1 UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION 2 3 In the Matter of: 4 METROPOLITAN EDISON COMPANY 5 300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345 [Three Mile Island Unit 2] 6 7 Room D-4, 8 Howard Johnson Motel, Harrisburg, Pennsylvania, 9 Wednesday, 24 September 1980. 10 INTERVIEW OF MICHAEL BENSON, 11 commenced at 10:35 a.m. 12 13 APPEARANCES: 14 NORMAN MOSELEY, Office of Inspection & Enforcement 15 Nuclear Regulatory Commission Washington, D.C. 16 TERRY HARPSTER, 17 Office of Inspection & Enforcement On behalf Nuclear Regulatory Commission 18 Washington, D.C. of the 19 JOHN CRAIG, Nuclear Office of Inspection & Enforcement 20 Nuclear Regulatory Commission Regulatory Washington, D.C. 21 Commission DAVID GAMBLE, 22 Office of Inspector & Auditor Nuclear Regulatory Commission 23 Washington, D.C. 24 RICHARD HOEFLING, ESQ., Office of the Executive Legal Director 25 Nuclear Regulatory Commission Washington, D.C.

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ALDERSON REPORTING COMPANY, INC.

1 (Appearances, continued:)
2 ERNEST BLAKE, ESQ.

NEST BLAKE, ESQ.
Shaw, Pittman, Potts & Trowbridge
Washington, D.C.,

Appearing for Metropolitan Edison.

PROCEEDINGS

(10:35 a.m.)

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MR. GAMBLE: This interview is being conducted as a portion of the Nuclear Regulatory Commission's investigation and the exchange of information between the Metropolitan Edison Company and the NRC on March 28th, 1979.

Mr. Benson, would you please raise your right hand? Whereupon,

MICHAEL LYNN BENSON

was called as a witness in the above-entitled matter and, having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY MR. GAMBLE:

- Q. Please state your full name.
- A. Michael Lynn Benson. "Lynn" is L-y-n-n.

MR. GAMBLE: Would counsel present please identify

himself.

MR. BLAKE: My name is Earnest Blake. I am with the law firm of Shaw, Pittman, Potts and Trowbridge,
Washington, D. C., and I am here representing Metropolitan
Edison Company.

MR. GAMBLE: Mr. Benson, Mr. Blake is representing Metropolitan Edison Company. Do you have any objections to his presence here in this interview?

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THE WITNESS: No, sir.

MR. GAMBLE: Thank you.

BY MR. HARPSTER:

Q. Is it "Mike"?

A. Yes.

Q. Mike, in your testimony to the Senate Investigation on October 15th, 1979, you stated that on March 28th, 1979, you were aware in Unit 1 of the containment pressure spike in Unit 2.

I have a copy here of your Senate testimony, if you'd like to take a look at pages 35 and 36.

(Handing document to the witness.)

A. I remember saying that; yes.

Q. Were you aware on March 28th, 1979, that containment spray had actuated?

A. I was aware during the time span, between the 28th, 29th, and 30th, that it happened by, not fact, but I guess by rumor. I had heard something about it, although I wasn't in the Unit 2 control room, nor did I see any instrumentation or hear any noises or anything of that type.

Q. Well, perhaps I'm still a little confused. It has to do with the way the transcript reads here. I couldn't tell if this was your quote or not. You state here:

"We actuated the spray." Does that mean that you knew on March 28th that you actuated the spray?

JWB 1-3

D.C. 20024 (202) 554-2345 300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, MR. BLAKE: The confusion that you have, Terry, was where the quote should shop? Whether somebody came over and said that on the 28th, or didn't?

MR. HARPSTER: That's what I don't understand. Is he saying that he knew they actuated the spray on March 28th? I can read it either way, and it is not clear to me.

THE WITNESS: The thing I am trying to say is:

The rumor I heard was that it actuated; that nobody told me

that directly, or I didn't see it happen, or see any indication

of it; I just heard that it happened. But I am not sure when

I actually heard that; whether it was on the 28th, or the 29th,

or possibly the 30th.

