

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

1 In the Matter of:

2 IE TMI INVESTIGATION INTERVIEW

3 of Mr. Hugh A. McGovern, Control Operator, Nuclear, Unit 2
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9 Trailer #203
10 NRC Investigation Site
11 TMI Nuclear Power Plant
12 Middletown, Pennsylvania

13 June 20, 1979
14 (Date of Interview)

15 July 6, 1979
16 (Date Transcript Typed)

17 #313
18 (Tape Number(s))
19
20
21

22 NRC PERSONNEL:
23 Mr. Larry Jackson
24 Mr. Mark E. Resner
25

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1 RESNER: This is an interview of Mr. Hugh A. McGovern. Mr. McGovern
2 is employed at the Three Mile Island facility, by Metropolitan Edison
3 Company, and his job title is Control Operator, Nuclear, Unit 2. The
4 present time is 2:25 p.m., EDT. And today's date is June 20, 1979.
5 This interview is being conducted in trailer 203, which is located
6 just outside the south security gate to Three Mile Island facility.
7 Individuals present representing the Nuclear Regulatory Commission at
8 this interview, are Mr. Larry Jackson. Mr. Jackson is a Radiation
9 Specialist employed at Region II, with the Nuclear Regulatory Commission.
10 Speaking and moderating this interview is Mark E. Resner. I am an
11 investigator with the Office of Inspector and Auditor, Headquarters of
12 the U. S. Nuclear Regulatory Commission. Mr. McGovern has been interviewed
13 previously, and on those occasions, he was given a two-page document
14 which explained the purpose, scope and the authority with which the
15 Nuclear Regulatory Commission is conducting this investigation. In
16 addition, it apprised him that he is entitled to a representative of
17 his choice during this interview, and in no way is he compelled to
18 talk with us, should he not want to. Mr. McGovern initialed and dated
19 the first page of this document; signed and dated the second page of
20 the document. And also on the second page of the document has answered
21 three questions in the affirmative. And I will state these for the
22 record. Question one, do you understand the document? And Mr. McGovern
23 has checked yes, on that. Is that correct, Mr. McGovern?
24
25

1 MCGOVERN: Yes.

2
3 RESNER: Question two. Do we have your permission to tape this inter-
4 view? Mr. McGovern has checked yes. Is that correct Mr. McGovern?

5
6 MCGOVERN: Yes, you may tape the interview.

7
8 RESNER: Question three, Mr. McGovern has checked yes, indicating that
9 he desires a copy of the interview. Is that correct, Mr. McGovern?

10
11 MCGOVERN: Yes, I would like a copy of the tape.

12
13 RESNER: O.K. We'll provide you with a copy of the tape at the con-
14 clusion of this interview. At this time, Mr. Jackson has some questions
15 that he would like to ask you.

16
17 JACKSON: Here I'm trying to basically establish what happened in the
18 way of vent releases, particularly from the makeup tank. And I under-
19 stand you were on shift from 0700 to approximately 1830 hours on the
20 28th. Do you recall if there were any vents from the makeup tank on
21 the 28th, or if so, when did they start?

22
23 MCGOVERN: I really don't recall any on the 28th. As I mentioned in
24 the previous interview, I was involved mostly in auxiliary type status.
25 I was helping out the people that were on the shift, and I was more or

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1 less, an extra set of hands for them. Behind the main panel, on the
2 second row of panels, and just generally around the outside areas of
3 the console, and not basically involved with the panel itself. I do
4 recall that they were venting the system off through the pressurizer
5 through the electromatic, relief and through RCV-137 vent valve. I
6 don't specifically recall any vents from the makeup tank at that time.

7
8 JACKSON: Do you recall any problems with the letdown system, early on
9 the 28th ... letdown flows. I know the ... sometime early, the letdown
10 block orifice was bypassed during the increased flows, and I thought
11 maybe there might be some connection between pressure building up the
12 system, and maybe the letdown flows?

13
14 MCGOVERN: I recall having that ... there is that problem on the 29th.
15 I don't recall it on the 28th. On the 29th, yes, they're having
16 problems with the letdown flow and the makeup tank pressure was going
17 up, and as a result, when the pressure was coming up they were opening
18 the vent valve on the makeup tank, which vents to the vent gas header,
19 and allowing the pressure to come down, and then attempt to maintain
20 letdown flow.

21
22 JACKSON: O.K. And that was on a ...

23
24 MCGOVERN: That was the 29th.
25

1 JACKSON: The 29th.

2
3 MCGOVERN: The morning of the 29th, yes, midshift.

4
5 JACKSON: O.K. And do you know how these vents were being made ...
6 with a short burst? What kind of controls over the vents or ...

7
8 MCGOVERN: Specifically, I really don't remember. I believe it was
9 more or less ... they started out trying the short bursts, and as time
10 progressed, they were having problems with the pressure. I think it
11 more or less ended up with an almost continuous opening 13 ... MUV 13
12 vent valve.

