

EXHIBIT 23

9711280072 971124
PDR FOIA
KEENAN97-325 PDR

Case No. 1-95-013

C/3

Exhibit 23

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

+ + + + +

OFFICE OF INVESTIGATIONS

INTERVIEW

-----X

IN THE MATTER OF: : Docket No.

INTERVIEW OF : 195-013

GITA NARASIMHAN :

:

-----X

Tuesday, August 22, 1995

Conference Room 13, 2nd Floor

PSE & G Administration Building

End of Buttonwood Road

Kancocks Bridge, New Jersey

The above-entitled interview was conducted at

9:09 a.m.

BEFORE:

KEITH LOGAN, Investigator

CASE NO. 1 - 95 - 013

NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

Release
EXHIBIT 23

PAGE 1 OF 21 PAGE(S)

1 APPEARANCES:

2 On Behalf of the Interviewee:

3 MARK J. WETTERHAHN, ESQ.

4 MARCIA R. GELMAN, ESQ.

5 of: Winston & Strawn

6 1400 L Street, N.W.

7 Washington, D.C. 20005-3502

8 202/371-5703

9

10 On Behalf of the Agency:

11 BRIAN McDERMOTT PRESIDENT INSPECTOR

12 475 Allendale Road

13 King of Prussia, PA 19406

14 610/337-5345

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

P R O C E E D I N G S

9:09 A.M.

INVESTIGATOR LOGAN: Ms. Narasimhan, welcome back. My name is Keith Logan. We've spoken several times before. What we'd like to do today, as we've discussed prior to going on the record, is to go over a couple of additional points on the memo that you prepared on the POPS System and the events surrounding that issue.

With me today is Brian McDermott.

MR. McDERMOTT: For the record, my name is Brian McDermott, a Resident Inspector with the Nuclear Regulatory Commission and I'm here today to provide technical back-up for Mr. Logan.

INVESTIGATOR LOGAN: And Ms. Narasimhan, is it still your desire to have Mr. Wetterhahn and Ms. Gelman here as your counsel?

MS. NARASIMHAN: Yes, it is my desire to have them here.

INVESTIGATOR LOGAN: Mr. Wetterhahn, will you identify yourself?

MR. WETTERHAHN: For the record again, my name is Mark Wetterhahn with the firm Winston & Strong, 1400 L Street, N.W., Washington, D.C. 20005. With me is Marcia Gelman, also of the firm.

INVESTIGATOR LOGAN: As with last time, Ms.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 Narasimhan, you're aware that Mr. Wetterhahn and Ms. Gelman
2 do represent other individuals for the corporation in this
3 matter?

4 MS. NARASIMHAN: Yes, I'm aware of that.

5 INVESTIGATOR LOGAN: Do you still desire to
6 have them here today?

7 MS. NARASIMHAN: Yes.

8 INVESTIGATOR LOGAN: Thank you. And for the
9 record, I'll note that I'm still an Investigator with the
10 NRC and we're still located in King of Prussia,
11 Pennsylvania.

12 What I'd like to --

13 MR. WETTERHAHN: Can we go off the record for a
14 second?

15 INVESTIGATOR LOGAN: Sure.

16 (Off the record.)

17 INVESTIGATOR LOGAN: As we discussed, Ms.
18 Narasimhan, this is a continuing interview to cover the few
19 additional points that we addressed earlier, I'm sorry, the
20 two points that we discussed earlier on this subject.

21 I'd like to start off, we talked to Mr. Ken
22 O'Gara last week. Mr. O'Gara told us that he had a
23 conversation with you about a month ago and that he
24 indicated that you had talked to Mahesh Danak about the
25 October 1993 time frame on the POPS issue. You did discuss

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 that with Mr. Danak about that time, didn't you?

2 MS. NARASIMHAN: No.

3 INVESTIGATOR LOGAN: You didn't discuss the
4 POPS issue with Mr. Danak.

5 MS. NARASIMHAN: Let me clarify what I want to
6 say. I had a conversation with Ken O'Gara in the hallway
7 and at the time I mentioned that I had early on considered
8 the RH3 valve and that is in my chronology of evidence that
9 I did look at the RH3 valve.

10 I do not recall having a conversation with
11 Mahesh or saying that to Mr. O'Gara.

12 INVESTIGATOR LOGAN: We'll call Mr. O'Gara back
13 and ask him again.

14 Let's talk then, if we can, I believe your
15 chronology of the event indicates that you did consider
16 taking credit for the RH3 valve with regard to the POPS
17 issue and the document you prepared for Mr. O'Gara and that
18 was in March of '93. I believe you're looking at your
19 chronology also? .

20 MS. NARASIMHAN: Yes, I am.

21 INVESTIGATOR LOGAN: And you considered it. Why
22 didn't you take credit for RH3 back in, I guess, March of
23 '93?

24 MS. NARASIMHAN: This was some preliminary work
25 and I think the work was started even before the NSAL came

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 up. I had discussions with Westinghouse people. I had
2 come across that W cap which I referred to which provides a
3 methodology for crediting the RH3. I think if you look on
4 the 4/5/93 it says W cap 11640. I had come across that and
5 I had some discussions with Ray Brown at Westinghouse about
6 using that methodology, but this was done, I think, it was
7 started before the NSAL came out and right about April time
8 frame, I prepared a draft evaluation and then I didn't
9 really proceed any further with that work. Westinghouse in
10 their NSAL had identified RCP, reducing the number of RCPs
11 as an option and I think about that time we had -- the
12 decision was made to pursue getting a Delta-P calculation
13 for different numbers of RCPs from Westinghouse. I really
14 didn't pursue any further with the RH3 evaluation. It
15 still exists as a draft document which was not reviewed.

