

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

1 In the Matter of:

2 IE TMI INVESTIGATION INTERVIEW

3 of Thomas Van Witbeck
4 Manager of Operating Plant Services
5 Energy, Inc.

6
7
8 Trailer #203
9 NRC Investigation Site
10 TMI Nuclear Power Plant
11 Middletown, Pennsylvania

12 May 17, 1979
(Date of Interview)

13 July 9, 1979
14 (Date Transcript Typed)

15 207
(Tape Number(s))

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20
21 NRC PERSONNEL:
22 Bob Marsh
23 Dorwin R. Hunter
24 William H. Behrle (Met Ed)
25 Tim Martin

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1 MARSH: Today's date is May 17, 1979. The time is 1:18 p.m., and we are
2 located in Trailer 203 at the TMI site. My name is Bob Marsh. I am an
3 investigator with the U.S. Nuclear Regulatory Commission, assigned to the
4 Region III office in Chicago, Illinois. We are at the TMI site today to
5 conduct an interview on Mr. Thomas Van Witbeck, and at this time I would
6 like the other people in the room to introduce themselves, spell their last
7 name, and indicate their employment position. You can start now.

8
9 HUNTER: My name is Dorwin R. Hunter. I am an inspector specialist, Perfor-
10 mance Appraisal Branch.

11
12 VANWITBECK: My name is Tom Van Witbeck. I am a manager of operating plant
13 services with Energy, Inc.

14
15 BEHRLE: My name is William H. Behrle and I am a project engineer with
16 Metropolitan Edison Company.

17
18 MARTIN: My name is Tim Martin. I am a reactor inspection specialist with
19 the Performance Appraisal Branch.

20
21 HUNTER: Mr. Van Witbeck before we began here we had a few words before I
22 began the tape addressing Mr. Page's memo which you had an opportunity to
23 read and I will provide you with a copy of this memo before you depart
24 today. As we indicated, the memo covers the purpose of this investigation
25 and some of the goals we hope to achieve as well as the authority under

1 which it is being conducted. In addition there are several questions asked
2 and at this time I would like to put those questions on tape and make them
3 a matter of record on tape as well as on the printed form. The first
4 question reads, do you understand the above making reference to the two-
5 page memo?

6
7 VANWITBECK: Yes.

8
9 HUNTER: The second question reads, do we have your permission to tape this
10 interview?

11
12 VANWITBECK: Yes.

13
14 HUNTER: And third, do you want a copy of the tape?

15
16 VANWITBECK: Yes.

17
18 HUNTER: Okay, what I will do is at the conclusion of this interview, I
19 will duplicate it and provide you a copy of the tape at that time and as a
20 copy of the transcript becomes available, you will also be provided a copy
21 of the written transcript. There is a fourth question not specifically
22 called out at the end of the letter, but covered in the body of it which
23 addresses your right, if you so choose to exercise it, to have a represen-
24 tative from Metropolitan Edison present or a union member if you are an
25 employee of that class. Can I ask would you like a company representative
present?

1 VANWITBECK: Yes, I would.

2
3 HUNTER: Okay, I will indicate at this time that William Burley, Project
4 Engineer with Med Ed is present in the room and is in that capacity.
5 Mr. Van Witbeck to begin with if you would could you give us a brief resume
6 of your education, your work experience, your position with Energy, Inc.,
7 and how that addresses the TMI incident?

8
9 VANWITBECK: My background starts, in the nuclear business, in seven years
10 in the Navy, nuclear Navy. I was an engineering and lab tech and an instruc-
11 tor at prototype, four years of college, and bachelor's degree in nuclear
12 engineering, and nine years industrial experience, in startup and operating
13 plant services, since. Currently, I manage a start up and operating plant
14 services group for Energy, Inc. As to the TMI involvement, we were brought
15 in by DeCamp to assist the client in identification of the sequence of
16 events and evaluation of data and the assessment of the accident.

17
18 HUNTER: Okay about Energy, Inc., could you provide me the address of the
19 home offices?

20
21 VANWITBECK: Yes, It is P.O. Box 736, Idaho Falls, Idaho, and zip is 83401.

22
23 HUNTER: Okay, and one other item. I'd like to cover is the nature of your
24 relationship with Med Ed in the TMI incident. Was this brought about by a
25 recent contract or business agreement or has this been in existence prior
to the date of the incident?

1 VANWITBECK: This particular involvement came about after the incident.
2 Prior to the incident we have been involved with GPU through the Epri
3 Retran users group.

4
5 HUNTER: All right, one other point I'd like to make is that we address
6 acronyms or jargon could we define as we go along to assist the girls who
7 have to transcribe this?

