5 film was reviewed and approved by the appropriate people.

6 MR. BATEMAN: At a later date?

7 MR. DESMARAIS: At a later date.

8 MR. BATEMAN: And you would also verify you have
9 the film?

10 MR. DESMARAIS: Yes.

11 MR. WESSMAN: Ted, let me pursue your Task 3 and
12 its electronic matching. I'm Dick Wessman from NRR.

13 Is the Task 3 done by the contractor and the
14 electronic matching constitute a check and balance to be
15 sure that the contractor has done everything, and that your
16 data base captures everything? Is that what that really
17 amounts to?

18 MR. DESMARAIS: New Hampshire Yankee will be doin
19 electronic matching of the information from both tasks,
20 separate and distinct from the contractor's effort. That i
21 a way of having a redundant check on their efforts of
22 comparison.

23 MR. WESSMAN: What is the difference between what
24 New Hampshire Yankee is doing electronically in the Task 3?
25 They sound like kind of the same thing, one being done by

1 New Hampshire Yankee, and one being done by the contractor.

2 MR. DESMARAIS: They are redundant.

3 MR. WESSMAN: Okay.

4 MR. PILLSBURY: If I can answer that. Neal
5 Pillsbury.

6 The other thing is we are specifying how we are
7 doing it, but we are not specifying for the contractor how
8 he will do it. We will approve his process, because he's
9 going to specify that to us in his procedure. But we don't
10 have any other influence over how he chooses to do that
11 comparison.

12 MR. FEIGENBAUM: They may choose to do it manually
13 as opposed to electronically.

14 MR. PILLSBURY: And because, you know, data entry
15 into an electronic program is a system that may be prone to
16 error, it is felt to be prudent to go back twice, have them
17 build it, we will build it, compare the results.

18 MR. EDISON: I would like to ask you what you
19 anticipate you are going to find when this is all over.

20 [Laughter.]

21 MR. EDISON: What scale do you expect -- more
22 missing films, more missing signatures, how many? Ball
23 park, what do you think you are going to find when you dig
24 into this?

25 MR. FEIGENBAUM: Well, we'll certainly find out,

1 but we have every confidence in our programs, that we
2 captured the records that were necessary. Now there are
3 thousands and thousands of documents, obviously, and you can
4 see each weld has separate stations. There are multiple
5 documents required for each weld.

6 It is quite possible we may find a few other
7 discrepancies, but as far as the technical adequacy of the
8 weld and the quality of the whole plant, I don't expect to
9 find any problems.

10 There may be a small number of missing records
11 that we will have to take care of and disposition, but I'm
12 not concerned about the technical adequacy of any of the
13 welds.

14 MR. CHANDLER: Larry Chandler again.

15 In connection with reporting, you indicated that
16 NES might make requests to you. Is there a feedback
17 mechanism for that in the contract?

18 MR. DESMARAIS: The RES process, as an example,
19 where the contractor sends the request out to New Hampshire
20 Yankee, that request has to be answered by New Hampshire
21 Yankee. As part of the final reporting mechanism, that will
22 remain an outstanding anomaly until New Hampshire Yankee
23 completes that resolution. All of the RES's that may be
24 generated will be included as part of the contractor's final
25 report and turned over to New Hampshire Yankee, so we have

1 document trail that clearly develops and establishes the
2 types of questions that were asked and their resolution for
3 each weld.

4 MR. CHANDLER: So the contractor doesn't
5 necessarily know what ultimate disposition is made by New
6 Hampshire Yankee?

7 MR. DESMARAIS: No, they don't. They will when w
8 complete the resolution and get it back to them.

9 MR. BATEMAN: Bill Bateman, NRC, again.

10 What confidence do you have, and what is the basi
11 for your confidence, that you accurately know the as-built
12 condition of your plant?

13 The reason I ask the question is the ISOs will be
14 out of your files, and any design modifications that were
15 made, your assumption is that what you have before you
16 accurately represents the as-built condition?

17 So my question is, what is your confidence that
18 you really know the as-built condition, and what is that
19 confidence based on?

20 MR. PILLSBURY: I can start, but you can chime in
21 if I don't cover it all. Neal Pillsbury, New Hampshire
22 Yankee.

23 At the conclusion of the construction and piping
24 installation process, there were formal walkdown processes
25 where they went hand over hand the entire pipe and

1 determined final dimensional configuration of that pipe, an
2 that went through independent engineering reconciliation
3 processes, and ultimate sign-off. The PAPSCOTT effort was
4 involved there, the piping and pipe support close-out, as-
5 built effort, and that was, as Ed has already mentioned in
6 his presentation, that was after the Pullman-Higgins
7 organization, as the piping installation contractor, was
8 entirely done with the plant. In other words, many, many
9 checks and balances, many controls were placed on that
10 particular effort, which in turn led up to the N-5 reportin
11 process.

12 So our confidence is very high that that is a goo
13 place and a prudent place to start the effort to look for
14 the welding documentation.

15 Did I miss anything?

16 Does that satisfy your question?

17 MR. BATEMAN: I just asked you what you did to
18 assure your confidence that what you're going to be looking
19 at represents the as-built condition of the plant. A lot o
20 plants have problems with that and they end up having to
21 reconstitute their design basis, their drawings. Hopefully
22 you do have a good as-built record of your plant.

23 MR. PARTLOW: Jim Partlow, NRC.

24 What is the magnitude of this thing in terms of
25 man-days or dollars? How --

1 MR. DESMARAIS: We're not speaking in man-days.
2 We're speaking in man-months. We're on the order of 12 man
3 months right now, specifically to the contractor. New
4 Hampshire Yankee labor is above and beyond that.

5 MR. PARTLOW: This is only the equivalent of one
6 person for a year? It sounded much bigger than that to me.

7 MR. DESMARAIS: Again, this is only for the
8 contractor.

9 MR. PARTLOW: Yes.

10 MR. DESMARAIS: New Hampshire Yankee will have --
11 will have spent a considerable number of resources for their
12 portion of this effort.

13 MR. FEIGENBAUM: Ted Feigenbaum.

14 Since we started this, responding to questions
15 regarding welds and records, since 1989, we have spent
16 hundreds of thousands of dollars on this effort, and this
17 will probably be close to double to what we have already
18 spent in terms of dollars.

19 MR. PARTLOW: I see.

20 MR. FEIGENBAUM: It is an extensive effort. One
21 of the reasons we are going through an independent
22 contractor is certainly the independence aspect of it, but
23 because of the manpower required to do it in a relatively
24 short period of time, we didn't have the resources on-site
25 to do it, and still be able to accomplish our other tasks.

1 MR. SNIEZEK: Are there any other questions on the
2 presentation?

3 MR. MARTIN: Yes. We need to discuss some of the
4 reporting aspects. I understand the points where you are
5 getting formal reports from your contractor, but we also
6 need some reports of ongoing activities, and I need to get
7 your commitment to give these kinds of reports.