MR. HOEFLING: You're not clear as to --

people that the days did run together. The crew I was working with, the ECS, ran continuously from about 7:00 that morning and the first time I left the site was to take a break the next morning. Then I went over to the observation center and came back to the Island a couple hours later. The time span is very close together. I might not be sure if it was the 28th, or the 29th, or the 30th.

BY MR. HOEFLING:

- Q. Well, now I'm a little confused. Were you aware that there was a pressure spike on the 28th?
 - A. I'm not sure if it was the 28th that I was aware of

- that or not. I was aware, after the fact, by rumors, that there was a pressure spike and probably a building actuation.
 - Q. But you're not sure --
- A. But I'm not sure that the 28th I was told that.

 I might have been aware that it happened on the 28th, but I might not have been aware of it until the 29th or the 30th, after the fact. That's what the statement was trying to say there.
 - Q Let me take you up a little higher here --
 - "Were you aware of the hydrogen spike on the 28th" -THE REPORTER: Could we have one person at a time?

 BY MR. HOEFLING:
- Q. So when we look at your response here on page 35 of the testimony, the question being:

"Aside from that, were you aware of the spike, the containment pressure spike on the 28th?"

Your response: "Yes, I have to say I was."

It's your testimony now that you're not that

certain? Or you are uncertain?

- A. Well, the question here is, it says:

 "Were you aware of the containment spike on the
 28th?"
- And I said, "Yes, I was aware of that." But I didn't say I was aware of it on the 28th. It was probably the 29th or the 30th, after the fact.

MR. HARPSTER: Could we have a two-minute recess here.

(Recess.)

MR. GAMBLE: On the record, please.

BY MR. HARPSTER:

Mike, let me reread a part of your previous testimony into the record. I refer to page 35 of your Senate testimony of October 15th, 1979, starting at line 9:

"MR. BLUSH: Aside from that, were you aware of the hydrogen spike, containment pressure spike, on the 28th?

"MR. BENSON: Yes, I have to say that I was.

"MR. BLUSH: How were you aware of that?

"MR. BENSON: I'm not really sure now that information came to me.

"MR. BLUSH. You were in Unit 1?

"MR. BENSON: Uh-huh. I'm not sure how it came across -- if one of the operators coming over from Unit 2 would have said, 'something's really strange; we actuated the spray.' I really don't know how it could of came over because we were always calling Unit 2 control room for information and the RMS, and they were calling us for information over the hot line. It could have come in in a lot of different ways."

Now, Mike, let me ask you again. The way I read this, the way we had interpreted this, that you were aware on

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the 28th of this. And as I read the words down 'ere, "Perhaps you can take us back to the ECS," were you in the ECS on Unit 2 on subsequent days, or Unit 1 on subsequent days?

A. Yes.

- Q. Were you talking on a phone line with Unit 2? Did they have a continuous phone line on subsequent days?
- A. Yes. We didn't go out of the ECS mode until July. So I was actually in Unit 1 ECS from March 28th until the middle of July when we went back to normal engineering.
- Q. Let me ask you, on line 18, in the context you've answered this thing, where you are saying that an example of the way you may have become aware of it is: "Something's really strange. We actuated the spray."

As I read this, I get the impression that that's the way you would find out about it on the 28th. If you had found out about it later, you would have stated it differently, that "I had become aware on the 28th" of something, as opposed to -- I keep getting the impression that you are talking about the 28th here. But perhaps you can help me out.

BY MR. GAMBLE:

Q In other words, if somebody came to you two days later and that was the first you had heard of it, they wouldn't say "something is really strange; we actuated the spray." That sounds like a present-time relation of what is going on right now, rather than what happened two days ago.

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MR. BLAKE: Is there a question?

THE WITNESS: That's not really true. If a person found out about it two days later, two days after the fact, it would be strange to him that two days later he became aware of it.