8
9 VANWITBECK: Sure. The GPU being General Public Utilities, RETRAN being a
10 computer code, thermal hydraulics computer code.

11
12 HUNTER: Okay, at that point then I'll turn it over to Tom Martin to begin
13 the questioning.

14
15 MARTIN: It's Tim Martin, Tom. My interest at this point is in any informa-
16 tion you might have relative to loss of data in the computer system. As a
17 result of possible operator action or otherwise. Can you provide us with
18 any information in this area?

19
20 VANWITBECK: There was approximately an hour and half worth of data lost
21 from the alarm printer. This information was lost because the alarm printer
22 went out, was out of service and the printer was transferred over to the
23 print, the alarm print function was transferred over to the utility type-
24 writer and in transferring back to the alarm printer after a new typewriter
25 was installed, the data was lost during that transition. As to whether or

1 not it was operator action or a component misfailure, you know a failure of
2 a component, we don't know at this time. We do know that it is missing and
3 it is well documented in sequence as you go down through the alarm type-
4 writer that it skips about an hour and a half worth of data. I have got
5 the exact times here if you want that.

6
7 MARTIN: Tom, In earlier discussions you had informal discussions with, I
8 think, Mr. Jim Creswell and you indicated that some data may have been lost
9 in the computer when NRC inspectors were interfacing with the computer. Do
10 you have any knowledge of this? If so, can you provide us with the specifics?

11
12 VANWITBECK: There was a lot of data being taken on the day of the incident
13 and this is all third party information by the way. I wasn't in the control
14 room at that time. NRC investigators were calling things up on the type-
15 writer trending data, and in the process of this trending of the data, and
16 accumulating this data, other data, the data they were interested in was
17 removed, and the other data was dumped. You know the paper was thrown
18 away. Some of it was data that some other people had been trending. The
19 data sheets, we have very few data sheets from these trends. They seemed
20 to have been removed or after they were used and the information taken from
21 them, they were discarded. Something was done with them. They did not get
22 into the filing system at Med Ed.

23
24 MARTIN: Tom, can you give an approximate time that this occurred, and ...
25

1 VANWITBECK: I think what I am referring to is conversations I have had
2 with the people from the plant and from those conversations it would be in
3 the first day and a half to two days where this was occurring.

4
5 MARTIN: Would this occur on the first day of the event or ...

6
7 VANWITBECK: Yes. First and second days.

8
9 MARTIN: Do you know what people were involved in calling this data and
10 possibly misplacing it?

11
12 VANWITBECK: No, I don't know the names of the individuals. I do know the,
13 that it was the, there was data being trended by both NRC and by the plant
14 people and in the taking of this data from the computer tape, you know from
15 the computer printout and removing it to other work locations in the plant
16 (the control room) that this information never got back in the files.

17
18 MARTIN: Tom, So what we are saying is that if the data within the computer
19 was not disturbed, but in its printed form the portions of this printed
20 form were removed to other work locations and have not been located since.

21
22 VANWITBECK: True. And this isn't with reference to the hour and a half
23 that was missing. That data was just lost in the computer, the alarm data,
24 and we are talking about other trending data information people had called
25 up on the computer. To my knowledge none of the alarm printer data was
missing because of people removing it.

1 MARTIN: All right Tom, can you identify the information that was specifi-
2 cally lost or must we refer to it in general terms?
3

4 VANWITBECK: I, the only, I do know there were some thermocouples in it and
5 thermocouples being called up, but that is the extent of the knowledge
6 right now. I do know they were calling up more than that and you know
7 using it, but as to what that data was I don't know at this time.
8

9 MARTIN: Tom, to your knowledge is this data critical for the analysis of
10 the event?
11

12 VANWITBECK: It would be hard to say whether or not it is critical because
13 I don't know what it is. It may or may not be. The thermocouple informa-
14 tion would be significant as the plant here does not have a routine thermo-
15 couple map as you would have on a Westinghouse plant, and these are called
16 up on an individual basis.
17

18 MARTIN: Tom, the information that we are talking about was it isolated to
19 a single printer or typewriter system? If so, what types of things would
20 be printed on that typer that would be of interest to the investigation of
21 sequence?
22

23 VANWITBECK: The information that would be printed on that typer would be,
24 it would be on a utility typer. It was the one that they were using at
25 that time. As to its value in the sequence, it probably wouldn't specify

1 information as to when something occurred, that is a pump start and that
2 type of thing. What it would provide is amplifying information as to the
3 condition of the plant. Whatever parameter was called up would be another
4 data point on that parameter. It may or may not be recorded elsewhere at
5 that time.