8 The first one is that if you identify either a
9 weld quality problem or a record that is not complete, then
10 we would request that you give us a prompt telephone call,
11 within 24 hours of the identification, to the section chief
12 or Bob, if he is not available.

13 If it happens to be on a weekend, then a call to
14 the incident response center, they will be able to put you
15 in touch with the section chief.

16 If it is a weld quality question, you don't have
17 information on the weld quality, or missing the radiograph,
18 then we need a written report, and we request that written
19 report be made to us within 72 hours of identification, and
20 it be to the document control desk, with copies to the
21 senior resident inspector, the project manager, and the
22 section chief.

23 It should include in there --

24 MR. HARPSTER: Excuse me, can I slow you down just
25 a second? I lost track. A written report within 72 hours.

1 MR. MARTIN: Right. To the document control desk
2 with copies to the senior resident, the project manager, and
3 the section chief.

4 That should identify the deficiency, the
5 justification for continued operations, and any short and
6 long term corrective action.

7 If either one of those reports happens to be
8 duplicative of your reporting requirements under the tech
9 specs or 10 CFR, and you have already made the report,
10 obviously you don't need to make another report. So any
11 existing reporting requirements that exist in your license
12 or in the regulations, if you have already made those
13 reports, and they encompass this, then no additional report
14 is required.

15 We would also request that on a monthly basis, we
16 get a written status report to the regional administrator,
17 with copies to the senior resident inspector and the project
18 manager, which would document progress to date, any
19 deficiencies identified, corrective actions implemented, and
20 any future plans.

21 Recognizing the timing of your work activities,
22 you didn't expect the first report until the 1st of June and
23 the second one, the 1st of July, and the third one, the 1st
24 of August, and if there is a need for it, the 1st of
25 September.

1 The final item, for your final report, we also
2 need to have the contractor's report to you along with your
3 report and conclusions.

4 Any questions on that?

5 MR. FEIGENBAUM: Yes, Tim, I've got one question.
6 When they went through the process and the methodology, you
7 indicated that the contractor may at times ask questions, i
8 something doesn't look right or he doesn't understand,
9 because they are independent, and they weren't involved in
10 the initial work.

11 If the contractor asks us a question through the
12 RES process that Ed described, you don't consider that a
13 discrepancy until you confirm that, in fact, we can't --
14 that, in fact, there really is a discrepancy. There really
15 is an issue, whether it be a quality issue or otherwise.

16 So that would be the point where we determine
17 that, in fact, there is an issue and a discrepancy, a true
18 discrepancy, versus just a question.

19 MR. MARTIN: It says the contractor is not a
20 licensee, and you are. It's when you make the determinatio
21 there is a weld quality problem or a records problem.
22 That's when the clock starts.

23 MR. PARTLOW: I take it there is little chance --
24 Partlow, NRC -- little chance of that happening until Phase
25 III; is that right -- when you bounce one list off the

other?

2 MR. FEIGENBAUM: Not necessarily.

3 MR. PARTLOW: Okay.

4 MR. PILLSBURY: Not --

5 MR. SNIEZEK: Wait a minute. Why don't you
6 identify yourself?

7 MR. PILLSBURY: Neal Pillsbury, New Hampshire
8 Yankee.

9 Phase III occurred sequentially throughout the
10 process, because Test 1 and Test 2 were running in parallel
11 so when we have Test 1 and Test 2 completed for a particula
12 system, that occurs.

13 MR. PARTLOW: Okay.

14 MR. SNIEZEK: Okay. Jim, I would like to caucus
15 before we close out the meeting.

16 MR. PARTLOW: Okay. Why don't we take a ten-
17 minute break, and NRC Staff, why don't we go into another
18 room?

19 [Recess.]

20 MR. SNIEZEK: Okay, are we ready to go back on th
21 record?

22 There is one area that I want to make sure we
23 thoroughly understand that wasn't quite certain from the
24 presentation, and so I'm asking Tony Cerne to recapitulate
25 what we thought we heard, or at least what we would have

1 liked to have heard if it's not exactly what we thought we
2 heard, and I want to make sure that we have a common
3 understanding, and if our understanding is wrong, let us
4 know.

5 Tony?

6 MR. CERNE: Okay, yes. Tony Cerne, Region I. Th
7 area is sort of divided into two questions.

8 The first has to do with weld identification. If
9 I understood Mr. Pillsbury correctly, when the TASK 2 peopl
10 go to the records and pull out individual film to look at
11 the station markers, they will also be looking at the weld
12 ID on that film to match it up with the weld, in fact, that
13 they're investigating; is that correct?

14 MR. PILLSBURY: That's correct.

15 MR. CERNE: Okay. The second point is a little
16 more complicated. It has to do with the TASK 1 effort, and
17 talking about starting with the isometric drawings.

18 When people -- when the TASK 1 contractor
19 researches isometric drawings, will they be using only the
20 material in the blocks that designate the field welds, or
21 will they instead start with the actual line designations,
22 the piping drawing, counting the welds, and then
23 determining, for example, there are ten welds in this
24 system, looking at line sizes to see if it makes sense with
25 respect to the Code, that these are fillets, that these are

1 circumferential butt welds, look on the other side of the
2 isometric drawing, looking at the blocks to determine, yes,
3 ten are accounted for. It makes sense that six of these are
4 circumferential butt welds that require radiography or
5 fillet welds that logically were socket welds of a two-inch
6 size or any other anomalies that might need to be addressed
7 or looked at and researched.

8 Is that our understanding, or is it just --

9 MR. DESMARAIS: It would be starting with the
10 isometric configuration showing the actual line and field
11 welds and the outstanding design or engineering
12 documentation that hasn't been incorporated. So it's a
13 combination of those two products that they start with, and
14 then subsequent to that, confirm that the requirements for
15 radiography have been fulfilled properly.

16 MR. CERNE: Okay.

17 MR. DESMARAIS: The only thing that is somewhat
18 different from your understanding is the fact that they
19 would also use outstanding design change documents.

20 MR. CERNE: Tony Cerne again. Maybe I need to
21 clarify. What I hear you say is that you will be verifying
22 that the code requirements are correctly specified by that
23 iso, to the extent that it doesn't require field --

24 MR. FEIGENBAUM: Ed, what I think -- Ted
25 Feigenbaum -- what I think Tony is asking is when you do th

1 takeoffs or the contractor does the takeoffs on an iso, will
2 they reverify the code requirements for non-destructive
3 examination for each weld?

4 MR. CERNE: Correct. Minus the necessity to walk
5 the field. In other words, from whatever is available on
6 the iso, that they will be able to determine the NDE, the
7 radiography that wasn't required has been exempted for a
8 proper reason.

9 MR. FEIGENBAUM: That wasn't the initial scope of
10 the effort. In terms of looking at the iso -- you can
11 answer the question, but I understood that if the Pullman-
12 Higgins had indicated a weld as a butt weld, that was our
13 starting point, unless something didn't make sense or the
14 information was not there.