BY MR. MOSELEY:

- Q But wouldn't there have been, if it was two days later, everyone at this point concluded that it was a hydrogen spike, a hydrogen bubble, and wouldn't that have been the thing that people would have been talking about? Rather than the actuation of the spray?
 - A. I'm not really sure.
- Q. It would seem to me that the fact of the spray starting is more startling on the 28th when probably few people really connected the pressure spike to a hydrogen burn. Yet, after Thursday when the spike had been pursued to some depth, there was a rather general conclusion that that's indeed what had happened. And the thrust of discussions, I would expect, would be toward that rather than the fact of the spray starting.

The entire line of questions and the answers seem to lead to a conclusion that this must have been on the 28th; and that's why we are trying to ask you to try to recall again as best you can, with what was occurring at the time, since the days do merge for you, what was occurring at the time which you could perhaps tie it to.

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Would you try to recall and see if you can relate to other events that were going on at the time you believe you heard of this?

(Pause.)

I can't really tie it into any particular time or A. place or individual, but I was aware of it. But I won't say it was the 28th that I was aware of it. It may have been the 29th, or it may have been the 30th.

And the way I would have heard about it, somebody would have said that the spray is actuated. Yes.

D.C. 20024 (202) 554 300 7TH STREET, S.W., RFPORTERS BUILDING, WASHINGTON, Q Well, it wouldn't be unusual at all, based on the other testimony, for you to have heard it on the 28th. We have testimony that says it was discussed rather generally, so it's not farfetched that you may have heard it?

A It's possible, it could have been -- I was in Unit 1 control room the 28th and 29th and 30th, and was continuously. It could have been any of those days. It could have been the 28th, late night on the 28th, it could have been the 29th. I'm not sure. I really -- I can't put a timeframe on it when I heard about that, at all.

BY MR. HARPSTER:

Q Can you recall, irrespective of the timeframe, if when you heard about it, it was your impression it was a real spike, as opposed to electrical failure or instrument malfunction?

A During those three days, I was very busy with the running of the offsite teams, monitoring of the radiation dose, windspeed direction, the plume travel. A building spike wouldn't, even when it did come to my attention, earth-shaking -- really taking my attention away from what I was doing. So I can't --

Q You were changing the position of the offsite teams, directing them to take samples; is that correct?

A Yes.

Q We have previously had testimony from Joe Chwastyk that as a result of the containment pressure spike, there was

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a question of containment integrity, and he directed offsite monitoring and some other checks to take place. Were you aware, for instance, of any additional monitoring taking place as a result of these concerns, as you would have been the person directing the teams?

A No, I don't. If I had the ledger of the monitoring done, I may see some type of increased readings or something that would refer to that, but I can't say yes or no right now. After the teams got running, we ran a team on the west side, a team north and south, and onsite. So I don't remember ever running them any more often than that. It was continuous four teams most of the time.

Q But you think you do -- or you would remember if you had to reposition the teams because someone had expressed a concern over the integrity of the containment?

personally, I probably would have remembered it -- remember it right now, yes. It may not have came, you know, to me directly.

I was just one of the people working in the teams. It could have been to the emergency coordinator, which would have been related to -- it varied from day to day, from Selinger, Kunder; in later days, it was Signarris and Potts. And it may have came to me by them saying is there a team in this area, and I'd say, well, they're getting a break, and he'd say, well, hurry up the break and get them out quicker. That may have been the extent of my

knowledge at that immediate time.

Q Okay.

BY MR. MOSELEY:

Q Mr. Benson, did you say earlier that if you heard of the containment pressure spike on March 28th, it wouldn't have made any particular impression on you? Did you say that earlier in this interview?

A Yes.

Q And what's your educational background?

A Nuclear engineering.

And that wouldn't have caused you -- the fact that there was a pressure spike in containment wouldn't have caused you to think the problem that was underway in Unit 2 was more severe, or that was a significant event in this occurrence?

A It would probably come across to me that the building spray actuated for a very short time, and that would have been the extent of what I would have been told, and that would not have bothered me to any great extent.