6
7 MARTIN: So basically this probably involved data that was called up because
8 of a specific interest of the individual would not have been available
9 normally unless someone else had called it up, and, therefore, it did not
10 disturb the computer system specifically just because these activities were
11 going on.

12
13 VANWITBECK: It wouldn't have disturbed the computer system, however, that
14 you know you can say the time being used to call up this was interrupting
15 trends that other people were doing on the machine. Each individual calling
16 up certain information would be wanting that information trended or printed
17 out and that would interrupt and reduce the total availability of the
18 computer to other users or at least that typer. I forgot the first part of
19 your question, excuse me.

20
21 MARTIN: Tom, let me go ahead. I think you've provided the information
22 needed there. You indicated that this information you had was third party.

23
24 VANWITBECK: That is correct.
25

1 MARTIN: Which means that for me trace back and find out exactly what
2 information we are talking about, I am going to need to talk to those
3 people. Can you give me the names of those people that might have first
4 hand knowledge of these activities?

5
6 VANWITBECK: Some would be several of the operators in the control room at
7 the time. I could have I would have to go back and look at my records. I
8 don't have them with me. I do know that Ivan Porter who is an INC engineer,
9 was one of the people that was using the typewriter at the time trending
10 some information.

11
12 MARSH: Okay. I would like to request that data that you do have available
13 in your nome records that I would have access to it.

14
15 VANWITBECK: Sure, right.

16
17 MARSH: Any names that you can recall or trace back that would have specific
18 first hand information I'd like to have access to it.

19
20 VANWITBECK: Fine.

21
22 MARTIN: Okay. I just have one question the data that was missing would
23 include thermocouple data, has Med Ed or you done, have you done a trace in
24 the document trailer for that data?
25

1 VANWITBECK: Oh, yes.

2
3 MARTIN: It wasn't able, you weren't able to locate it?

4
5 VANWITBECK: No. The information that was being trended and as to what was
6 being called up would probably be best be gotten from the people who were
7 doing it at the time that were calling the trend. The value of that infor-
8 mation would be you know best gotten from them as to what they were trending
9 and what they were looking at. It was my impression this information was
10 being relayed to people offsite that were attempting to get a handle on the
11 situation. Therefore, I would assume that it was of value.

12
13 MARTIN: Has any attempt been made to trace this data to these people since
14 obviously you had first hand or you've been informed that this was where
15 the data is?

16
17 VANWITBECK: Several requests have been made to NRC to provide all informa-
18 tion they had. The trending data that the other people were trending in
19 the control room, we have gone back through all the waste material we could
20 find in the control room. This was three days later though, 3 to 5 days
21 later, and that in that type of time frame. We could not find it and we
22 went through all the boxes, the desks, the drawers, cabinets. One of the
23 things the operators at this plant do is when they are taking data like
24 that they tear off the sheets and pardon me, they get the information that
25 they want, and then those sheets that are torn out are put into the back of

1 the computer. There is a cabinet behind it. We pulled out the information
2 that was in there. There were some 25 or 30 sheets though. It wasn't
3 anything like we have had coming out of there at that time.

4
5 MARTIN: Tom, let me understand you then. Are you indicating that you
6 can't determine how many sheets are missing or which sheets are missing?

7
8 VANWITBECK: There is not at this time any way to determine that because it
9 is off of a typewriter or a printer that doesn't run the, you know is not
10 running in a routine sequence. It has been interrupted to provide this
11 information. And as to the extent and the amount of information, no one, I
12 can't. All we know is, it was taken and it is not currently in our files,
13 and we have made a search of the control room for it. And have asked the
14 operators and people to, you know anybody that was in there, to bring out
15 of their files or in their files in the plant any information they had.

16
17 MARTIN: You indicate that there is no way to determine how many sheets are
18 gone. You know that some tear sheets were inserted in the back and you
19 indicated there were approximately 50 you found there.

20
21 VANWITBECK: Twenty-five or thirty.

22
23 MARTIN: All right 25 or 30. How do you know that does not cover all the
24 sheets that were actually typed?
25

1 VANWITBECK: In the volume of paper that goes through that machine was in
2 continuous use and that would be more than that for that period of time
3 over those several days. Plus, there were no thermocouple data in there.
4

5 MARSH: For the sake of an understanding of the system here, could you
6 briefly describe the system as we are addressing it what the input devices
7 are, or what the output is? Are you working off a buffer or strictly
8 addressing the computer straight? What's the nature of the printing devices?
9 Are they IBM Selectrics or are they other devices? Are you using single
10 paper or manifold paper? Could you cover that briefly for us?
11