15 MR. DESMARAIS: The starting point would be the
16 isometric, the actual configuration of the piping as
17 depicted on the drawing.

18 The second step would be to review any outstanding
19 and varying documentation that exists that hasn't been
20 incorporated on the drawing.

21 From that, those first two steps, the contractor
22 will develop a list of field welds for that line segment.

23 The fourth step would be to use existing
24 information that currently exists on the isometric and/or i
25 the design change documents that would indicate the type of

1 radiography requirements that may be or may not be invoked
2 - for instance, the non-destructive examination requirement
3 for the welds, staying squarely within the four corners of
4 the isometric and existing change documents.

5 MR. CERNE: Well, I guess the question comes up,
6 if, you know, the purpose of the charts showing that what
7 the code requires radiography is meaningless to these
8 individuals, that all they have to do is look at the
9 Pulmann-Higgins block and say this is what requires
10 radiography, knowledgeable people, we would assume, would be
11 able to determine where they have before them the contract
12 requirements and the code requirements, and they are
13 knowledgeable, they would be able to determine where the
14 isometric drawings may be in error, minus a field walkdown.

15 If a person is unable to determine from the
16 isometric drawings, that's one thing, but if somebody shows
17 a six-inch weld at the socket weld or the fillet weld where
18 there's a six-inch pipe, then we would expect knowledgeable
19 people to question that.

20 I mean, is that unreasonable?

21 MR. FEIGENBAUM: That's not unreasonable. No, it
22 would be questioned, and that would be part of the effort.
23 And certainly if there is no -- the type of weld was not
24 specified, there would be a thorough review back through the
25 code requirement as to what weld type was required and

1 whether radiography was required.

2 MR. CERNE: I guess what we're trying to elicit
3 from you is some specific statement or commitment that this
4 TASK-1 review is not a rote acceptance of documented welds
5 that required radiography per the isos. As we understood
6 it, it would be a look into the codes to see that the code
7 requirements had been met.

8 MR. FEIGENBAUM: Could we take a minute?

9 MR. SNIEZEK: Sure, go ahead. There's a room
10 right next door.

11 [Recess.]

12 MR. FEIGENBAUM: Okay, Jim, I'm going to ask you
13 first that question from Tony. We appreciate the
14 sensitivity of the question, and I hope that we can answer
15 it crisply and concisely.

16 In our interpretation of your March 19th letter t
17 us, it was our understanding that you are requesting us to
18 confirm the records for the Pullman-Higgins field welds
19 requiring radiography by code.

20 Now we had to, in order to estimate the scope of
21 that effort for ourselves and for any other contractor, we
22 had to choose a starting line and a finish line to propose
23 to that contractor and to propose to our own materials and
24 resources estimation inside, inside our own organization.

25 We chose as a starting point the as-built

1 engineering records, which we feel have been through more
2 than adequate numbers of reviews during the construction an
3 close-out process, and we have every confidence that those
4 are based on valid as-built efforts, the 7914 efforts, the
5 Papscott efforts, the PSI efforts, and a multiple number of
6 reviews from Pullman-Higgins, through the walkdowns,
7 dimensional considerations, engineering reconciliations,
8 UE&C Engineering's part, Westinghouse Engineering's part,
9 the Yankee engineering oversight and licensee oversight.

10 Now in having an independent contractor,
11 contractors actually, go through the process, a Request for
12 a Proposal process and the bid solicitation process and so
13 forth, we feel comfortable that we have a highly manageable
14 independent contractor and highly manageable people that
15 they have supplied that will be pulling the data off of the
16 as-built engineering documents.

17 And in the process of pulling that data, they wil
18 be confirming that the field joint configuration and
19 radiographic requirements are consistent with applied
20 engineering principles and practices.

21 If there is any doubt, it will be clear in their
22 procedures, and it is clear in our expectations to that
23 contractor today that they are to take the conservative
24 approach and document through us the request that we resolv
25 that question, or if they are interpreting it as not

1 conservative in accordance with applied engineering
2 principles and practices, then they are going to document
3 the question to us, and we are going to have to resolve
4 that.

5 Once that has occurred, then that particular
6 question and resolution is going to be tracked to the
7 following resolution and will be demonstrated in the final
8 report.

9 I hope that answers the question.

10 MR. SNIEZEK: I don't know -- Jim Sniezek -- I
11 don't know if we're saying the same thing or not. It
12 sounded, by what you said, we were saying the same thing in
13 different words.

14 MR. PILLSBURY: I had that impression when Mr.
15 Cerne was talking before, but it's a very sensitive issue,
16 because we have very precisely scoped this to the
17 independent contractor.

18 MR. SNIEZEK: Well, I understand that, and if our
19 letter to you wasn't clear and understandable, that's one of
20 the reasons why we're having the meeting, to make sure we're
21 all talking the same thing, so that when we get done, we
22 don't say, well, that's not what we wanted. You didn't do
23 what we expected you to do. Because that would be the worse
24 of both worlds.

25 Let me repeat back what I heard you say in my

1 words.

2 Your independent contractor is going to start with
3 isometric, and he identifies the welds from isometric using
4 the engineering principles, the engineering judgment. He'll
5 make a determination whether or not what may be on his part
6 of the isometric is consistent with what the contractor
7 should be on here. And if anything looks fishy, he's going
8 to identify it as a question for resolution.

9 So your basic starting point will be actually
10 the piping portion of the isometric for identification of
11 the field welds.

12 Now that's what I believe that we asked for in our
13 letter, and that's what I hear you, in my own words, saying
14 that you intend to do.

15 MR. FEIGENBAUM: Yes. Now in cases, you know, I
16 would try to say, in cases where the type of joint is not
17 clear, not specified, then that would certainly be an RES t
18 Engineering, to New Hampshire Yankee to resolve.

19 MR. SNIEZEK: I understand. And if it looks like
20 it's a six-inch circumferential joint, and it's not listed
21 on here as requiring radiography, that would be the type of
22 thing that your contractor would raise a question on?

23 MR. FEIGENBAUM: Yes.

24 MR. SNIEZEK: And say, what's going on?

25 MR. FEIGENBAUM: That's correct.

1 MR. SNIEZEK: All right. Are there any other
2 questions that the NRC Staff has on that point?

3 MR. MARTIN: Not on that point.

4 MR. SNIEZEK: Now the question on the reporting.
5 Are you prepared to agree that you would report under the
6 conditions that Mr. Martin laid out?

7 MR. FEIGENBAUM: I have a comment on that. Yes,
8 we are prepared to agree to those reporting requirements,
9 but we have two requests.

10 One is that we would like a copy of the transcrip
11 as soon as possible. As much as I trust Mr. Harpster as my
12 scribe, we may have missed a point or a number, so I think
13 it's important that we have that as soon as possible.

