

ORIGINAL  
OFFICIAL TRANSCRIPT OF PROCEEDINGS

07-81A-91

Agency: Nuclear Regulatory Commission  
Incident Investigation Team

Title: Nine Mile Point Nuclear Power Plant  
Interview of: DAVID HANCZYK

Docket No.

LOCATION: Scriba, New York

DATE: August 17, 1991

PAGES: 1 - 68

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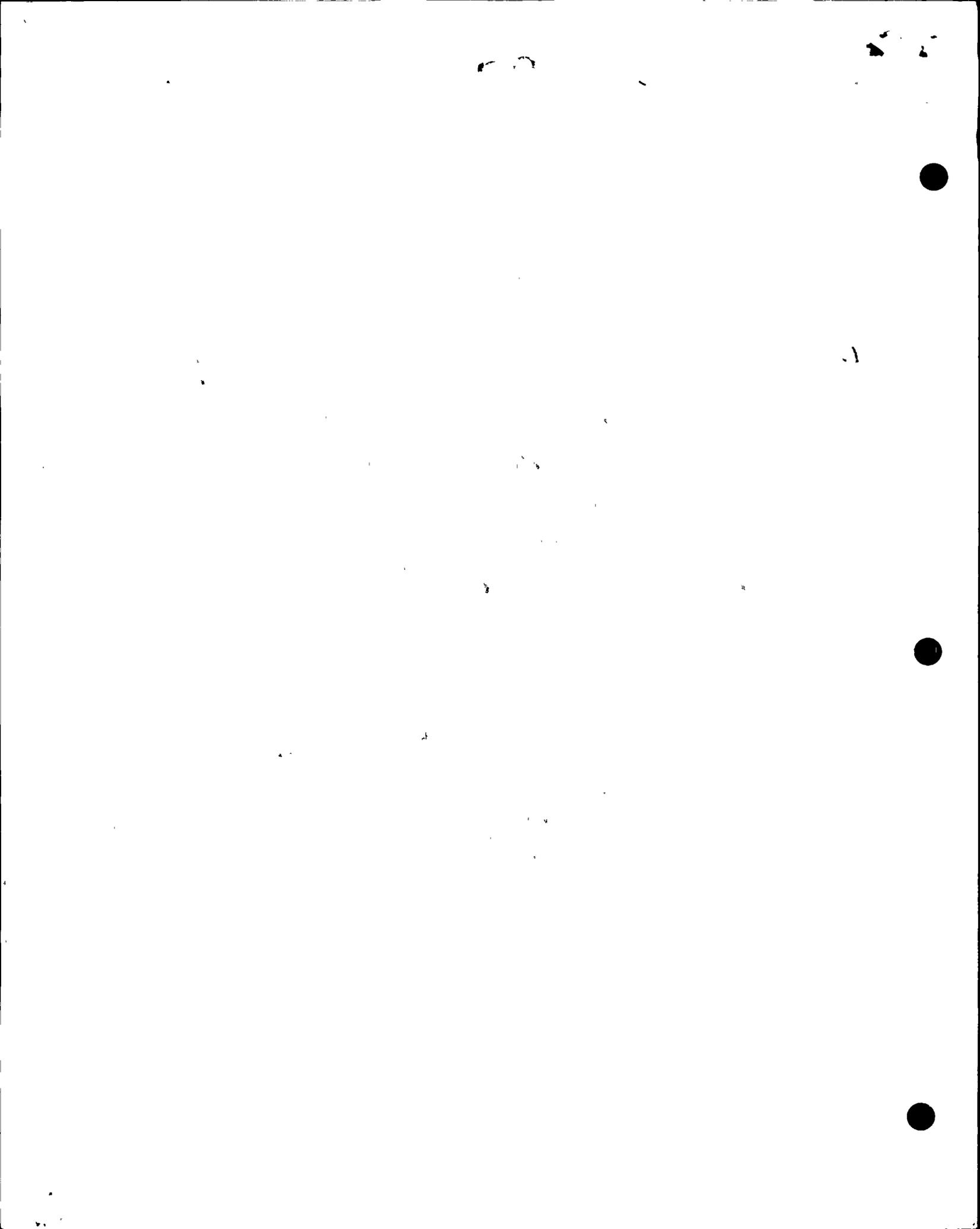
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ADDENDUM TO INTERVIEW OF DAVID CHANCZYK / NAOE  
(Name/Position)