12 VANWITBECK: Okay. The computer system, I am not totally familiar with the
13 whole system because you know this is not a plant that I have worked on in
14 the past. The paper we are using is a standard single sheet computer
15 paper. The printers are IBM Selectric typewriters. The input devices are
16 most of the plant parameters that are brought into the computer, and there
17 are some single point, there are quite a few single point parameters that
18 can be called up on a code number point number and put on trend or called
19 up for single readings. There are also some trend blocks that can be
20 called up, and as to the content of all the trend blocks available, I don't
21 know how all of those trend blocks that are available.
22

23 MARSH: Okay. If I am understanding what you are saying earlier correctly,
24 I am looking at the possibility of laymen or other investigative teams
25 downstream listening to this tape that may not understand the intricacies

1 of it, but are you saying that as this computer is calling these single
2 point pickups or taking information from those sources and is then asked to
3 provide a printout that that interrupts that input of information?
4

5 VANWITBECK: It could interrupt a trend that was in process at the time,
6 yes. Or it will queue these and print them out from the queue.
7

8 MARSH: All right, so as it is going through the process of queuing infor-
9 mation and preparing to feed it into the printer it no longer accepts
10 inputs or is that it still gets inputs but we just delay the actual print-
11 out of that information.
12

13 VANWITBECK: The printout, I don't believe you will lose the printout
14 information. It is just a matter of an interrupt and then coming back.
15 Now you can and I don't know the hierarchy of commands, but there are
16 certain commands that will come on and you could by setting up the correct
17 trend rate, block out any printout, but I don't know that that was going
18 on. As far as somebody calling up a given point and putting it on trend to
19 the extent that it would block out other inputs or if it the trend points
20 they were looking at were of, let's say the trend commands were in the
21 hierarchy such that they would blank out anything else.
22

23 MARSH: The process of calling out a dump of particular information, would
24 this automatically wipe out the memory of information that was requested or
25 is that it just that it dumps and still maintains a fixed memory of that
info?

1 VANWITBECK: I do not know. Whether as to the memory of this machine for
2 all single points, but based on the machine to my limited knowledge of it,
3 I don't believe that the information would be stored in the memory. There
4 is a 12-hour dump, but I don't know what goes into it totally.

5
6 MARSH: Okay, but there is a 12-hour?

7
8 VANWITBECK: Yes, but I don't know what it, I just learned this a couple of
9 days ago here and I don't know the extent of the content of that storage.

10
11 MARSH: Okay. What type of a dump is that? Is it just a general erase or
12 is it dumped out in a Mag tape or Mag card or is--?

13
14 VANWITBECK: No, I don't think it is dumped on Mag tape and I really don't
15 know, but I imagine it is dumped out to this, through the Selectrics.

16
17 MARSH: So there might still be a possibility that the total memory was
18 dumped at a 12-hour period later and could possibly still be located? What
19 I'm after is information that was lost, lost forever or might we regain it
20 from a later dump.

21
22 VANWITBECK: No, I don't think there was a later dump of that type of
23 information made for that machine and I am not sure what the capacity is of
24 the machine and as to whether or not it just fills up the buffer and then
25 starts pushing the information out the back side of the buffer.

1 MARSH: That is all I have, thank you.

2
3 VANWITBECK: Okay.

4
5 MARSH: It appears that we are at the end. Okay, n. one else indicates
6 they have any questions. Tom, at this point I'd like to open it up to you.
7 We have asked you a few questions. If there is any statement you would
8 like to make or make a matter of record, I'd like to turn the microphone
9 over to you at this time for your comments.

10
11 VANWITBECK: Well, I guess I would ask the question that several requests
12 have been made to the NRC and are you aware of the status of any of these
13 requests that is the information that it was believed to be, have been in
14 NRC investigators' hands and the reps onsite at the time.

15
16 MARSH: Okay. To the best of my knowledge, we had no investigators onsite
17 during the event itself. You had more operational people who were addressing
18 the operational conditions that were going on. Any requests put to them,
19 no, I am not privy of any at this time.

20
21 VANWITBECK: Umhum.

22
23 MARSH: And I speak that in a personal sense.
24
25

1 VANWITBECK: Yeah. I understand.

2
3 MARSH: Our investigation as far as I know has not turned up any specific
4 requests.

5
6 VANWITBECK: Okay. That is the only question I had.

7
8 MARSH: Anything else? Okay, then the time being 1:40 p.m. and I am reading
9 410 on the meter. I would like to say thank you for your time recognizing
10 you have a busy schedule and have an aircraft to catch. Just say thank you
11 for your your input for showing up here.

12
13 VANWITBECK: Well, thank you.
14
15
16
17
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23
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25