14 MR. SNIEZEK: That's agreed upon, yes. You
15 definitely will.

16 MR. FEIGENBAUM: The second --

17 MR. HARPSTER: You think I'm untrustworthy?

18 MR. SNIEZEK: I won't comment on that.

19 MR. FEIGENBAUM: The second clarification I have
20 is that I inferred from what was said, Tim, that these
21 special reporting requirements are for the duration of this
22 project only.

23 MR. MARTIN: Yes.

24 MR. FEIGENBAUM: They are above normal reporting
25 requirements. With that understanding, yes, we accept that

1 MR. SNIEZEK: Does anyone on the NRC Staff have
2 anything else they would like to add?

3 [No response.]

4 MR. SNIEZEK: Does New Hampshire have anything
5 they would like to add?

6 MR. FEIGENBAUM: No.

7 MR. SNIEZEK: Okay. I want to thank you for
8 coming in. I think we both have a common understanding of
9 what now is going to be done, and I appreciate it.

10 Thank you very much. This closes the meeting.

11 [Whereupon, at 3:10 o'clock, p.m., the meeting wa
12 adjourned.]

13

14

15

16

17

18

19

20

21

22

23

24

25

REPORTER'S CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission

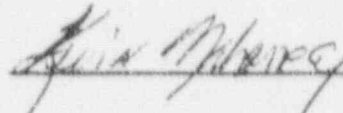
in the matter of:

NAME OF PROCEEDING: New Hampshire Yankee

DOCKET NUMBER:

PLACE OF PROCEEDING: Rockville, Maryland

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.



Official Reporter
Ann Riley & Associates, Ltd.

NEW HAMPSHIRE YANKEE
PRESENTATION TO NRC
ON
PULLMAN-HIGGINS FIELD WELD
RECORDS RE-VERIFICATION PROJECT

APRIL 10, 1991

RECORDS REVERIFICATION

Purpose

1. Identify all Pullman-Higgins field welds that require radiography by code
2. Verify that NHY has the documents (RIR's and radiographs)
3. Confirm evidence of YAEC radiograph review
4. Identify and report records anomalies
5. Report on the results of this effort

RECORDS REVERIFICATION

Scope

Applicable codes: 1977 edition, winter 1977 addenda

ASME Section III

Piping

Class 1

Class 2

Class 3

Supports

Class 1

ASME Section VIII

ANSI B 31.1

RECORDS REVERIFICATION ASME Radiography Requirements

ASME Type of Welds	ASME Class	RT	Applicable ASME Code Paragraph
1.			
Circumferential	1	X	NB-5222
Butt Weld	2	X	NC-5222
Joints	3	—	ND-5222
2.			
Branch Piping	1	>4"NPS	NB-5242
Butt Welded	2	>4"NPS	NC-5242
Joints	3	—	ND-5242
3.			
Branch Piping	1	>4"NPS	NB-5243
Corner Welded	2	>4"NPS	NC-5242
Joints and Oblique	3	—	ND-5242
Piping Connections			
4.			
Fillet and Socket	1	—	NB-5260
Welds (excluding	2	—	NC-5260
Name Plate Welds)	3	—	ND-5222

RECORDS REVERIFICATION

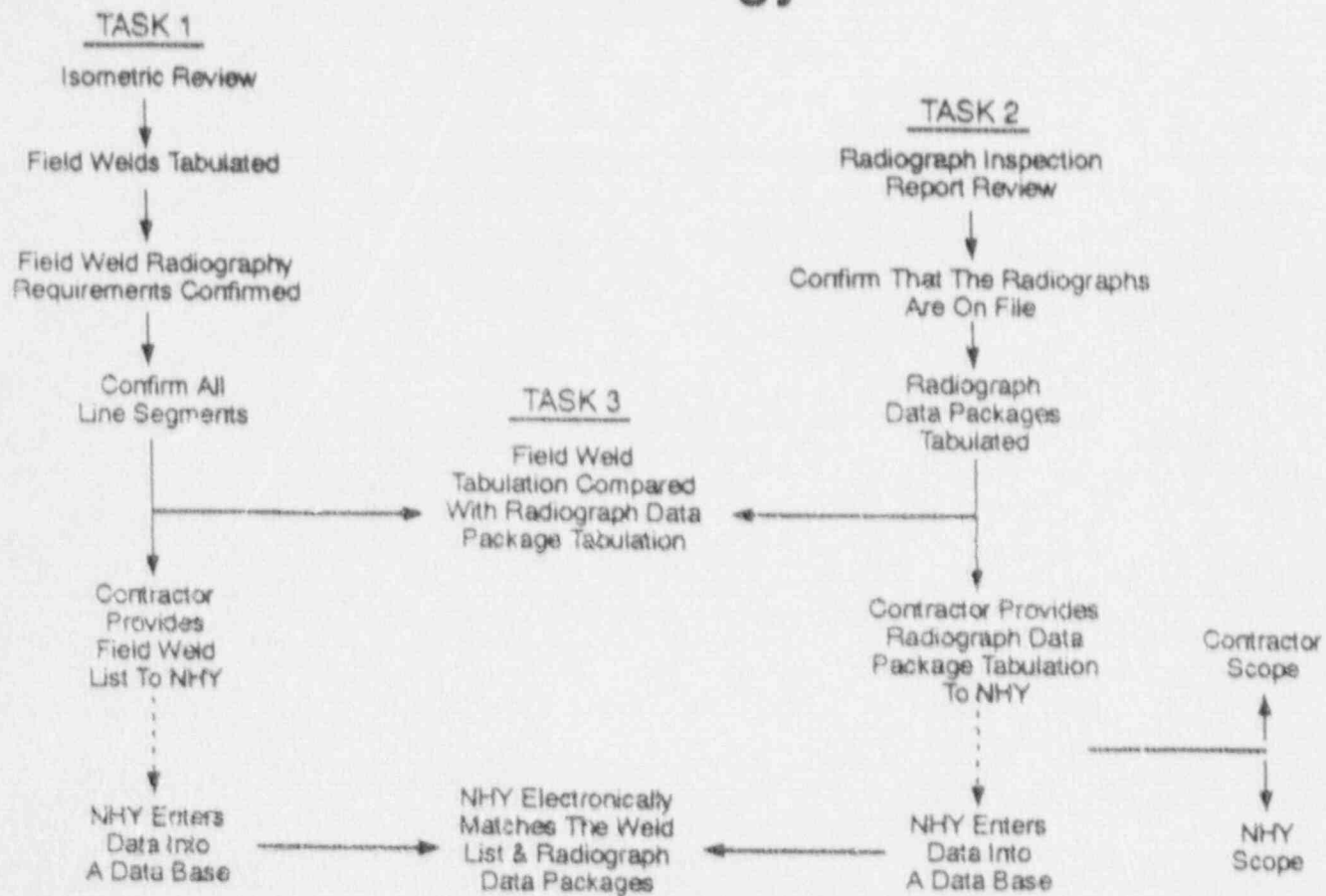
ANSI B 31.1 Radiography Requirements

ASME Type of Welds	Systems With Temperatures Over 750°F	Systems With Temperatures Between 350°F and 750°F Inclusive And All Pressures Over 1025 PSIG
Butt Welds (Girth and Longitudinal)	RT For NPS Over 2 Inches	RT For Over 2 Inches NPS With Thickness Over 3/4 Inch
Welded Branch Connections	RT For NPS Over 4 Inches	RT For Branch Over 4 Inches NPS And Thickness of Branch Over 3/4 Inch
Fillet, Socket Welds, Deposited Weld Metal as Reinforcement	— None —	— None —