16 INVESTIGATOR LOGAN: And where does that
17 document currently exist?

18 MR. WETTERHAHN: You have it.

19 INVESTIGATOR LOGAN: We have it?

20 MR. WETTERHAHN: Yes. It's this document --

21 MS. NARASIMHAN: That's it.

22 MR. WETTERHAHN: Mr. Danak gave it to you at a
23 prior interview. He didn't indicate it was Gita's
24 document, I don't believe, but that's the document --

25 INVESTIGATOR LOGAN: Let's read the name into

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 the record.

2 MR. WETTERHAHN: It says, the title is
3 "Evaluation of Nonconservative Low Temperature Overpressure
4 Set Point for Salem 1 and 2."

5 INVESTIGATOR LOGAN: Is there a date on that?

6 MR. WETTERHAHN: It's unsigned and undated.

7 INVESTIGATOR LOGAN: Let's go off the record.

8 (Off the record.)

9 INVESTIGATOR LOGAN: We've had an opportunity
10 to look at this document and you indicated that this was
11 the item that appears on your chronology on 4/5/93?

12 MS. NARASIMHAN: That's right.

13 INVESTIGATOR LOGAN: What was the purpose of
14 this? Why did you write this document?

15 MS. NARASIMHAN: I was evaluating the operating
16 experience 5832 which had been brought to our attention and
17 I was looking at different approaches and this was one
18 approach I was considering at that time.

19 INVESTIGATOR LOGAN: And why didn't you follow
20 through with your consideration of this approach?

21 MS. NARASIMHAN: I think right about the end of
22 March, around that time, the NSAL came out from
23 Westinghouse and this approach was not identified in the
24 NSAL and I think that I had discussions with people.

25 INVESTIGATOR LOGAN: With whom?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 MS. NARASIMHAN: Probably with Mahesh, I don't
2 recall. Mahesh was cognizant for the outer systems, so I
3 probably had a discussion saying I had been using this
4 approach, but then based on what the NSAL said, we decided
5 to pursue getting the Delta-P calculation at the time.

6 INVESTIGATOR LOGAN: You and Mahesh?

7 MS. NARASIMHAN: I don't recall.

8 INVESTIGATOR LOGAN: You said "we decided."

9 MS. NARASIMHAN: Me, meaning me and the PS.

10 INVESTIGATOR LOGAN: When you say "PSI" you
11 have to use a name. I don't understand when you say PS.

12 MS. NARASIMHAN: I think it was with Mahesh.

13 INVESTIGATOR LOGAN: It was with Mahesh.

14 MS. NARASIMHAN: I think it was with Mahesh.

15 INVESTIGATOR LOGAN: So you and Mahesh
16 considered it around the March time frame and then backed
17 off on your consideration of using the RH3 because -- say
18 again, because why?

19 MS. NARASIMHAN: Because in the NSAL,
20 Westinghouse had said that by going with fewer pumps that
21 was an option to find margin for this issue.

22 Now if you look at what I had done, I had used
23 74 PSI which is the Delta-P with four pumps. At the time I
24 did this, we did not have information on less than four
25 pumps and when the 74 PSI, I think, was a number that was

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 verbally given to me by Westinghouse at the time.

2 INVESTIGATOR LOGAN: Questions on this point?

3 MR. McDERMOTT: No, I do not.

4 INVESTIGATOR LOGAN: Let's go back again to
5 your chronology, March of '93. You had informal
6 discussions with QA on status of code case and crediting it
7 and you have in parentheses "would need approval."

8 MS. NARASIMHAN: That's right.

9 INVESTIGATOR LOGAN: When you say "with QA" who
10 are you talking about?

11 MS. NARASIMHAN: I was having discussions with
12 Tom Roberts. As I stated in the earlier interview, Tom
13 Roberts procured a copy of the draft for me at that time.

14 INVESTIGATOR LOGAN: Okay, and that's what you
15 refer to the status of the code case because it was in
16 draft. Is that it?

17 MS. NARASIMHAN: At that time, the code case
18 was in draft. It was to be issued, I think, around May.

19 INVESTIGATOR LOGAN: And when you say "would
20 need approval" you were referring to NRC approval, weren't
21 you?

22 MS. NARASIMHAN: I don't recall what I made
23 that statement. I think that was what was implied there.
24 But it would need approval.

25 INVESTIGATOR LOGAN: By the NRC?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 MS. NARASIMHAN: Right.

2 INVESTIGATOR LOGAN: In order for it to be used
3 in NSAL?

4 MS. NARASIMHAN: It says for crediting it, yes.

5 INVESTIGATOR LOGAN: And go back down to 493 on
6 your chronology again. It says "confirm applicability of
7 generic 4, RCP Delta P to 2011 and obtain from Westinghouse
8 informal discussions with a licensing engineer."

9 Who is the licensing engineer referred to on
10 that line?

11 MS. NARASIMHAN: I think Howard Onorato was his
12 name.

13 INVESTIGATOR LOGAN: And what was his
14 responsibility that you chose to talk to him on this issue?

15 MS. NARASIMHAN: I don't recall. He was in
16 licensing.

17 INVESTIGATOR LOGAN: Just in licensing. But
18 you don't specifically know why you spoke to him as opposed
19 to someone else?

20 MS. NARASIMHAN: No.

21 INVESTIGATOR LOGAN: And you discussed the RH3
22 with him and the code case and what did you conclude after
23 your discussions with Mr. Onorato?

24 MS. NARASIMHAN: I can't recall.

25 INVESTIGATOR LOGAN: Take your time.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 MS. NARASIMHAN: I don't see anything in my
2 notes on that. I don't recall. This was before the code
3 case had been approved. I don't recall any --

4 INVESTIGATOR LOGAN: Why did you go and talk to
5 him? Do you remember that? Because the reason I'm asking
6 is you said you discussed discussions with a licensing
7 engineer on RH3 and code case and then in brackets or
8 excuse me, parentheses, it says "no problems identified.
9 Will proceed use of code case with licensing supervisor."