Q Are you aware of what is required in order for containment sprays to come on, what conditions have to exist?

Were you aware on the 28th?

A The pressure in the building would cause them to come on, yes.

Q Were you aware of that on the 28th?

A Did my knowledge entail, to have enough knowledge to

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know that the building spray coordinated with high building pressure? Yes, on the 28th, I would have been that educated.

Q Then I guess I have to ask you again if you had known the containment spray had started, wouldn't you have known that it had to be a real pressure increase for it to come on?

A I won't say that for instruments to work, there is a direct effect, when you are in the middle of the incident we had, that the building sprays would have had to come on because of pressure, that some other malfunction couldn't have started them, or they couldn't have been started by remote control. I won't say that's a one-to-one correlation there.

BY MR. HARPSTER:

Q Can you give us some other credible explanation of how you could start them?

A I'm not really sure as to how you could start them, but there has to be a manual -- they could have been started without a pressure spike.

BY MR. HOEFLING:

Mike, if someone came to you and said the containment sprays had started yesterday or the day before yesterday,
and then it stopped, would that impress you, that they had run
for a brief period of time yesterday or the day before yesterday, and then had been shut off?

- A That it had already happened?
- Q That it happened in the past.

I'm saying. It wouldn't have been a direct -- I can't feel it was a direct one to one, it's happening now, has it happened a couple days ago, or it happened yesterday or yesterday evening or something.

Q Let's try it this way: If someone came to you and told you the containment sprays had actuated and were running now, would that have a greater effect on you, do you think, than if someone told you that they had run yesterday, the day before, and then were shut off?

A Yes.

Q Why is that?

A I'd probably ask for a reason why they're running right now, why they're running, for some explanation.

Q You think that that would have had more significance to you, a real time context instead of something in an historical context?

A Yes.

Q Okay. The problem we're having with your test, nony that's been read into the record is that it could be read -- it could be read to mean that you were actually aware on the 28th of that pressure spike by rumor, or however. Are you telling us now that it was not your intent when you gave this testimony, to give that impression?

That's true.

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Q And what would have been your intent, or what was your intent?

A My intent would have been, as an example, if somebody came to me today and said, "Are you aware that Bob had a car accident two days ago?" I'd say, "Yes, I was aware of that," but that wouldn't refer -- that wouldn't mean that two days ago I was at the scene of the accident and actually physically saw it. It would mean that, yeah, in two days or in the timespan I became aware of it, and that's what I'm -- that's what my intent to say here is, that during some timespan I was aware of that, but I'm not saying that it was a one-to-one when it happened, because I -- I'm positive that I wasn't aware of it at the time that it happened, but some time in history after the fact I became aware of it. That's why it would have come across from an operator through the grapevine versus a direct command to me.

BY MR. HARPSTER:

Q Mike, have you had any licensing training, the training given for the licensing of operators?

A No, sir.

Q Have you had any training with regard to the redundancy and diversity of the safeguards instrumentation, the SFAS instrumentation?

A I have had some training in that, several years ago when I first came to the company, B&W type of training. SFAS

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was not my area of expertise.

Q Would you, on March 28th, have had a working knowledge of the diversity of the power supplies for the SFAS components and for the redundancy of instrumentation, say at the level expected of a licensed operator?

A No, sir.

BY MR. MOSELEY:

Q Well, let's ask you, were you aware of redundancy and diversity in these, even though you may not have been aware that the specific power sources or the specific instrument channels, were you aware that they were diverse and redundant on March 28th?

A No, sir.

Q You were not aware --

A I couldn't tell you if it took three instrumentations or three signals or two or just one. I couldn't tell you that.

Q On March 28th, you would not have known -- is this your testimony -- you would not have known that a single instrument could not give you containment spray actuation?

A That's correct.

BY MR. CRAIG:

- Q How many pounds pressure does it take to actuate containment sprays? Do you have a feel for that?
 - A No, sir. I'd say p. bably in the range of 10 pounds.
 - Q And that would have been your guess on the 28th?