RECORDS REVERIFICATION Approach

1. Independence
2. Accuracy and Control
3. Qualifications
4. Reporting
5. Checks and Balances

RECORDS REVERIFICATION Methodology

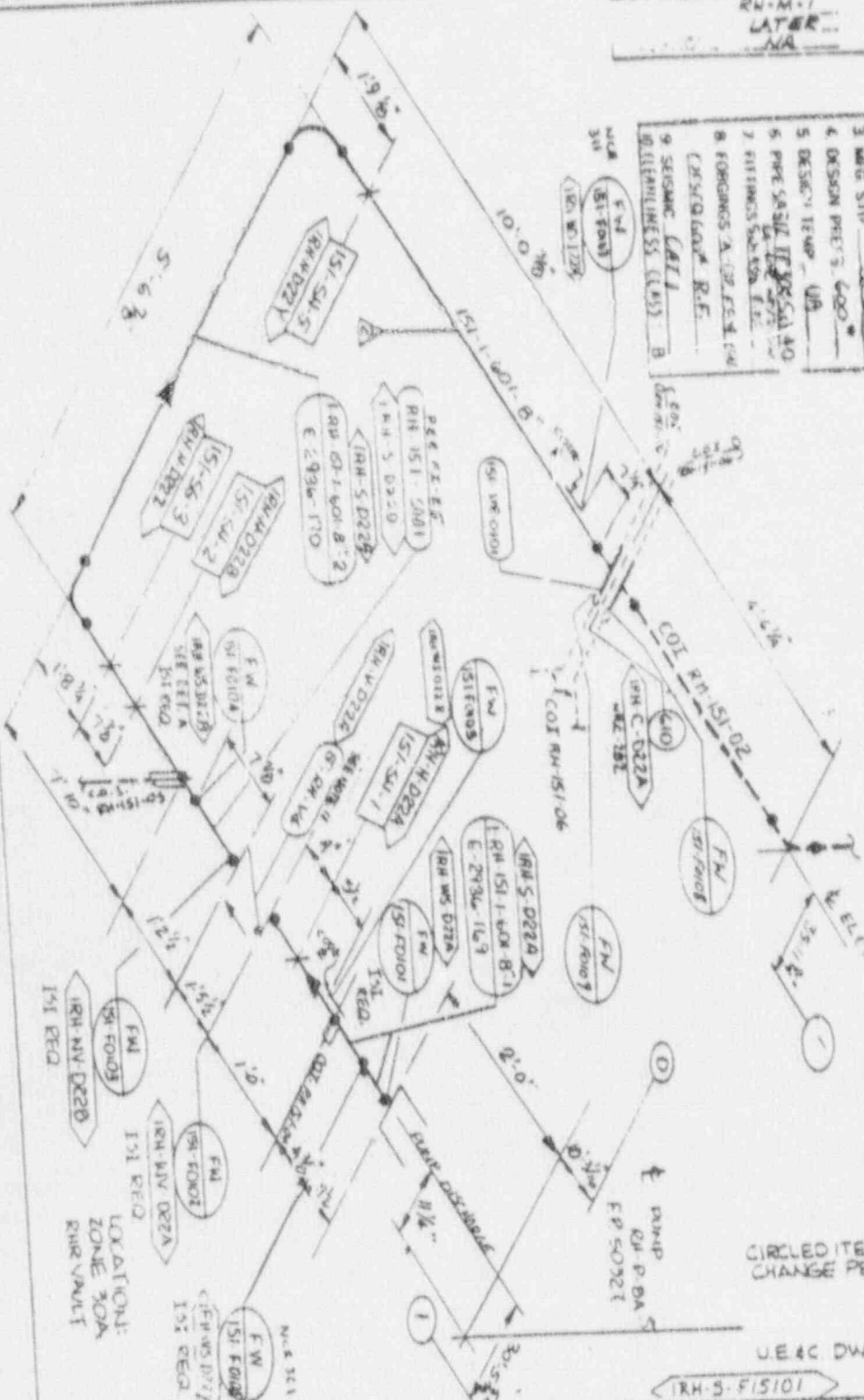


RH-M-1
LATER
NA



1. SEE ISO. N/A. FOR FIELD
2. SPEC. 1001
3. MFG. STD.
4. DESIGN PREP. 3. 600
5. DESIGN TEMP. 100
6. PRE. 5000 IF 10000
7. 11111111111111111111
8. 11111111111111111111
9. 11111111111111111111
10. 11111111111111111111

NOTE: CONT
II. VALVE V4 SERIAL NUMBER:
08001595000000005700005



CIRCLED ITEMS INDICATE
CHANGE PER REV

UE & C DWG AS OF REV

IRH-S-F15101

7 10-2-2010			REVISED PER NCR #321 PER NLC 122			REF. DWG. 97163-F-805003 (P110)			NCR # 105			JOB NO. 7035					
6 10-2-2010			REVISED TO ADD ENGLISH TO REV 5			UE & C PLAN 97163-F-805002			OTHER			NCR # 108			SYSTEM RESIDUAL		
5 10-2-2010			ADDED THIRD NUMBER			UE & C ISO 97163-D-800161			DRAVO ISO 6-2750-K-800161			NCR # 111			HEAT REMOVAL		
4 10-2-2010			ADDED DIMENSION TO WELD END PRPT			DRAVO ISO 6-2750-K-800161			P.P. 1A SHEET			97163-F-800161 (MTD)			ISO RH-151-01		
3 10-2-2010			REV. PER NCR # 105			DRAWN			CHK'D			APP'D			Fullman Power Products		
2 10-2-2010			REV. PER NCR # 105			PAL			LUB			HGT			Division of Pullman Industries		
1 10-2-2010			REV. PER NCR # 105			11-10-100			4 & 7			11/17			ISOMETRIC DRAWING		
REV. DATE			BY			E BN			DESCRIPTION								

BILL OF MATERIAL

[illegible][illegible]

JOINT TORQUE
RECCD 151-JTR-0101

FINAL: WELD SUTURE
PREPARED ON PER 181
- 1 FOR INJURY -
REQUIRING

DESIGNER ERIC A. ORL
FILED WITHDRAWN ERIC
TILL OUT ERIC
WIND WIND N WIND N WIND
MIN MIN
FILL TEND FILL TEND
N.D. LEAD V/A
FOI007 PAIR7
FOI08 FOI09
FILLET WELD

FILLET WELD

'CERTIFIED - AS-BUILT'