Page	Line	Correction and Reason for Correction
2	22	CHANGE MR HILKEIC TO MR CHANCZYK
9	19	CHANGE NON-LOP TO NON-LOT
9	22	" " " "
11	23	CHANGE THEY TO THAT
12	19	CHANGE THIRTY SEC TO 40 SECTION SEC
14	11	CHANGE AND I COULD START SEEING (TO THE LIGHTS WERE ON)
18	5	ADD: WENT TO THE ELEVATOR FIRST THEN THE STAIRS
18	11	ADD: THE NON-LOT WITH ME HAD HIS OUT
19	8	CHANGE GROUP TO ROOM
19	17	COMMA AFTER ONE REMOVE COMMA AFTER THEM PLACE ONE AFTER OUT
20	15	ADD AFTER YES, THEY HAD STARTED TO QLOW.
21	10	CHANGE MR HILKEIC TO MR ROUTE
29	9	CHANGE RC10 TO RC1C
29	10	" " " "
29	11	" " " "
29	14	" " " "
31	13	" " " "
32	9	CHANGE THEM TO THATS
34	7	THROWING TO SHOWING
34	17	CLEAR TO CLEAR
35	12	(FEED SETPOINT SET DOWN) FROM B POINT SUB POINT
39	25	CHANGE NON-LOP TO NON LOTS
40	18	CB 3 TO CB 2
42	9	CHANGE BBB TO VBB
52	4	CHANGE VOLTMETER TO AMPMETER
60	19	CHANGE ROUTE TO Biddoff

Page 1 of 1 Signature David Chanczyk Date 8/21/91



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
INCIDENT INVESTIGATION TEAM

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Interview of :  
DAVID HANCZYK :  
(Closed) :  
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Conference Room B  
Administration Building  
Nine Mile Point Nuclear  
Power Plant, Unit Two  
Lake Road  
Scriba, New York 13093  
Saturday, August 17, 1991

The interview commenced, pursuant to notice,  
at 10:25 a.m.

PRESENT FOR THE IIT:  
William Vatter, INPO  
Richard Conte, NRC  
PRESENT WITH MR. HANCZYK:  
Jerry Helker, Niagara Mohawk

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## P R O C E E D I N G S

[10:25 a.m.]

1  
2  
3 MR. VATTER: We probably ought to start by saying  
4 who everybody is. My name is William Vatter, and I'm an  
5 employee of INPO.

6 MR. CONTE: My name is Richard Conte. I work with  
7 the NRC Region I office, King of Prussia, Pennsylvania.

8 MR. HANCZYK: My name is David Hanczyk. I work  
9 for Niagara Mohawk. I am a RO.

10 MR. HELKER: I'm Jerry Helker. I work for Niagara  
11 Mohawk, general supervisor of operations at Unit Two.

12 MR. VATTER: Okay. My understanding of  
13 everybody's role is that Rich and I are members of the  
14 Incident Investigation Team, and we're trying to figure out  
15 what happened; Jon is taking notes; and Dave was in the  
16 plant on shift when all this happened; and, Jerry, you're  
17 here at Dave's request, so that he has some support -- I  
18 guess that's how you call it.

19 One of the things that we do want to make sure of  
20 is that you're here at Dave's request, not at Niagara  
21 Mohawk's request.

22 MR. HELKER: Yes. My request.

23 MR. VATTER: Okay. Great. That's the way we want  
24 it.

25 Let me tell you a little of my background and



1 explain to you what the purpose of the IIT is. I work for  
2 INPO, and I have for many years. Before that, I was with  
3 Westinghouse, on the Navy prototype; I was a shift  
4 supervisor there, and I did a lot of design work for  
5 Westinghouse before I got into that. What I do at INPO is,  
6 I work with human performance and plant operations; I'm  
7 assistant manager in the human performance department.  
8 We're involved with HPES, which you may have heard something  
9 about here, and we're also involved in event investigations  
10 and that kind of stuff.

11 INPO and the NRC have a memorandum of agreement  
12 that, on a very few and select things, INPO and the NRC will  
13 interact and cooperate. One of those is incident  
14 investigation teams. INPO is allowed to have a guy on the  
15 IIT, and also to have another industry representative, if it  
16 seems like that's a good idea. I think we are going to get  
17 another guy to come up who has expertise in electric power  
18 systems.

19 Our purpose is to find out what happened and if  
20 there are any important lessons learned from that. I'm sure  
21 there are going to be some lessons learned, but we don't  
22 know what they are yet.

23 The IIT is here instead of an AIT, which started,  
24 because the AIT perceives that there would likely be some  
25 generic lessons learned for the entire industry, and so that



1 warrants a little bit higher level type of an effort than an  
2 AIT would normally be able to provide.

3 Do you have any questions about what we're about?

4 MR. HANCZYK: No.

5 MR. VATTER: Okay.

6 Now, I understand that you were on shift -- you  
7 were on the midnight shift.

8 MR. HANCZYK: Yes, that's correct.

9 MR. VATTER: Okay. Perhaps we could start by your  
10 telling us in general what your duties were that night, what  
11 you were responsible, and then specifically what you were  
12 doing before all this started to happen.