10 Who was the licensing supervisor in this case?

11 MS. NARASIMHAN: I don't know who Howard was
12 working for at the time.

13 INVESTIGATOR LOGAN: So Howard said he would
14 pursue it with a licensing supervisor and not you?

15 MS. NARASIMHAN: I think that's what -- see, I
16 prepared this in '94.

17 INVESTIGATOR LOGAN: I understand.

18 MS. NARASIMHAN: I guess at the time that was
19 my recollection, yes.

20 INVESTIGATOR LOGAN: But what's of concern is
21 that there were quite a few names in here and if you recall
22 that you spoke with a licensing supervisor, or someone who
23 was going to pursue this with a licensing supervisor, you
24 would have had to recall the name, wouldn't you, in order
25 to write that down?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 MS. NARASIMHAN: I recall the name of the
2 engineer.

3 INVESTIGATOR LOGAN: The engineer.

4 MS. NARASIMHAN: But I can't remember who the
5 supervisor of the group was at the time.

6 INVESTIGATOR LOGAN: And what did you mean by
7 "no problems identified?" The use of the RH3, no problems
8 identified, the code case, no problems identified? It
9 seems to be somewhat contradictory to what you said, that
10 you discounted the RH3, the RH3 valves.

11 MS. NARASIMHAN: That was discounted after
12 this. If you read the next one, it says "reconsidering,
13 also considering PORE with Salem specific Delta-P."

14 This was right about the time the NSAL had come
15 out and we were re-reviewing our options.

16 INVESTIGATOR LOGAN: And you have notes of this
17 conversation with Howard? I'm looking at the right column,
18 you have reference documents and notes. Are those the
19 handwritten notes you're looking at there?

20 MS. NARASIMHAN: Yes, I think it's referring to
21 those handwritten notes, but there is nothing there about
22 the conversation with the licensing engineer. Maybe that
23 part is a recollection. All the notes I have are attached.

24 INVESTIGATOR LOGAN: And Howard said he was
25 going to talk to a licensing supervisor or you were going

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 to talk to a licensing supervisor, what's your best
2 recollection?

3 MS. NARASIMHAN: My best recollection is Howard
4 Onorato who was the licensing engineer, that he would talk
5 to the licensing supervisor.

6 INVESTIGATOR LOGAN: Do you know who Howard
7 worked for at that time?

8 MS. NARASIMHAN: I do not know who he worked
9 for.

10 INVESTIGATOR LOGAN: Next one, "GN
11 recollection, internal discussions, reconsidering using
12 RH3, considering evaluating PLRVs with Salem specific
13 data."

14 MR. WETTERHAHN: Delta-P, actually.

15 INVESTIGATOR LOGAN: I'm sorry, specific Delta-
16 Ps.

17 Is there anything more that you can tell us
18 about your consideration of the RH3?

19 MS. NARASIMHAN: My efforts in the RH3 resulted
20 in this draft document and this took place in March, mostly
21 in March and by about the first week in April this approach
22 was not pursued.

23 INVESTIGATOR LOGAN: Why?

24 MS. NARASIMHAN: Again, Westinghouse NSAL came
25 out which had identified different options. This was

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 something that I had started on, based on my discussions
2 with Westinghouse, even before the NSAL came out.

3 INVESTIGATOR LOGAN: And did you communicate
4 your intention not to pursue the RH3 further to anyone
5 else? Did you talk to Mahesh Danak about it?

6 MS. NARASIMHAN: I think I discussed it with
7 Mahesh and that's when we decided to request the Delta-P
8 calculations from Westinghouse.

9 INVESTIGATOR LOGAN: Did you also discuss it
10 with Howard Berrick?

11 MS. NARASIMHAN: I may have. I don't have
12 specific recollections from that time frame.

13 INVESTIGATOR LOGAN: Is there anyone else you
14 might have discussed it with?

15 MS. NARASIMHAN: No, I don't think so. I can't
16 think of anyone else.

17 MR. McDERMOTT: I have a question regarding
18 your draft document in the use of the RH3 valve. This is
19 the document which we were discussing. Earlier, you
20 prepared it in the March 1993 time frame. In that you make
21 reference to Salem POPs analyses, SGS/M/MDM/042 and 062.

22 MS. NARASIMHAN: Yes.

23 MR. McDERMOTT: The specific numbers that you
24 use in there lead me to believe that you actually had those
25 documents and were reviewing those as part of your

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 evaluation of the issue?

2 MS. NARASIMHAN: That's right.

3 MR. McDERMOTT: And were those documents
4 considered to be the design basis for this system?

5 MS. NARASIMHAN: They were the design
6 calculations. That's what I was aware of then.

7 MR. McDERMOTT: Okay, and how did you view the
8 discussion of RH3 in those documents?

9 MS. NARASIMHAN: I don't have any specific
10 recollection at this time.

11 MR. McDERMOTT: Okay. In your draft memorandum
12 discussing the use of RH3 you mentioned the auto closure
13 interlock.

14 MR. WETTERHAHN: Where are we? Let's identify
15 the page.

16 MR. McDERMOTT: Second page of the draft
17 document, second paragraph.

18 MS. NARASIMHAN: Yes, I have that.

19 MR. McDERMOTT: It discusses the deletion of
20 the auto closure interlock. Can you tell me about your
21 consideration of RH3 and how that related to auto closure
22 interlock?

23 MS. NARASIMHAN: The Westinghouse W cap
24 methodology, I think, made reference to the fact that auto
25 closure interlock had to be deleted before you could take

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 credit for RH3 and I think that's the connection in which I
2 have that paragraph.