AS-BUILDER W. J. C. DATE 3/23/74
DRAFTSMAN W. J. C. DATE 3/23/74
ENGINEER W. J. C. DATE 3/23/74
SUPERVISOR W. J. C. DATE 3/23/74
STATUS 2/5 REVISION C

D. H.

5	3-84	REV TO REFLECT CERTIFIED AS BUILT'S ADDED IN REG	REF. DWGS.	OTHER	JOB NO. 7035
6	3-84	INC OTS ECA BUBBLES 19/3146B	JE & CLAN		SYSTEM
11	12-20-85	RELEASE FOR FINAL INSPECTION	UE & C ISO	P.P. ISO	ISO
12	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		REV
13	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
14	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
15	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
16	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
17	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
18	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
19	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
20	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
21	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
22	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
23	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
24	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
25	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
26	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
27	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
28	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
29	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
30	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
31	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
32	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
33	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
34	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
35	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
36	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
37	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
38	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
39	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
40	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
41	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
42	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
43	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
44	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
45	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
46	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
47	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
48	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
49	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
50	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
51	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
52	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
53	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
54	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
55	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
56	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
57	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
58	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
59	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
60	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
61	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
62	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
63	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
64	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
65	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
66	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
67	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
68	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
69	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
70	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
71	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
72	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
73	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
74	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
75	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
76	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
77	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
78	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
79	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
80	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
81	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
82	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
83	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
84	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
85	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
86	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
87	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
88	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
89	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
90	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
91	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
92	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
93	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
94	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
95	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
96	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
97	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
98	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
99	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		
100	12-20-85	ADDED CONTIN. REMOVED E2956-171	DRAGO ISO		

The diagram illustrates the containment system for the BWR Main Steam Generator (MSG) and the Containment Building (BLDG). It shows two main containment vessels, 1214-5-301-6' (HOR, NO. 1) and 1216-5-301-4' (HOR, NO. 4), each with its own spray nozzles and rings. The system is connected to a common containment building spray ring system. The diagram includes various piping, valves (V11, V12, V13, V22, V23), and flow indicators (N, L.O., P). The system is labeled 'CONTAINMENT BLDG'.

JOB 7035

UNIT		SYSTEM		LINE NO.		ISO NO.		FIELD WELD NO.																																																																															
1		CRS		1214		05		FOS 12 R-1																																																																															
PIPE DIAMETER	8"	SCHEDULE	30	WELD THICKNESS	382	TYPE OF WELD	INERT	OPEN BUTT																																																																															
MATERIAL	SS	Q35	SPECIFICATION	ASME III	1	S/R		S/R REMOVE																																																																															
CUNI		OTHER	ANSI B 31.1		2	LOCATION	CONT	ZONE	57-F																																																																														
FIRST RADIOGRAPHIC EXPOSURE		INFO ONLY		DATE OF EXPOSURE	1-12-84	RADIOGRAPHER	0441	ELEVATION	105'																																																																														
RESHOT		REPAIR	1 2 3 4	NCR				LEVEL																																																																															
SINGLE WALL		DOUBLE WALL	2	SINGLE WALL		PANORAMIC		DOUBLE WALL																																																																															
Source Side Penetrator		Side Penetrator		Side Penetrator				Other																																																																															
RADIATION SOURCE			FILM DATA			INTENSIFYING SCREENS																																																																																	
IR	2	CO		X-RAY		TYPE KODAK		FRONT	0.0																																																																														
CURIES	30	MA		KV		AA		BACK	0.0																																																																														
EXPOSURE TIME	1 min 45 sec			SIZE	5x7	4x10	4x17	OTHER																																																																															
FOCAL SPOT SIZE	102 x 0.5"			FILM VIEWING	SINGLE	COMPOSITE		LEAD BACKING	YES																																																																														
SOURCE TO FILM DISTANCE	8.625"			SINGLE WALL VIEWING		DOUBLE WALL		LEAD "B" USED	YES																																																																														
RT PROCEDURE	IX-RT-1-WTREV			TYPE OF FILM LOAD	SINGLE	DOUBLE	MULTIPLE	PENETRATOR DATA																																																																															
ACCEPT STAND	PER IX-RT-1-WTREV			PROCESSING DATA			SIZE	10	SHIM																																																																														
				AUTOMATIC	2	HAND		SIZE	12																																																																														
								SHIM	06																																																																														
								MATERIAL	S/S																																																																														
								MATERIAL	S/S																																																																														
								22T	24T																																																																														
<table border="1"> <thead> <tr> <th rowspan="2">STATION NO</th> <th colspan="15">FILM INDENT</th> <th rowspan="2">REMARKS</th> </tr> <tr> <th>ACCEPT</th> <th>REJECT</th> <th>INCOMPLETE INSERT</th> <th>SLAG INCLUSION</th> <th>POINTESS</th> <th>ROOT CONCAVITY</th> <th>TURBIDITY</th> <th>WELD DISLOCATION</th> <th>INCOMPLETE FUSION</th> <th>SLAG (TRAP)</th> <th>CRACK</th> <th>CRATER CRACK</th> <th>UNDERBUT</th> <th>SURFACE INDICATION</th> <th>FILM ARTIFACT</th> <th>PLATE UNACCEPTABLE</th> <th>DENSITY UNACCEPTABLE</th> <th>BACKSCATTER</th> <th>WITHIN CODE</th> </tr> </thead> <tbody> <tr> <td>2-3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2-0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>										STATION NO	FILM INDENT															REMARKS	ACCEPT	REJECT	INCOMPLETE INSERT	SLAG INCLUSION	POINTESS	ROOT CONCAVITY	TURBIDITY	WELD DISLOCATION	INCOMPLETE FUSION	SLAG (TRAP)	CRACK	CRATER CRACK	UNDERBUT	SURFACE INDICATION	FILM ARTIFACT	PLATE UNACCEPTABLE	DENSITY UNACCEPTABLE	BACKSCATTER	WITHIN CODE	2-3																					2-0																				
STATION NO	FILM INDENT															REMARKS																																																																							
	ACCEPT	REJECT	INCOMPLETE INSERT	SLAG INCLUSION	POINTESS	ROOT CONCAVITY	TURBIDITY	WELD DISLOCATION	INCOMPLETE FUSION	SLAG (TRAP)	CRACK	CRATER CRACK	UNDERBUT	SURFACE INDICATION	FILM ARTIFACT		PLATE UNACCEPTABLE	DENSITY UNACCEPTABLE	BACKSCATTER	WITHIN CODE																																																																			
2-3																																																																																							
2-0																																																																																							
DISPOSITION: ACCEPTABLE <input checked="" type="checkbox"/> REJECT <input type="checkbox"/> RESHOOT <input type="checkbox"/>																																																																																							
REMARKS: 402 JORRIGAS 7-11-84																																																																																							
INTERPRETER: Michael D. ... DATE: 1-12-84																																																																																							
CONCURRING AUTHORITY: ... DATE: 1-12-84																																																																																							