13
14 JACKSON: O.K. On the morning of the 30th, which was Friday morning,
15 there was a problem with the makeup tank level, about 4 o'clock in the
16 morning, it just bottomed out ... very sharp drop, and the ... later
17 on that morning, because of problems that that was causing in trying
18 to get makeup into the reactor coolant system, and not wanting to
19 drain the borated water storage tank, the decision was made to open
20 MUV 13, the makeup tank vent valve. And it stayed open. Do you
21 recall, or were you involved in any of the decision making with that
22 tank problem, and the decision to open that vent on that tank?

23
24 MCGOVERN: I'm afraid Junior CROs are not usually asked for decisions
25 of that nature. But, no, I really wasn't involved in the decision. I

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1 was aware that that decision was made. But, no, I wasn't involved in
2 making it, one way or the other.

3
4 JACKSON: Do you recall what time that would have ...

5
6 MCGOVERN: It was early in the morning, on the 30th. I can't give the
7 exact time.

8
9 JACKSON: Do you know who was talking about the problem? I think Greg
10 Hitz was one of the supervisors in the building.

11
12 MCGOVERN: Bill Zewe was one of them, too.

13
14 JACKSON: Jim Floyd, I believe, was in there. Do you know if all of
15 the people were ...

16
17 MCGOVERN: I don't remember who all ... I remember Bill (Zewe) being
18 involved with it. He was involved with ... the first three days,
19 quite extensively. And I do remember him getting involved with that
20 problem. But, I don't remember either Hitz or Zewe, I mean Jim Floyd
21 being involved with it. But I'm sure it wasn't Bill's decision by
22 himself, by any means. You know, I've been involved in so many decision
23 making things like that.
24
25

1 JACKSON: Were you involved in any of the other things that...on tele-
2 phone communications between the Control Room and the Emergency Control
3 Station over in Unit 1?

4
5 MCGOVERN: Yeah. I took a couple of calls on the lines. But, mostly
6 we had a guy that was, I can't even remember who was doing that most
7 of the time. But, there was a specific guy for the ECS.

8
9 JACKSON: Were you present when the ... excuse me, the radio transmission
10 came through giving the 1,200 rR/hour over the vent stack, do you
11 recall?

12
13 MCGOVERN: No, I don't remember that at all. I really don't. By that
14 time, we were getting releases on a periodic basis from the (unintelli-
15 gible) into the makeup tank, and I really wasn't wasn't keying in on
16 those after a period of time. You got use to hearing the helicopter,
17 and, you know, the background and announcements coming over the radio,
18 and I wasn't specifically listening for them.

19
20 JACKSON: O.K. What kind of other ... what kind of duties were you
21 doing that morning still, basically?

22
23 MCGOVERN: Basically, you know trying to help out, and a backup. I
24 was working with two CROs that I had worked with previously. I had
25 worked in a training status with them. They were CROs ... I sensed

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1 CROs, when I was in training. And so I was accustomed to working with
2 them, more or less as a backup and helping them out.

3
4 JACKSON: Who would that have been?

5
6 MCGOVERN: That was Ed Frederick and Craig Faust.

7
8 JACKSON: O.K. So, you don't recall then the account of the tone that
9 was in there that morning on a release ... whether it was it a surprise
10 ... the number of 1,200? Do you recall any of the reactions?

11
12 MCGOVERN: Like I said, I don't remember the 1,200 coming in. I do
13 remember, the knowledge that, yes, we are now making a release. We
14 had the 13 valve opening, MUV-13 13. And that also kind of a tone of,
15 well this is what we've got to do. We've got to get level in the
16 makeup tank to keep water going in. And this is what was required.
17 We had to have letdown flow. We had to keep the pressure off of that
18 tank, and that was more or less what everybody was aiming at.

19
20 JACKSON: Do you know whether or not ~~the~~ release was terminated that
21 morning?

22
23 MCGOVERN: I can't really ... I do remember we had letdown flow back
24 before we left that morning. And we did have some sort of letdown
25 flow. We had an indicated level in the makeup tank. And things were

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1 in a relatively stable position. But, I don't remember if the vent
2 valve was open at that time or not.

3
4 JACKSON: Let me explain something to you, and see if we can fit it
5 together. I was told earlier, now Greg Hitz said that when he ... he
6 asked Faust to open the vent valve, I believe. And he told Faust to
7 open that vent valve and leave it open. Now, this was a little bit
8 ... a little bit unusual because they had been venting it with a
9 knowledge that they were going to close it back off shortly, but
10 apparently the problem with such a magnitude, and the need to get
11 letdown back in that tank was such a magnitude, that he told him this
12 is going to be a long term release, we're going to get that tank
13 pressure down.