3 MR. McDERMOTT: And to your best recollection,
4 were you aware of whether or not that auto closure
5 interlock was removed at the time you drafted this
6 document?

7 MS. NARASIMHAN: Yes, it had been removed. I
8 think I got that information from the CBD.

9 MR. McDERMOTT: The CBD being?

10 MS. NARASIMHAN: The configuration base line
11 document.

12 MR. McDERMOTT: Okay. Thank you.

13 INVESTIGATOR LOGAN: Ms. Narasimhan, are there
14 any other discussions that you had related to the POPS
15 system and the preparation of your document that you and I
16 have not discussed in the course of this interview or an
17 earlier interview?

18 MS. NARASIMHAN: When you say "document"?

19 INVESTIGATOR LOGAN: That's the draft memo that
20 you were working on at the time.

21 MS. NARASIMHAN: The one that was --

22 INVESTIGATOR LOGAN: Dated 12/30 --

23 MS. NARASIMHAN: The draft that I had prepared
24 on 10/30?

25 INVESTIGATOR LOGAN: Yes. Prior to your

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 leaving that office.

2 MS. NARASIMHAN: No, I do not think there is
3 anything. I had discussed it, I had prepared the draft and
4 turned it over to Howard Berrick on my last day of work
5 here. I had had on-going discussions on the POPS issue
6 with Mahesh since he was cognizant of the system. That was
7 about my involvement on that issue with other people.

8 INVESTIGATOR LOGAN: Okay. Are there any other
9 questions that you have, Brian?

10 We can go off the record for a minute.

11 (Off the record.)

12 INVESTIGATOR LOGAN: Ms. Narasimhan, one last
13 question, are there any documents that you prepared or any
14 notes that you have or anything that you would be aware of
15 that would indicate that licensing was in on the
16 discussions of the use of the code case or the RH3 valve
17 prior to December of 1993?

18 MS. NARASIMHAN: I did not have anything in my
19 files.

20 INVESTIGATOR LOGAN: So there is nothing else
21 that you are aware of that would reflect licensings
22 involved?

23 MS. NARASIMHAN: Not that I'm aware of.

24 INVESTIGATOR LOGAN: Okay. Brian, anything
25 else?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 MR. McDERMOTT: Unless -- are you aware of any
2 copies of the draft of your letter that was eventually
3 signed by Howard Berrick on December 30, 1993, the draft
4 version of that? Do you have the original concurrence copy
5 or would that original concurrence copy --

6 MR. WETTERHAHN: Are we on the record?

7 INVESTIGATOR LOGAN: Yes, we are.

8 MR. WETTERHAHN: Gita had left by that time so
9 I don't think you would have seen any concurrence on the
10 December 30th, what was it the '93 --

11 INVESTIGATOR LOGAN: I think we're all aware of
12 the 12/30 --

13 MR. WETTERHAHN: 9/7, I'm sorry. You don't
14 have a copy of that, do you?

15 MS. NARASIMHAN: No, I don't. I had a draft of
16 the final memo, but I turned over --

17 INVESTIGATOR LOGAN: We received that.

18 MR. McDERMOTT: I was just looking for any
19 other documents that might have circulated before your
20 leaving in October that would indicate that licensing would
21 be part of those discussions, the original memo that went
22 out didn't have any distribution to licensing and I was
23 looking for something that would perhaps indicate that they
24 had been part of the original draft of that.

25 MS. NARASIMHAN: I'm not aware. I left in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 October.

2 INVESTIGATOR LOGAN: Certainly from your
3 discussions you indicated that licensing was involved in
4 your preparation of the draft.

5 MS. NARASIMHAN: I need to clarify that. I had
6 talked licensing in March, April time frame on the RH3,
7 crediting the RH3. After that, I did not have any
8 discussions with Howard Onorato on that.

9 MR. McDERMOTT: Did you have discussions with
10 anyone else from licensing after that point?

11 MS. NARASIMHAN: No, I don't recall any
12 discussions.

13 INVESTIGATOR LOGAN: That is all we have.

14 MR. WETTERHAHN: Two questions. With regard to
15 the document we've been speaking about, the evaluation of
16 nonconservative low temperature overpressure set point for
17 Salem 1 and 2, how many RCP pumps or RCPs does this assume
18 in your analysis?

19 MS. NARASIMHAN: I assumed four RCPs. On page
20 2, there's a statement that adding the 75 PSI pressure
21 difference and -- I'm sorry, 74 PSI pressure difference.
22 74 PSI was for four RCPs.

23 MR. WETTERHAHN: One final question, in your
24 chronology, there's an indication of a file name of all
25 caps, GITA.DOC. Have you brought a copy with you?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

1 MS. NARASIMHAN: Yes, I have a copy of that
2 with me.

3 MR. WETTERHAHN: Okay, does that appear to you
4 after your review to be a draft of the document we've just
5 been discussing?

6 MS. NARASIMHAN: That's what it appears to be.

7 MR. WETTERHAHN: And when was it last revised?

8 MS. NARASIMHAN: According to the records from
9 the secretary, it was revised on 4/5/93.

10 MR. WETTERHAHN: I have nothing further.

11 INVESTIGATOR LOGAN: That's all. Thank you
12 very much for coming. Off the record.

13 (Whereupon, at 9:47 a.m., the interview was
14 concluded.)

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

C E R T I F I C A T E

This is to certify that the attached
proceedings before the United States Nuclear
Regulatory Commission in the matter of:

Name of Proceeding: INTERVIEW OF GITA NARASIMHAN

Docket Number: 195-013

Place of Proceeding: HANCOCKS BRIDGE, NJ

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.