13 MR. HANCZYK: My duties that night consisted of  
14 taking the shift checks; once that was completed, I was  
15 required to do other duties, as far as relieving the CSO if  
16 he had to leave the control room. I also --

17 MR. VATTER: Could you tell me what shift checks  
18 are?

19 MR. HANCZYK: Shift checks are required tech-spec  
20 checks on instruments.

21 MR. VATTER: It's like log readings?

22 MR. HANCZYK: Log readings, yes.

23 MR. VATTER: Okay. But only on the more important  
24 stuff.

25 MR. HANCZYK: The important instruments.



1 MR. VATTER: Okay.

2 MR. HANCZYK: Once I completed that, during the  
3 night, we transferred back to house loads. After that, I  
4 had to do a mark-up, and that's where I was when the event  
5 happened.

6 MR. VATTER: Could you tell me what you mean when  
7 you say, "We transferred back to house loads?"

8 MR. HANCZYK: We had had a problem with our normal  
9 station service transformer load tap changer. There were  
10 some bad contactors.

11 MR. VATTER: The normal station service  
12 transformer is the one that is 25 kV down to 13.8?

13 MR. HANCZYK: Yes.

14 MR. VATTER: Okay.

15 MR. HANCZYK: That normally supplies the in-plant  
16 loads, but we were on our reserve station transformers, and  
17 we had to change over to get the power back off the normal  
18 service station transformer, when they had the load tap  
19 changer fixed.

20 MR. VATTER: Okay. Do you know about what time it  
21 was that you transferred onto that?

22 MR. HANCZYK: No, I don't.

23 MR. VATTER: It was sometime during the shift.

24 MR. HANCZYK: Sometimes during the shift, yes.

25 MR. VATTER: Okay.



1 MR. CONTE: Excuse me.

2 This is Rich Conte.

3 Could you explain to me what the problem was with  
4 the normal station service transformers again? You said  
5 something about contactors.

6 MR. HANCZYK: I'm not sure what they come up with  
7 for the problem, but one time, a couple of days before or a  
8 while before, they went to take and adjust the load tap  
9 changer bars, and it continued to drive voltage down. The  
10 operators on shift corrected the problem, and they wrote a  
11 WR. Later on, we transferred to offsite power. They fixed  
12 the problem -- it was a loose connectors -- I don't know  
13 what they found. Then we were supposed to change back that  
14 night, and we did.

15 MR. CONTE: So the activities governing the work  
16 was under some maintenance request number? You don't happen  
17 to know what the number was?

18 MR. HANCZYK: The work request number for fixing  
19 it? No, I do not.

20 MR. CONTE: Okay. Thank you.

21 MR. HELKER: Excuse me. If I know more  
22 information, am I allowed to provide it?

23 MR. VATTER: Yes, I guess. I mean -- sure.

24 MR. HELKER: This normal station transformer would  
25 get problems in the past with the load tap changer. Just so



1 you're clear, it's not the same transformer that we had  
2 problems with.

3 MR. VATTER: Right. The main transformer is the  
4 one that had trouble.

5 MR. HELKER: Right, the main 25 to 345 kV, which  
6 volts off site. This is the 25 down to 13.8. They're  
7 different transformers.

8 MR. VATTER: I understand. The load tap changers,  
9 we could talk to somebody else to find out more about that  
10 later on.

11 MR. CONTE: Thank you.

12 MR. VATTER: Okay.

13 Let me get my own thoughts back in context here.

14 When you transfer that back to the station service  
15 transformer, that's all done in the control room; is that  
16 right?

17 MR. HANCZYK: Yes, it is.

18 MR. VATTER: With those electrical panel --

19 MR. HANCZYK: The control volt, yes. Yes, it is.

20 MR. VATTER: Okay. And your assignment on this  
21 night -- your principal work -- was outside the control  
22 room.

23 MR. HANCZYK: My principal requirement is to do  
24 the work outside the control room that needs to be done  
25 outside. If there's no work for an RO out there, then, I



1 work in the control room.

2 MR. VATTER: Okay. You do whatever is needed, I  
3 guess.

4 MR. HANCZYK: Right. Yes, that is correct.

5 MR. VATTER: And the guy that gives you those  
6 tasks is the --?

7 MR. HANCZYK: CSO.

8 MR. VATTER: Okay.

9 So at the time that they made this transformer  
10 shift, you were working outside the control room.

11 MR. HANCZYK: No, I did this inside the control  
12 room.

13 Do you mean when the transformer blew up, or --

14 MR. VATTER: No, no. I'm just trying to  
15 understand this transfer back to the normal station service  
16 transformer. Did you do that?