RECORDS REVERIFICATION Schedule

April 5, 1991	Contract Awarded
April 8, 1991	Contractor Arrives on Site
April 19, 1991	Contractor's Procedures Approved
April 22, 1991	Weld Tabulation (TASK 1) and RIR Review (TASK 2) Begins
May 30, 1991	Project Status Report (Verbal)
June 28, 1991	Weld Tabulation and RIR Review Completed
July 5, 1991	Weld Tabulation and RIR Review Comparison (TASK 3) Completed
July 31, 1991	Contractor Submits Report to NHY
July 31, 1991	Project Status Report (Verbal)
August 23, 1991	NHY Completes Root Cause Analysis (as Required)
August 30, 1991	NHY Submits Final Report to NRC

ENCLOSURE 2
NHV PLAN FOR
REVERIFICATION OF RECORDS

NEW HAMPSHIRE YANKEE

PRESENTATION TO NRC

ON

PULLMAN-HIGGINS FIELD WELD

RECORDS RE-VERIFICATION PROJECT

APRIL 10, 1991

RECORDS REVERIFICATION

Purpose

1. Identify all Pullman-Higgins field welds that require radiography by code
2. Verify that NHY has the documents (RIR's and radiographs)
3. Confirm evidence of YAEC radiograph review
4. Identify and report records anomalies
5. Report on the results of this effort

RECORDS REVERIFICATION

Scope

Applicable codes: 1977 edition, winter 1977 addenda

ASME Section III

Piping

Class 1

Class 2

Class 3

Supports

Class 1

ASME Section VIII

ANSI B 31.1

RECORDS REVERIFICATION

ASME Radiography Requirements

ASME Type of Welds	ASME Class	RT	Applicable ASME Code Paragraph
1.			
Circumferential	1	X	NB-5222
Butt Weld	2	X	NC-5222
Joints	3	—	ND-5222
2.			
Branch Piping	1	>4"NPS	NB-5242
Butt Welded	2	>4"NPS	NC-5242
Joints	3	—	ND-5242
3.			
Branch Piping	1	>4"NPS	NB-5243
Corner Welded	2	>4"NPS	NC-5242
Joints and Oblique	3	—	ND-5242
Piping Connections			
4.			
Fillet and Socket	1	—	NB-5260
Welds (excluding	2	—	NC-5260
Name Plate Welds)	3	—	ND-5222

RECORDS REVERIFICATION

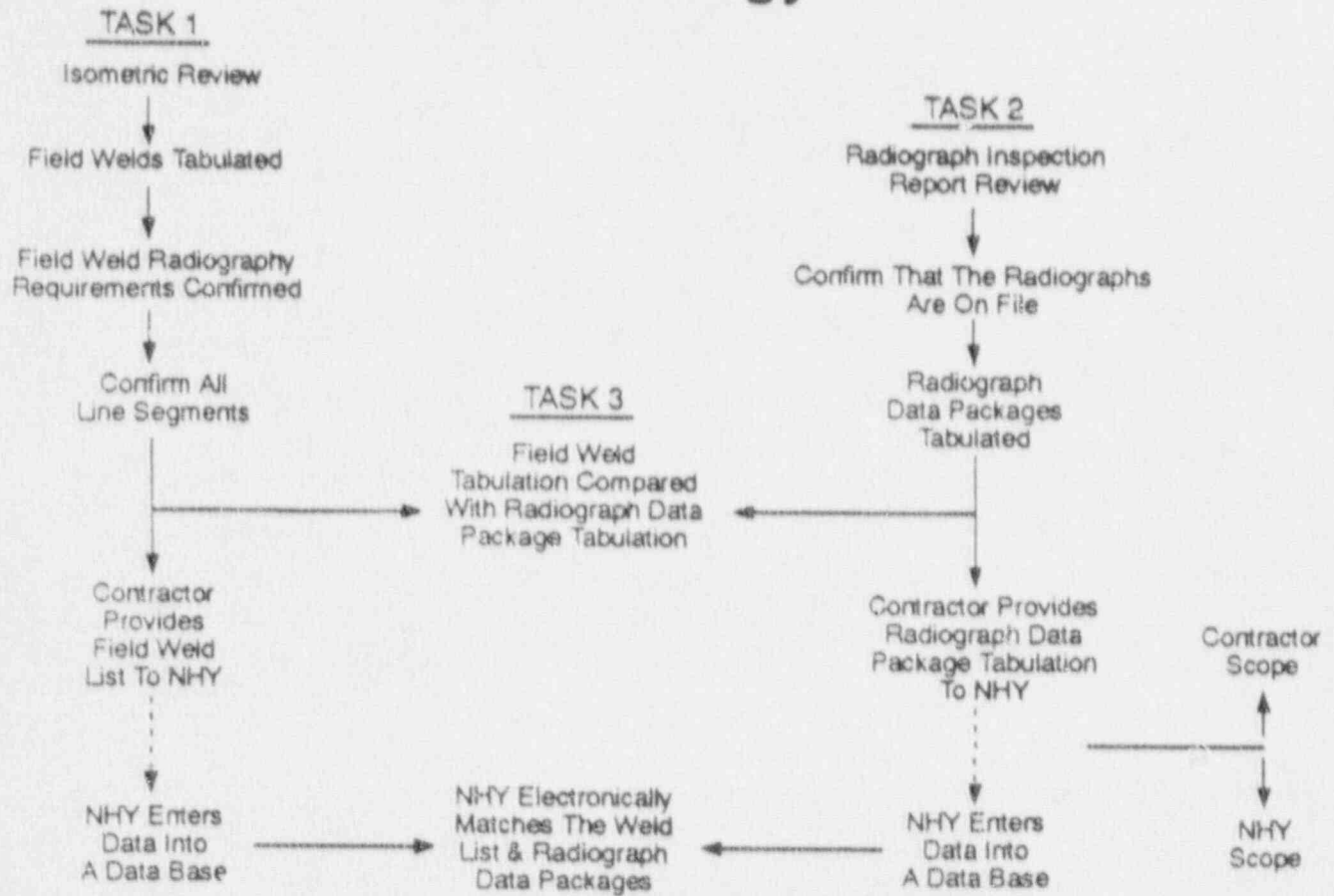
ANSI B 31.1 Radiography Requirements

ASME Type of Welds	Systems With Temperatures Over 750°F	Systems With Temperatures Between 350°F and 750°F Inclusive And All Pressures Over 1025 PSIG
Butt Welds (Girth and Longitudinal)	RT For NPS Over 2 Inches	RT For Over 2 Inches NPS With Thickness Over 3/4 Inch
Welded Branch Connections	RT For NPS Over 4 Inches	RT For Branch Over 4 Inches NPS And Thickness of Branch Over 3/4 Inch
Fillet, Socket Welds, Deposited Weld Metal as Reinforcement	— None —	— None —

RECORDS REVERIFICATION Approach

1. Independence
2. Accuracy and Control
3. Qualifications
4. Reporting
5. Checks and Balances

RECORDS REVERIFICATION Methodology



[illegible]