KAREN HANTMAN
Official Reporter
Neal R. Gross and Co., Inc.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVENUE, N.W.

WASHINGTON, D.C. 20005

EXHIBIT 21

C/1

FORM NC.DE-AP.22-0018-1
DISCREPANCY EVALUATION FORM

94-0060

DEF # 15-2260

STATION/UNIT 1 & 2 SYSTEM RCS COMPONENT REACTOR VESSEL

DISCREPANCY

- THE CURRENT PLANT HEATUP AND COOLDOWN CURVES LITECH SPEC FIGURES 3.4-2 AND 3.4-3 LOW TEMPERATURE OVER PROTECTION [LTOP] LIMITS ARE APPROXIMATELY 450 & 475 PSIG, FOR SALEM UNITS 1 & 2, RESPECTIVELY
- THE CURRENT RCS PEAK PRESSURES FOR LTOP DESIGN ARE 446 PSIG FOR BOTH UNITS PER DESIGN MEMO SCS-M-AM-042 and 062.
- THE PRESSURE DIFFERENCE FROM THE WIDE RANGE PRESSURE TRANSMITTER TO THE RX MIDPLANE WAS NOT ADDED AT SALEM AS IDENTIFIED IN WESTINGHOUSE NSAL-93-0058
- IF THE NON CONSERVATION IS REMOVED BY INCLUDING THE PRESSURE DIFFERENCE CALCULATION FOR SALEM, LTOP LIMITS WILL INFRINGE UPON HEATUP & COOLDOWN CURVES, UNLESS CREDIT IS TAKEN FOR CODE CASE NS14 CMEC-93-317 DATED 12/30/93 FROM BERRICK TO SCHNABER PROVIDES

ORIGINATOR M. DANAK

(Print Name)

DATE 4/19/94

DETAIL

DEPARTMENT EX PB

EXTENSION 1872

INITIAL ASSESSMENT:

TECHNICAL SPECIFICATION APPLIES YES ☒ NO ☐ IF YES, LCO NUMBER

OPERABILITY CONCERN YES ☐ NO ☒ SAFETY CONCERN YES ☒ NO ☐

INCIDENT REPORT WRITTEN YES ☐ NO ☒ IF YES, IR NUMBER

SYSTEM ENGINEER C. LASHKARI

(Print Name)

DATE NOTIFIED 4/19/94

SUPERVISOR [Signature]

DATE 4/19/94

COMMENTS THIS DEF SHOULD BE REVIEWED ALONG WITH THE TWO PAGES & COMMENTS ATTACHED

SEE CONTACT - REF C 6420 11370

Page 1 of

NUCLEAR COMMON

Page 1 of 4

Revision 4

CASE NO. 1-95-013

Release

EXHIBIT 21
PAGE 1 OF 3 PAGE(S)

COMMENTS ATTACHED TO RCS DEF:

[1] AS IDENTIFIED IN THE MEC-93-917, THE CALCULATED MAXIMUM PRESSURES AGAINST THE APPENDIX G ALLOWABLE PRESSURE ARE AS FOLLOWS FOR SALEM 1&2.

UNIT	RCP IN SERVICE	CALCULATED MAX. PSEG	TECH. SPEC P/T PSEG
1	2	485	450
1	1	477	450
2	2	485	475
2	1	477	475

[2] AS IDENTIFIED IN THE MEC-93-917, ADDITIONAL MARGIN IN THE TECH SPEC CURVES CAN BE GAINED FOR THE LTOP APPLICATION BY TAKING CREDIT FOR ASME CODE CASE N514. THIS CODE CASE STATES "LTOP SYSTEMS SHALL LIMIT THE MAXIMUM PRESSURE IN THE VESSEL TO 110% OF THE PRESSURE DETERMINED TO SATISFY APPENDIX G OF SECTION XI, ARTICLE G-2215". BY TAKING CREDIT FOR THIS CODE CASE, THE ALLOWABLE PRESSURE CAN BE INCREASED BY 10 %. IN THIS CASE THE LOWEST PRESSURE THAT MUST NOT EXCEED IS 495 PSIG FOR SALEM 1 AND 522.5 PSIG ON UNIT 2. THIS WILL ELIMINATE THIS DEF DISCREPANCY, IF APPROVED. USE OF THE CODE CASE HAS BEEN RELIED UPON BY OTHER UTILITY [FP & L]. HOWEVER, USE OF CODE CASE WILL REQUIRE NRC PERMISSION AND POSSIBLE REVISION OF TECH SPEC CURVES TO ADDRESS 10 % INCREASE.

[3] LIMITING THE RCP OPERATION TO NO MORE THAN 2 RCPS IN MODE 5 IS ALREADY INCLUDED IN THE CURRENT PLANT PROCEDURES. [THROUGH IMPLEMENTATION OF PROCEDURE REVISION REQUEST R07326]. PROCEDURE CHANGE TO LIMIT RCP OPERATION TO ONE PUMP IN OPERATION IS BEING PURSUED BY THE SYSTEM ENGINEER.

[4] THE CURRENT PLANT DESIGN RELIES ON ONE PORV SET AT 375 PSIG.