17 MR. HANCZYK: Yes, I did that.

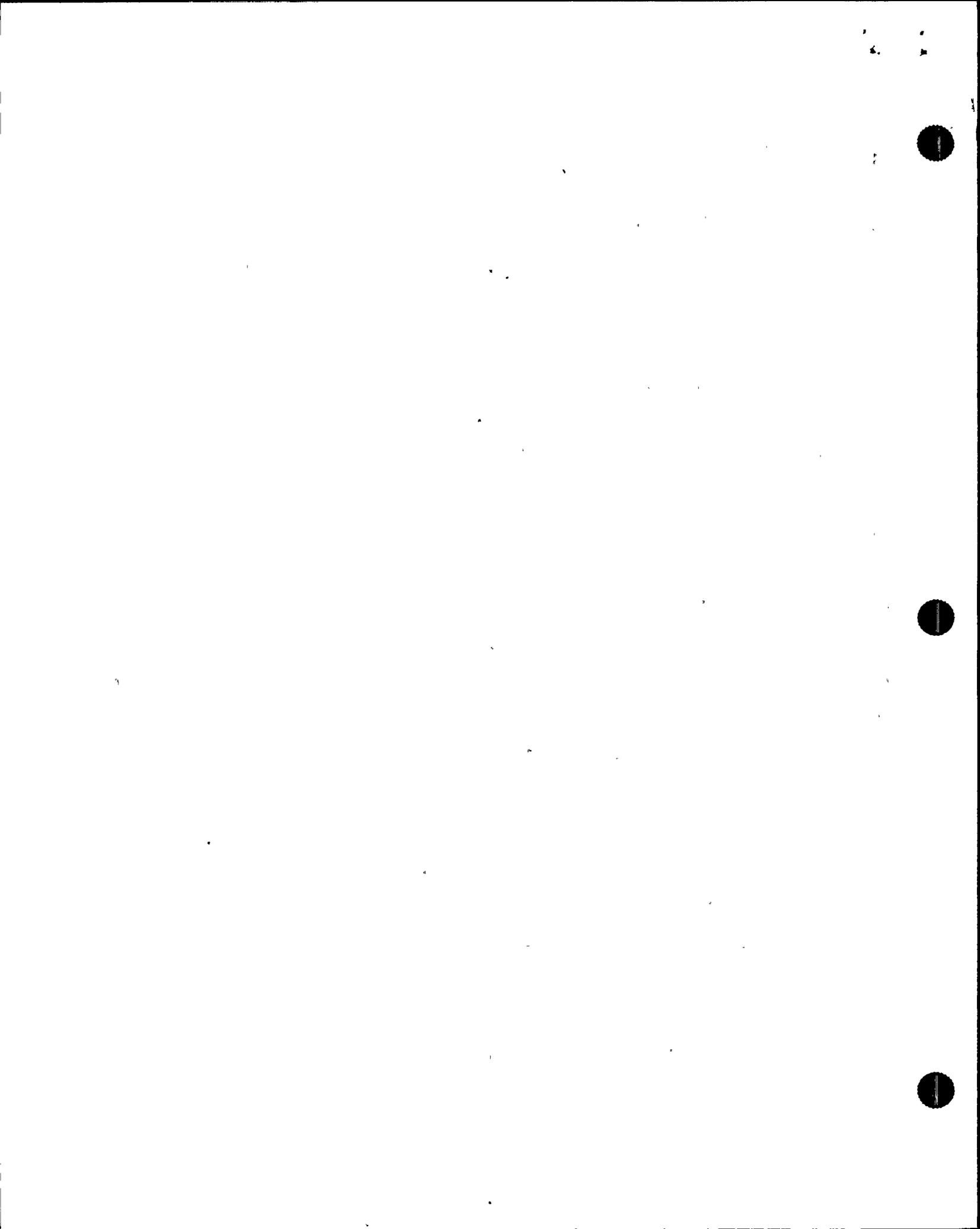
18 MR. VATTER: You just don't remember when it was  
19 done.