14
15 MCGOVERN: I think that it really wasn't a matter of choice by that
16 time. The pressure ... the pressure in the makeup tank was somewhere
17 around 75 pounds. There's a relief valve on top of the tank. I don't
18 remember the setting. I think it's around 80 something. It's not
19 very high. And your either going to get it going through the MUV 13,
20 or it going to go out through the relief valve anyway. And one way or
21 another, it was going to go out. It was more or less a matter of ...
22 let's get the letdown flow. We need the ... you know the ability to
23 put some water in the system and take some out. Control our volume a
24 little bit. I think that was more or less what everybody was shooting
25 at. Trying to get the system under control.

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1 JACKSON: O.K. The ... I want to come back to that relief valve, in
2 just a minute. Do you know of this valve being closed ... MUV 13 now,
3 anytime subsequent to that ... anytime after that period? Are you
4 aware of it being closed and opened?

5
6 MCGOVERN: Well, after I got off the morning of the 30th, I was off
7 for two days, so I really can't help you with that period of time.
8 But, I know that the previous plan of action was ... yeah, we'll open
9 the valve, get the pressure down and close it back. I don't know.
10 After that they did start leaving it open for a period of time. How
11 long?...I just don't know.

12
13 JACKSON: O.K. Going back to the relief valve, that would be MUR 1,
14 right? That valve comes off the top of the tank?

15
16 MCGOVERN: That's correct.

17
18 JACKSON: Does it relieve ... is it designed to relieve liquid or gas?

19
20 MCGOVERN: It's designed to relieve gaseous release, I believe.
21 I really couldn't tell you that much about the design. But, I remember
22 that we were approaching at setpoint, and we lifted and said, O.K.,
23 this is where it's going to go. We're going to lose it anyway.
24
25

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1 JACKSON: O.K.

2
3 MCGOVERN: That was part of the decision making that they used in
4 opening the tank.

5
6 JACKSON: O.K. Fine. I just wanted to clarify that, because some
7 people have the conception that that valve is seeing only liquid. And
8 I think we might have been mislead, not intentionally, but statement
9 was made that the relief valve lifted, and that's why the level in the
10 makeup tank dropped off so sharply.

11
12 MCGOVERN: O.K. I think I maybe mistaken on this, but I believe what
13 they're talking about is the letdown relief valve. (here's a valve on
14 the letdown line, just downstream of the block orifice, that is strictly
15 a liquid relief. Maybe, I'm mistaken. Maybe, that's the only valve
16 they were talking about. But, I thought they remembered one on top of
17 the tanks ... it ran off the top of my head. I don't remember. But,
18 yeah, their liquid ... the letdown relief valve is strictly liquid.
19 And that might of been what they were referring to when they said,
20 yeah, we lost level, and that's why. When the pressure went up, it
21 popped.

22
23 JACKSON: O.K. So, then ...
24
25

1 MCGOVERN: That would have been strictly liquid.

2
3 JACKSON: Yeah. That would be MUR 3.

4
5 MCGOVERN: Yeah, O.K.

6
7 JACKSON: Just downstream of the block orifice.

8
9 MCGOVERN: I think that's probably what they were referring to when I
10 said we lost level because it popped.

11
12 JACKSON: O.K. Maybe we weren't mislead, maybe people like myself
13 were thinking.

14
15 MCGOVERN: Misunderstood which valve we were talking about.

16
17 JACKSON: Yeah. The drawing shows MUR 1 on the line coming out of the
18 makeup tank. But, the reason I'm interested in this, is I ran across
19 a print yesterday, it showed that valve on top of the tank.

20
21 MCGOVERN: I really can't remember off-hand. I thought it was on top.
22 I believe it, you know, it was a vent-header type gas relief valve.
23 Because it goes into the relief header and an then out. I'll have to
24 look into that and find out one way or another for sure.
25

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1 JACKSON: Alright. So, then back to the releases. So, you left for
2 two days, and ...

3
4 MCGOVERN: I was of for ... well, really for three. Friday morning,
5 Saturday, Sunday, and I went back Monday.

6
7 JACKSON: O.K. And after that ... when you came back was there any
8 problem with the makeup tank being relieved?

9
10 MCGOVERN: The pressure was off of it. It ... they were still playing
11 their reactor vessel bubble games.

12
13 JACKSON: Yes.

14
15 MCGOVERN: We got the bubble. We got to get rid of the type things
16 ... but, as I recall, there really wasn't any real strict problem with
17 it. I'm kind of hazy on that point.

18
19 JACKSON: O.K. I think we pretty much covered, Mark, everything I had
20 aimed for.

21
22 RESNER: O.K., Larry, if we don't have any further questions, we'll
23 conclude the interview. The time now is 2:40 p.m., EDT. And this
24 concludes the interview with Mr. Hugh A. McGovern.
25