[5] ORIGINAL RHR DESIGN AT SALEM INCLUDED AUTO CLOSURE [ACI] INTERLOCK OF RH 1 & 2 VALVES TIED TO PT403 AND PT405 PRESSURE > 375 PSIG. SALEM UNITS REMOVED THESE ACI THROUGH DCPS. BASED ON WESTINGHOUSE WCAP 11640, IF THE ACI IS REMOVED, THEN THE INADVERTENT ISOLATION OF THE RHR RELIEF VALVE IS CONSIDERED TO BE HIGHLY UNLIKELY. RHR RELIEF VALVES ARE THEN AVAILABLE TO MITIGATE POTENTIAL LOW TEMPERATURE OVER PRESSURE TRANSIENTS. THE RELIEF VALVE SET POINT OF SALEM UNITS ALONG WITH THE RH3 VALVE CAPACITY WERE GENERICALLY EVALUATED BY WOG TO BE ADEQUATE TO PROVIDE APPENDIX G PROTECTION WITHOUT RELYING ON THE USE OF PORVS FOR LTOP. ALTHOUGH THE PLANT SPECIFIC ANALYSIS FOR LTOP SYSTEM USING RH3 RELIEF VALVE IS NOT COMPLETED YET, THE RESULTS ARE EXPECTED TO PRODUCE PEAK PRESSURE WITHIN THE 10

% ACCUMULATION OF THE SET PRESSURE. ADDITION OF PRESSURE DIFFERENCE BASED ON ONE RCP WILL PRODUCE ACCEPTABLE RESULTS. [INITIAL ANALYSIS COMPLETED TAKING CREDIT FOR RH3 PROVIDES PEAK PRESSURE FOR MASS INPUT CASE SUCH THAT THE CURRENT TFCH SPECS CAN BE MET WITHOUT THE USE OF CODE CASE. THE HEAT INPUT CASE HAS NOT BEEN COMPLETED, BUT IS LIKELY TO BE NON LIMITING CONSIDERING THE CURRENT DESIGN FOR WHICH THE HEAT INPUT CASE IS NOT LIMITING.]

[6] UPON COMPLETION OF THE RH3 LTOP CALCULATION, THE SALEM FSAR WILL HAVE TO BE REVISED THROUGH A 10CFR 50.59 EVALUATION. TECH SPEC REVISION IS NOT EXPECTED, BUT IF MANDATED, LCR WILL HAVE TO BE GENERATED.

[7] THE DISCREPANCY IDENTIFIED IN THE DEF CAN BE RESOLVED THROUGH ONE OF THE FOLLOWING APPROACHES:

[A] GETTING ASME CODE CASE N514 APPROVED BY NRC FOR SALEM. INCIDENTALLY, THE CODE CASE HAS NOW BEEN INCLUDED IN THE ASME XI THROUGH 1993 ADDENDUM.

OR

[B] COMPLETING THE CALCULATION FOR LTOP USING RH3 VALVE AND REVISING PLANT DESIGN BASIS.

[8] THIS DEF IS NOT CONSIDERED AN OPERABILITY CONCERN TAKING THE CREDIT FOR CODE CASE 514 OR THE 1993 ADDENDUM OF ASME XI.

Added to Operating Basis

EXHIBIT 22

OPERATING EXPERIENCE FEEDBACK MEETING

STATION: Salem DATE: 4/7/93

ITEM NO.	R&A SPONSOR	AGENDA SUBJECT	PRIORITY	PROSPECTIVE ASSIGNEE
1. GE SIL 552.		Fuel Failures caused by Metal debris		INFO only
2. West Sale PSE-93-1025		Turbine Rotor L-1 & L-2 Discs	4	Montcourtis/morreni
3. Vend OTHR T-36988A		Governor valves Terry Turbines		morreni/weidema
4. NRC INFO 93-17		Safety System Response To LOCA/LOPA		21 Bailey INFO only to
5. RCT LET INFO		INFO Letter to VP/inattention to Detail		JRH review
6. NRC INFO 88-94		Undersized valve actuators	4	Ketcham/QA
7. West NSAL PSE-93-204		pop's Non-conservatism	4	Curry

COMMENTS:

ATTENDEES:

General Manager	<input checked="" type="checkbox"/>	
Maintenance Manager	<input checked="" type="checkbox"/>	Alternate <input type="checkbox"/>
Operations Manager	<input checked="" type="checkbox"/>	Alternate <input type="checkbox"/>
RP/Chemistry Manager	<input type="checkbox"/>	Alternate <input checked="" type="checkbox"/>
Technical Manager	<input type="checkbox"/>	Alternate <input checked="" type="checkbox"/> Pike

Other

☒ Schultz (QA)

R&A Representative: Harrick/Schnarr/myers/chromowski

CASE NO. 1-95-013

Release

EXHIBIT 22

PAGE 1 OF 9 PAGE(S)

URCE: NRC_ TYPE: INFO ITEM NO: 93-58 _____ LAST UPDATE: 08/06/93 BY: JRH

===== RESPONSE =====
REFER TO WEST NSAL 93-204
ITEM ALSO SENT TO E&PB FOR ADDITIONAL INFORMATION AND DISTRIBUTED AT
SALEM OEF MANAGERS MEETING ON 8/4/93 FOR INFORMATION TO THE SYSTEM ENGR.

MESSAGE: ENTER 'NEXT' TO VIEW NEXT SCREEN, 'PF4' TO RETURN TO HEADER
B MY JOB LU #15

FR 4

----- ACTION TRACKING TASK RESPONSE -----PAGE 1 OF 1-
COMMAND INPUT ==> _____ DISPLAY MODE

SOURCE: WEST TYPE: NSAL ITEM NO: PSE-93-204 LAST UPDATE: 05/31/94 BY: JRH

===== ITEM RESPONSE =====
0001 THIS NSAL DEALS WITH THE COLD OVERPRESSURE MITIGATION (COMS) NON-
0002 CONSERVATISM.