20 MR. HANCZYK: I don't remember the time. I'd have  
21 to have the CSO's log to find the number, the exact time.

22 MR. VATTER: Okay. We can get that out of the  
23 log.

24 But you did that, that shift.

25 MR. HANCZYK: Yes, I did.



1 MR. VATTER: Okay. And then, after that, you went  
2 and did some other stuff.

3 MR. HANCZYK: Yes.

4 MR. VATTER: Okay.

5 So what, then, were you doing when the transformer  
6 fault happened?

7 MR. HANCZYK: I was out hanging mark-ups on the  
8 RHR system.

9 MR. VATTER: What's a mark-up?

10 MR. HANCZYK: A mark-up? A mark-up is --

11 MR. VATTER: Is that like a danger tag?

12 MR. HANCZYK: A danger tag, yes.

13 MR. VATTER: Clearances.

14 MR. HANCZYK: Yes. I was hanging them so that  
15 they could do work.

16 MR. VATTER: Okay.

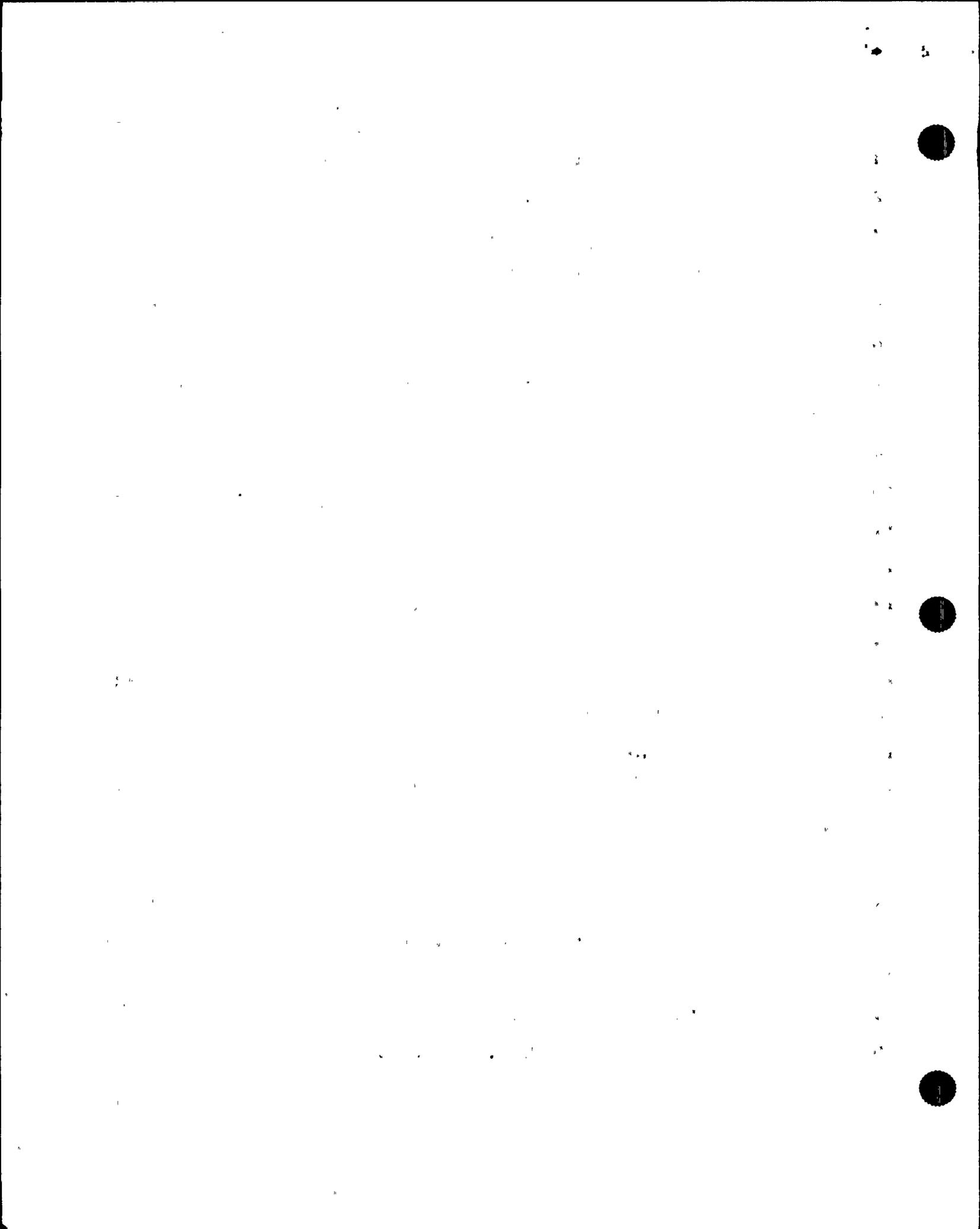
17 Is that something that --

18 MR. HANCZYK: On any safety-related system, an RO  
19 and a non-RO, non-LOP, have to go out and hang it on -- The  
20 non-LOP actually hangs it, and the RO second-verifies it  
21 being hung.

22 MR. VATTER: Okay. And that's only for safety-  
23 related equipment.

24 MR. HANCZYK: Safety-related equipment.

25 MR. VATTER: Okay. So there was some work plan



1 for later in the day?

2 MR. HANCZYK: For the next day, yes.

3 MR. VATTER: Is that something that you normally  
4 do, hang those mark-ups during the night --

5 MR. HANCZYK: Yes.

6 MR. VATTER: -- so they'll be ready to go --

7 MR. HANCZYK: -- in the morning. Yes, that is  
8 correct.

9 MR. VATTER: Why do you do them near the end of  
10 the shift?

11 MR. HANCZYK: Those mark-ups were done at the end  
12 of the shift because it was an LCO, and you wanted to get as  
13 much time as you can for them to get their work complete.