BILL OF MATERIAL							
SB ITEM NO	ASME CLASS	QUANT	SIZE	DESCRIPTION	MAT. SPEC.	LINE SPEC.	SB HEAT NO.
01	SA-21	3	1/2"	RA-12-11-201-7-1/2-20% - 149		60	
02	SA-21	4	1/2"	RA-12-11-201-7-1/2-20% - 170		60	
03	WCC-5	5"		SLABS LONG INSERT	SS	60	
04	WCC-2	8"		DIURNAL FLYCATCHER TRAP	30856	60	
05	WCC-12	1/2"		ON LE STUD BOLTS	SA193 GR 8	60	HE-35
06	WCC-24	1/2"		NUTS	SA194 GR 8	60	HE-35
07	WCC-11	3"		1/2" - 5001 (PER NCR #105)		60	

Fullman Power Products
FIELD INSTALLATION INSTRUCTIONS
SEABROOK STATION

WELD PROCEDURE WTT-4KT-2
FILLER METAL ROOT ER 308
FILL MET E 308
BACK TIGING N/A CONSUM. INSERT N/A
RT UP OR SPILT RING N/A
PREHEAT 50°
INTERPASS 350°
POST WELD HEAT TREAT N/A

N.D.T. REQ. - PTA N/A RT# 10027
E0101 E0102 E0103 E0104
F0106
BUTT WELD

228-0A
 APPROVED
 BY
 DATE

FINAL WELD JOURNAL
PREPARED BY: [illegible]
DATE: [illegible]
REVISION: [illegible]

[illegible]

CERTIFIED AS-BUILT

AS-BUILDER W. J. J. J. DATE 1/12/70

TRAFFICMAN W. J. J. J. DATE 1/12/70

ENGINEER W. J. J. J. DATE 1/12/70

SUPERVISOR W. J. J. J. DATE 1/12/70

STATUS 2/5 REVISION 0

13	200	100	100
14	200	100	100
15	200	100	100
KEY	E	QA	DATE

D-H

3-7-84 [X] REV TO REFLECT CERTIF SD'G BUILTS 6 ADDED IN I RF-2 12-13-84 [X] REMOVING DTS ECA 9/31/46A 9/31/46B 11-12-84 [X] RELEASE FOR FINAL INSPECTION 10-11-84 [X] ADDED CRT AND SH PUCKS 4-12-84 [X] ADDED CONTIN C PLUMBED F2936-171 1-12-84 [X] ADDITIONAL DTS 240 KILL 27.1 BY EDA DESCRIPTION						REF DWGS. UE & PLAN UE & ISO DRAWG ISO		OTHER P.P. ISO		JOB NO. 7035 SYSTEM ISO A REV	
						SEABROOK STATION PUBLIC SERVICE OF NEW HAMPSHIRE		Pullman Power Products Division of Pullman Incorporated ISOMETRIC DRAWING			

[illegible]

JOB 7035

UNIT	SYSTEM	LINE NO.	SC NO.	FIELD WELD NO.
PIPE DIAMETER 8"	SCHEDULE AND/OR THICKNESS CRS	WELD THICKNESS 1214	TYPE OF WELD INSERT 05	FIELD WELD NO. FOS 12 C-1
MATERIAL S/S	SPECIFICATION ASME III	SR REMOVED	OPEN BUTT	CIRCUMFERENTIAL BEAM
QUALITY	OTHER	LOCATION	ZONE	LONGITUDINAL BEAM
FIRST RADIOGRAPHIC EXPOSURE	REPAIR	DATE OF EXPOSURE	RADIOGRAPHER	ELEVATION
RESHOT	1-2-84	001	57-F	105-1
SINGLE WALL	DOUBLE WALL	SINGLE WALL	PANORAMIC	DOUBLE WALL
Source Side Penetrator	Side Penetrator	Side Penetrator		
RADIATION SOURCE		FILM DATA		INTENSIFYING SCREENS
R=2"	CO ⁶⁰	X-RAY	TYPE KODAK	FRONT
CURIES 30	MA	KV	SIZE 347	BACK
EXPOSURE TIME	1/4 in 45 sec	FILM VIEWING	SINGLE	LEAD BACKING
FOCAL SPOT SIZE	1.07 x .057"	SINGLE WALL VIEWING	DOUBLE WALL	LEAD "B" USED
SOURCE-TO-FILM DISTANCE	8.625"	TYPE OF FILM LOAD	SINGLE	PENETRATOR DATA
RT PROCEDURE	IX-RT-1-WTTREV	PROCESSING DATA	AUTOMATIC	SIZE 10 SHIM .01 MATERIAL S/S
ACCEPT STAND	PER IX-RT-1-WTTREV	PROCESSING DATA	HAND	SIZE 12 SHIM .06 MATERIAL S/S
FILM IDENT.		REMARKS		
STATION NO	2-3	Add Trans 8/1/84 2-11-84		
2-0				
DISPOSITION		DATE		
ACCEPTABLE	REJECT	1-12-84		
REMARKS		LEVEL III		

RECORDS REVERIFICATION Schedule

April 5, 1991	Contract Awarded
April 8, 1991	Contractor Arrives on Site
April 19, 1991	Contractor's Procedures Approved
April 22, 1991	Weld Tabulation (TASK 1) and RIR Review (TASK 2) Begins
May 30, 1991	Project Status Report (Verbal)
June 28, 1991	Weld Tabulation and RIR Review Completed
July 5, 1991	Weld Tabulation and RIR Review Comparison (TASK 3) Completed
July 31, 1991	Contractor Submits Report to NHY
July 31, 1991	Project Status Report (Verbal)
August 23, 1991	NHY Completes Root Cause Analysis (as Required)
August 30, 1991	NHY Submits Final Report to NRC

ENCLOSURE 3

MEETING ATTENDANCE LIST

ATTENDANCE AT APRIL 10, 1991 MEETING
WITH NEW HAMPSHIRE YANKEE

NAME	ORGANIZATION
Gordon Edison	NRC/NPS
Neal A. Pillsbury	NHY
Ted C. Feigenbaum	NHY
Terry L. Harpster	NHY
E. W. Desmarais	NHY
Robert E. Sweeney	NHY
Kent E. Walter	NRC/OIG
Ben Hayes	OI/NRC
D. Ringo	INRC
M. S. Callahan	GPA/CA
L. J. Norrholm	OCM/KC
Jose A. Calvo	NRC/NRR
Lawrence J. Chandler	NRC/OGC
Philip Joukoff	NRC/OI
W. Bateman	NRC/EDO
Frank Forgione	OIG
Ebe C. McCabe	NRC/RI
Antone C. Cerne	NRC/RI
Ken E. Brockman	NRC/OEDO
Dick Wessman	NRC/NRR
Tim Martin	NRC/RI
Jim Snizek	NRC/OEDO
Jim Partlow	NRC/NRR