===== TASK RESPONSE =====
TASK NO: 0001

EVALUATION IS COMPLETE. APPROACH TAKEN TO RESOLVE ISSUE CONSISTS OF 1) _____ 1
RESTRICTING THE NUMBER OF RCP'S WHICH CAN BE IN OPERATION IN MODE 5 TO _____ 2
2 RCP'S AND 2) TAKING INTO ACCOUNT THE 10% RELAXATION OF THE TECH. SPEC. _____ 3
HEATUP AND COOLDOWN LIMITS PERMITTED BY ASME CODE CASE N-514. DOCUMENTA- _____ 4
TION OF EVALUATION IN PROGRESS. _____ 5
*SEE MECHANICAL MEMO MEC-93-917, DATED 12/30/93. IN SUMMARY, THE RECOM- _____ 6
MENDED RESTRICTIONS ABOVE SHOULD BE PROCEDURALIZED. PROCEDURE CHANGE REQ _____ 7
IS BEING ISSUED TO OPERATIONS TO AFFECT THE CHANGE TO REVISE IOP -2 AND _____ 8
IOP - 6 FOR SALEM UNITS 1 AND 2. THIS ATS ITEM IS CONSIDERED CLOSED FOR _____ 9
SALEM MECHANICAL NSSS GROUP. *HGB 12/29/93* _____ 10
UPDATE: 5/1/94: ITEM REJECTED BY STATION---REOPENED FOR E&PB TO REDO EVL _____ 11

MESSAGE: ENTER 'NEXT' TO VIEW NEXT SCREEN, 'PF4' TO RETURN TO HEADER
B MY JOB TIME LU #15

----- ACTION TRACKING TASK RESPONSE -----PAGE 1 OF 1-
COMMAND INPUT ==> _____ DISPLAY MODE

SOURCE: WEST TYPE: NSAL ITEM NO: PSE-93-204 LAST UPDATE: 05/31/94 BY: JRH

===== ITEM RESPONSE =====
0001 THIS NSAL DEALS WITH THE COLD OVERPRESSURE MITIGATION (COMS) NON-
0002 CONSERVATISM.

===== TASK RESPONSE =====
TASK NO: 0001

FOLLOWING CONVERSATIONS WITH STATION AND LICENSING, MECHANICAL MEMO MEC- _____ 12
93-917 WAS REVISITED AND RE-ISSUED AS MEC-94-630. THIS MEMO PROVIDES THE _____ 13
REVISED JUSTIFICATION FOR OPERATION AS IS WITHOUT RELYING ON CODE CASE _____ 14
N514. THIS MEMO ALSO RECOMMEND THE PURSUIT OF CODE CASE APPROVAL AND THE _____ 15
SUBMITTAL OF A LCR FOR CREDITING RH3. THIS WILL PROVIDE FUTURE MARGIN. _____ 16
THIS ATS TASK IS CONSIDERED CLOSED. ***HGB/MRD 05/26/94*** _____ 17

MESSAGE: NO MORE DATA TO SCROLL IN FORWARD DIRECTION
B MY JOB LU #15

change 1st time
def't mgr.

4/6/93 Doc Rec'd From Outside by CEF

4/7/93 CEF Mtg.

change 2nd time

10/12/93 orig due date

- 5.2.3 After determining the need for further evaluation, the sponsor department should negotiate a task assignment and an appropriate evaluation period based upon priorities established in NC.NA-AP.ZZ-0057(Q), Action Tracking System, Appendix D.

NOTE

The evaluation period is discussed between the sponsor and responsible department and resolved based upon the severity of the issue or by the agency issuing the document. One extension to the committed due date will be considered for extension requests signed by the department manager.

Following agreement the sponsor should:

- A. Enter the task assignment into the ATS IAW NC.NA-AP.ZZ-0057(Q) or CADB. OEF documents not requiring any follow-up action should be inputted into the ATS/CADB with key words and cross references for future retrieval purposes (sponsor judgement).
- B. Prepare an assignment package to include:
 - ◆ NC.NA-AP.ZZ-0057(Q), Attachment 2, Action Request Form, with Section I completed including a clear concise task assignment
 - ◆ A copy of the original document
 - ◆ All pertinent information obtained during the screening process, including copies of reference documents
- C. Forward an assignment package to the responsible department/coordinator.

- 5.2.4 The responsible department/coordinator should review an event utilizing the following guidelines:

- A. Determine the implications or effects on personnel, operations, equipment, design, environmental qualification (EQ), current practices, and procedures.
- B. Initiate requests for assistance in performing multi-discipline review of complex events. It is the assigned department's responsibility to assure that the assistance requested receives the proper attention to complete the task.
- C. Interview personnel associated with the issue.
- D. Review previous events, both external and internal. Assistance may be required.

NOTE

INPO SOERs, SERs, SOs, and SENs and NRC Bulletins, Generic Letters and Information Notices are classified as significant since the agencies have thoroughly evaluated the particular issue and issued the document. The screening process only evaluates applicability to Hope Creek and Salem. If the issue is applicable, an evaluation is required.

A. Screen to determine issue significance utilizing the INPO EVENT SIGNIFICANCE GUIDE (Exhibit 1). In addition:

- ◆ Consideration should be based upon specific component and generic issues.
- ◆ Perform searches (internal events, OEF documents and NPRDS) to determine if a similar occurrence has been previously dispositioned and if that previous disposition is currently suitable.
- ◆ Include the bases for judgements in the documentation for future reference.
- ◆ Communicate events considered of high importance to the appropriate departments as soon as possible.
- ◆ Defects or non compliance issues that have been transferred to PSE&G under 10CFR21.21(b) shall be evaluated. The assigned responsible department should provide the evaluation by completing Form NC.NA-AP.ZZ-0054-1 to determine whether the potential reportable concern exists.

B. Screen for applicability to Hope Creek or Salem.

5.2.2 Events deemed applicable by the sponsor department but not requiring further evaluation (based upon the severity of the issue) may be distributed as "information only" to the appropriate department. The justification should be included in the disposition.