14 MR. VATTER: Sure. I understand that. Okay.  
15 So you were where, then, in the reactor building?

16 MR. HANCZYK: I was on 215 -- just outside the  
17 south aux bay.

18 MR. VATTER: I guess I asked the question, and I  
19 don't know what the answer means.

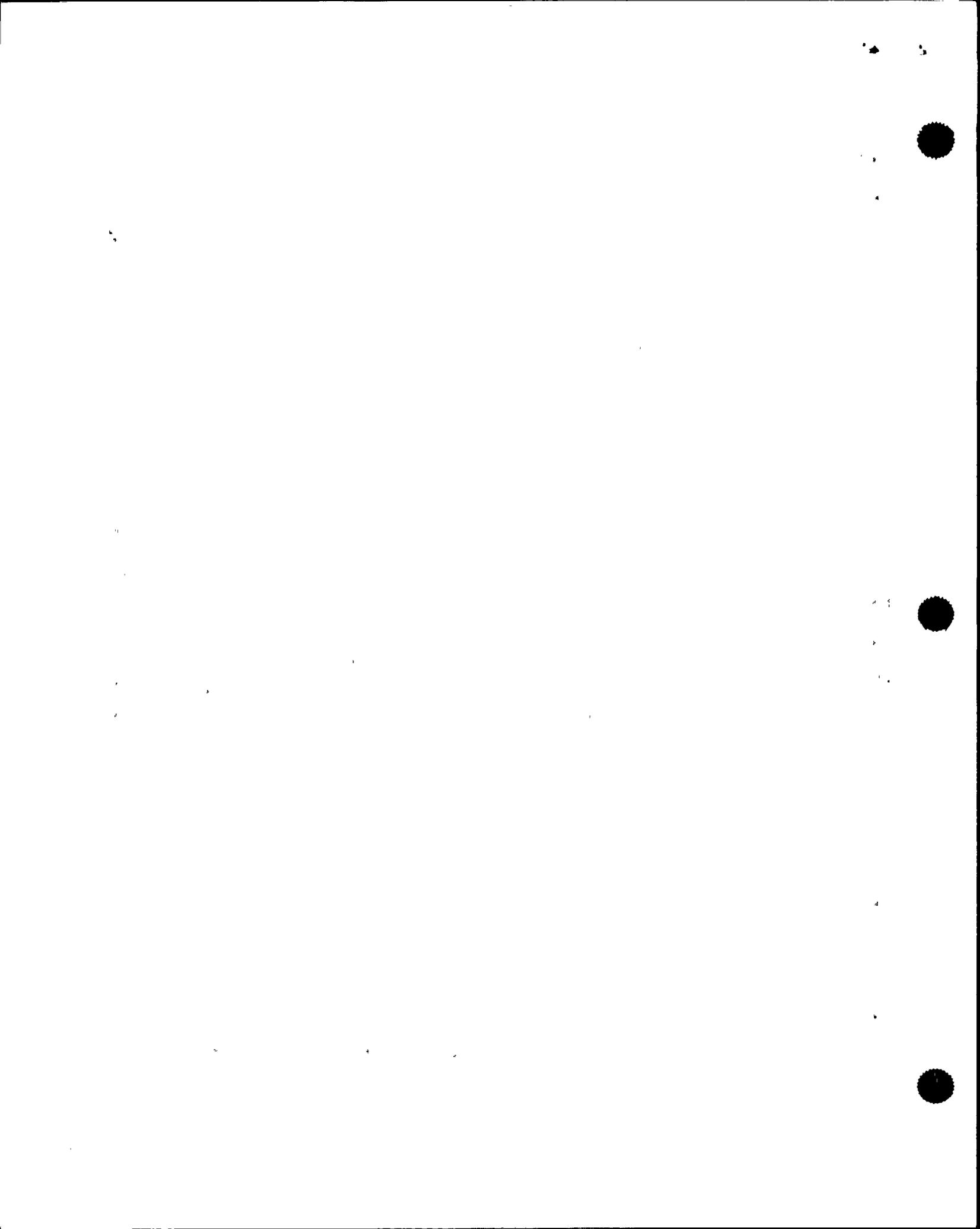
20 [Laughter.]

21 MR. CONTE: The south what?

22 MR. HANCZYK: South aux bay.

23 MR. VATTER: South aux bay.

24 What other equipment is around there? I've not  
25 been in the reactor building here. It's a round reactor



1 building instead of a square one that I'm used to, so I'm  
2 having a hard time here. What other equipment is near  
3 there, big stuff? Like, are the HCUs there?