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A Yes.

MR. HARPSTER: Mike, thank you.

(Discussion off the record.)

BY MR. MOSELEY:

Q Let's go back on the record.

Mr. Benson, did you have communications with the state on March 28th, by telephone or by personal contact?

A I possibly could have had it on the 28th, during the accident. We had telephone lines to the state, the Margaret Riley group, to transmit radiation readings that we were receiving with our offsite teams for their records. I'm not sure if I talked personally, would have talked on the 28th. I know that during the time period between the accident and July, that I did talk to the state, but I'm not sure, positive, on the 28th I would have -- it could have been -- could have been any one of the several of us that would have talked to the state.

Q Do you have any recollection of the information that was transmitted to the state? If you were participating in this, what was the type of information that you transmitted to them?

A We would have transmitted radiation readings. An example would have been if we had got a 10 millirem reading in the center of Middletown at 12:00 o'clock noon on the 29th, that would have gone across. We would have told them that the reading -- the quadrant in Middletown at 12:00 o'clock was

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D.C. 20024 (202) 554-300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, 10 millirem. That was the information we transmitted. I'm particularly interested on the 28th, and I'm also particularly interested in your recollection of what you personally transmitted, if you could address those. Let me amend the question. When I say you personally transmitted, or you have recollection recalling specific things that someone else knew or heard being transmitted. No specifics. Well, let me ask the question this way: Do you recall any transmission to the state that involved anything other than radiation survey readings? Not really. The people that we talked to in the state, to the best of my knowledge, were more secretary-priented than management, because at times we'd say readings gamma, and they'd ask me to spell it. So I don't think -- I think the people that we talked to were mostly secretarial type. But to answer the specific question: You don't recall any information other than radiation survey readings? No, sir. There would have been no reason to give any other type of information to a secretary other than what we were giving. MR. MOSELEY: Okay. Thank you. MR. CRAIG: I have one last question.

Can you associate, regarding your knowledge of

BY MR. CRAIG:

containment sprays being actuated, the name of any person, a place or a thing that you can recall at the time when you first had knowledge that the sprays had been actuated?

A No, sir.

Q So you know that you knew it, and that's all that you know about it; is that correct?

A Yes.

MR. MOSELEY: Thank you, Mr. Benson.

(Whereupon, at 11:15 a.m., the interview was concluded.)

* * * *

NUCLEAR REGULATORY COMMISSION

This is to certify that the attached proceedings before the

U.S. NUCLEAR REGULATORY COMMISSION

in the matter of:

Date of Proceeding: Wednesday, 24 September 1980

Docket Number: DEPOSITION OF MICHAEL BENSON

Place of Proceeding: Harrisburg, Pennsylvania

were held as herein appears, and that this is the original transcript thereof for the file of the Commission.

JANE W. BEACH

Official Reporter (Typed)

Official Reporter (Signature)

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*NOT ADMITTED IN D. C. (202) 331-4100 TELECOPIER (202) 296-0694 & 296-1760 TELEX 89-2693 (SHAWLAW WSH) CABLE "SHAWLAW" EDWARD B. CROSLAND COUNSEL October 27, 1980 FNOT ADMITTED IN D.C. Mr. Norman C. Moseley, Director Division of Reactor Operations Inspection Office of Inspection and Enforcement U.S. Nuclear Regulatory Commission Washington, D. C. 20555 Dear Mr. Moseley: Enclosed are signed correction sheets for the transcripts of September 24, 1980 interviews of Michael L. Benson and Michael J. Ross. Mr. Benson has provided some six corrections; Mr. Ross has indicated no corrections.

Sincerely,

Ernest L. Blake, Jr.

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enclosures

NUCLEAR REGULATORY COMMISSION OFFICE OF INSPECTION AND ENFORCEMENT

Corrections to the September 24, 1980, Interview of Michael L. Benson:

Page	Line	Change To Read
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