- ◆ Send event reports suitable for use in drill scenarios to the Emergency Preparedness Department.
- ◆ INPO O&MRs and NETWORK OEs are normally processed as "info only" and addressed at the department's discretion. They can however, be evaluated as a significant issue when appropriate.
- ◆ Send appropriate event reports to the training department for material to be presented in formal training programs.

4.2 Program Requirements

- 4.2.1 Effectiveness of the OEF program should be monitored and results reported to management by means of performance indicators by the Reliability and Assessment Department.
- 4.2.2 Departments should use the ATS/CADB for tracking the status of OEF documents.

4.3 Program Background

This procedure provides the overall direction for the Nuclear Department's implementation of NUREG 0.37, Section I.C.5.

5.0 PROCEDURE

5.1 Internal Events

- 5.1.1 The sponsor department (as defined in Section 6.0) for internal events should review the event IAW procedures as indicated below:

- ◆ NC.NA-AP.ZZ-0006(Q), Incident Report/Reportable Event Program and Quality/Safety Concerns Reporting System
- ◆ NC.NA-AP.ZZ-0061(Q), Significant Event Response Team Management
- ◆ NC.NA-AP.ZZ-0035(Q), Nuclear Licensing and Reporting
- ◆ SC.RP-TI.ZZ-1001(Q), Radiological Occurrence Investigation

- 5.1.2 Station management or Reliability and Assessment personnel should recommend reporting significant internal events to the other station and to the industry via Nuclear NETWORK as identified during their review process.

5.2 External Events

- 5.2.1 The sponsor department processes external event reports and requires an evaluation for documents which are significant and applicable as described below:

NC.NA-AP.ZZ-0054


OPERATING EXPERIENCE FEEDBACK (OEF) PROGRAM

SPONSOR ORGANIZATION: Reliability & Assessment

REVISION SUMMARY

- ◆ Added NUREGS to Steps 2.2.3 and 6.13.
- ◆ Changed titles per current organization titles.
- ◆ Added 10CFR Part 21 requirements to Steps 3.5, 5.2.5.B, and 6.13.
- ◆ Added Step 5.1.3.
- ◆ Added requirements for using Form NC.NA-AP.ZZ-0035-1 in Steps 5.2.1.A and 5.2.4.F.
- ◆ Updated references to current revisions.
- ◆ Updated Exhibit 1 to current SEE-IN revision.
- ◆ Changed shall to should to conform to the NC.NA-AP.ZZ-0001 revision.
- ◆ Eliminated Form NC.NA-AP.ZZ-0054-1 and reused form number for Pt 21 purposes.


APPROVED:


General Manager - Salem Operations

Date

9/6/94

APPROVED:


General Manager - Hope Creek Operations

Date

9/2/94

EXHIBIT 27
PAGE 7 OF 9 PAGE(S)

PSE&G NUCLEAR DEPARTMENT
 NC.NA-AP.ZZ-0057(Q) - Rev.2
 ACTION TRACKING PROGRAM

CONTROL COPY #
 149

SPONSOR ORGANIZATION: Engineering and Plant Betterment

REVISION SUMMARY

This is a Limited Revision to NC.NA-AP.ZZ-0057(Q).

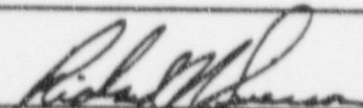
This Revision incorporates the following:

1. A request by QA to change Appendix D (Priority Classifications). Changes will provide a priority system consistent with the priorities in use by both stations per NAP-8 and NAP-9.
2. Deletion of task status code "NEGO" (task under negotiation) from Section 5.1.1. The deletion of this code will make the NAP consistent with the ATS program; tasks must be negotiated before they are entered into ATS.
3. Appendix A (Primary ATS Tracking Responsibilities) has been updated to include SOURCE/TYPES added to the Action Tracking System since Revision 1.

IMPLEMENTATION REQUIREMENTS


This procedure becomes effective on date of issuance. Retrofitting of priorities is not required but may be done at the sponsors discretion. The format of this procedure has been changed to conform with NC.NA-AS.ZZ-0001(Q) - NUCLEAR DEPARTMENT PROCEDURE FORMAT AND CONTENT STANDARD.

APPROVED:


 General Manager - Engineering and
 Plant Betterment


12/14/92
 Date

CONCUR:


 General Manager - Quality Assurance/
 Nuclear Safety Review

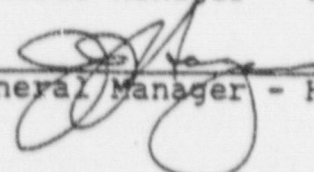
12/14/92
 Date

APPROVED:


 General Manager - Salem Operations

1/5/93
 Date

APPROVED:


 General Manager - Hope Creek Operations

12-23-92
 Date

EXHIBIT 22
 PAGE 8 OF 9 PAGE(S)

APPENDIX D

PRIORITIES

PRIORITYDESCRIPTION

- A Emergency work requiring immediate action. Includes issues with immediate:
- Nuclear, industrial, or radiological safety consequences.
 - Regulatory significance including entering of action statements or notification of regulatory authorities.
- B Action required to start as soon as possible normally no later than the next scheduled work day.
1. Problem, to which action is directed, is not threatening to safe plant operation, but may have adverse operational impact and should be addressed quickly - one to two weeks. There is clear potential for developing into a larger problem. May involve significant regulatory commitment compliance.
 2. Problem, to which action is directed, is not expected to develop into a larger problem in the near future. Should be addressed in the near term - three to six weeks. May involve regulatory or commitment compliance.
 3. Minor deficiencies not affecting component operation and may include minor compliance issues, "nuisance" or "eyesore" type situations. Solutions should be implemented in seven to twenty weeks.
 4. Plant betterment activities, general enhancements which would result in more effective, efficient or lower cost activities. Greater than twenty weeks.