4 MR. HANCZYK: No. They're up on 261.

5 MR. VATTER: Okay.

6 Is it down below the main floor? Is it -- Shoot.  
7 How can I describe this?

8 MR. CONTE: What is ground level here?

9 MR. HANCZYK: Ground level is 261.

10 MR. VATTER: So you were on the sub-ground level.

11 MR. HANCZYK: Yes, I was.

12 MR. VATTER: So it's down at the same level as the  
13 suppression pool is.

14 MR. HANCZYK: That's the entrance to the  
15 suppression pool, on 215, yes.

16 MR. VATTER: What were you hanging the mark-ups on  
17 at the time?

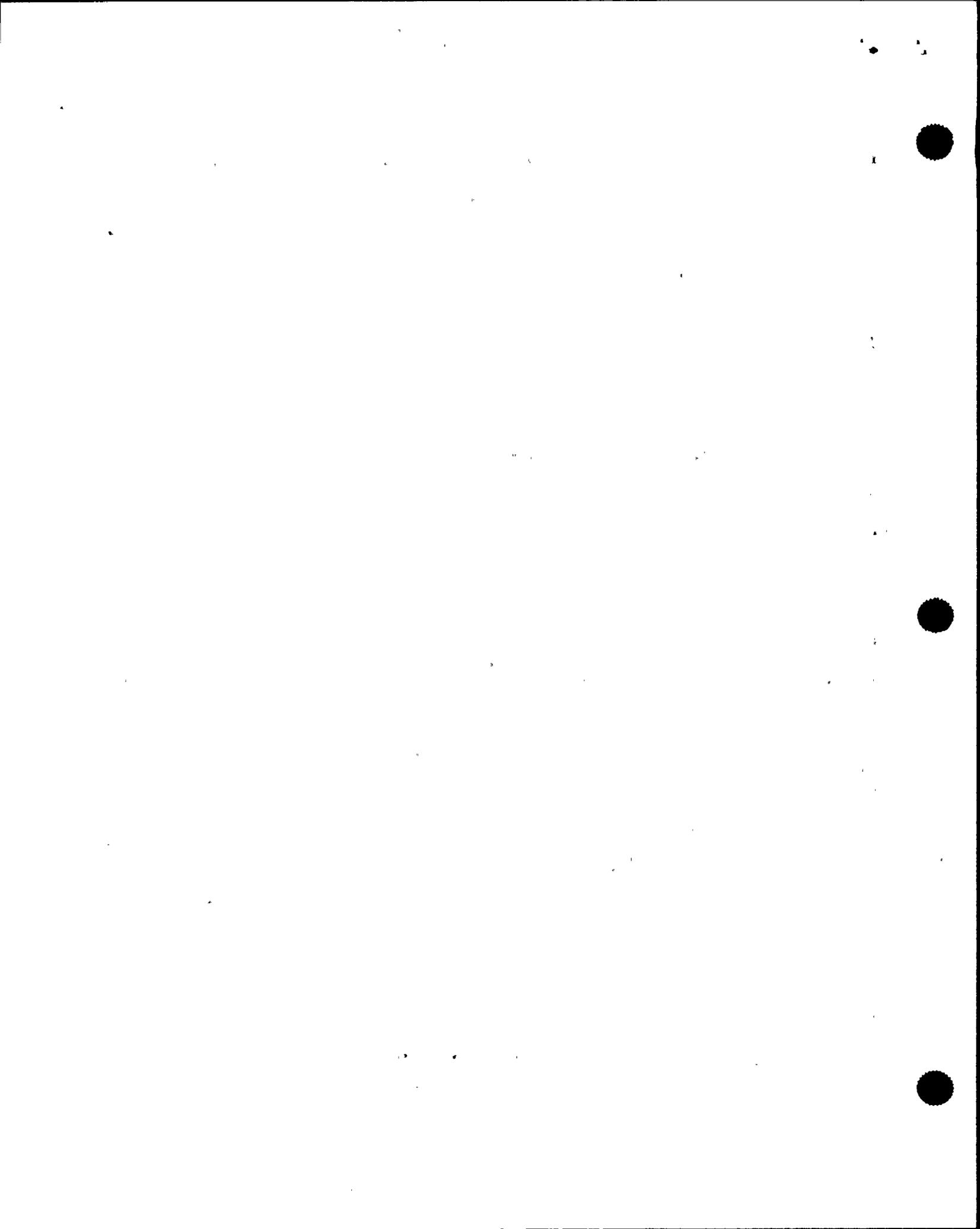
18 MR. HANCZYK: RHR, Bravo loop. I was hanging it  
19 on the sup pool spray.

20 MR. VATTER: On the valves themselves.

21 MR. HANCZYK: Yes. I was draining a section on  
22 sup pool spray, so that they could do work on an flow  
23 transmitter; they had a leak on it.

24 MR. VATTER: Okay.

25 So how did you find out an event was going on?



1           MR. HANCZYK: My initial indication was, the  
2 lights went out in the reactor building -- the normal  
3 lighting that would go out when you would have an ECCS  
4 initiation, which comes off in Div 1. My first indication  
5 and my first thought was that we had a Div 1 ECCS  
6 initiation.

7           MR. VATTER: What happens when an Div 1 ECCS  
8 initiation occurs?

9           MR. HANCZYK: All the reactor building lights go  
10 out for the heat load calculations -- that's why they go  
11 off. But they came right back on, so that wasn't indicative  
12 of an ECCS initiation. They went out, and, as I was  
13 traveling out of the plant, they came right back on.

14          MR. VATTER: Can you estimate for us about how  
15 long the lights were out?

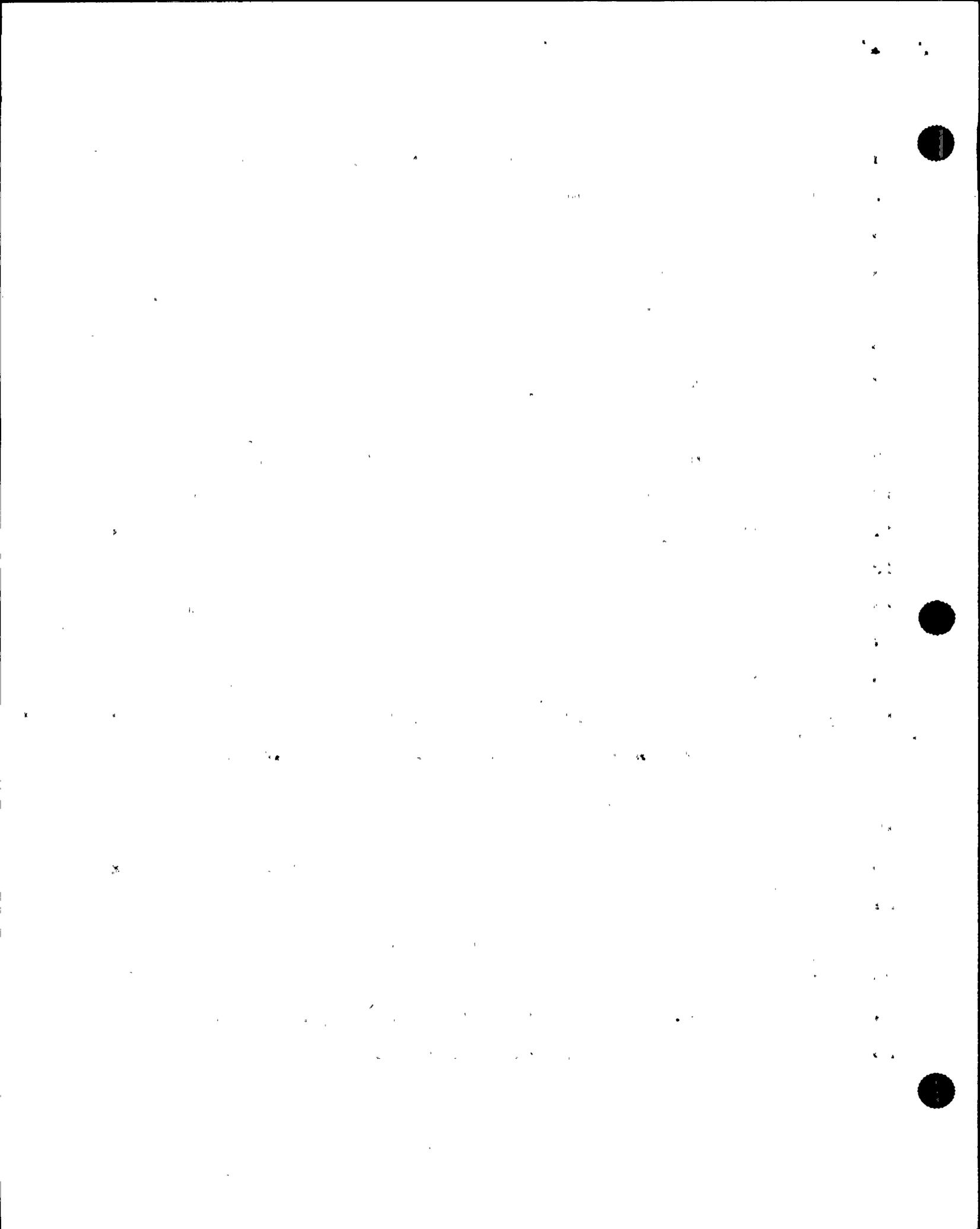
16          MR. HANCZYK: The normal lighting?

17          MR. VATTER: The ones that you noticed, that you  
18 were just talking about.

19          MR. HANCZYK: Thirty seconds from the time that  
20 they go out, and they've got to heat back up and come back  
21 on.

22          MR. VATTER: Is that the way it ordinarily happens  
23 if you have an ECCS actuation?

24          MR. HANCZYK: No. They go off, and we have to  
25 reset them to make them come back on.



1 MR. VATTER: You said that they had to heat up.  
2 I'm not sure that I understand that.

3 MR. HANCZYK: Have you ever had a liquid sodium or  
4 mercury --

5 MR. VATTER: Yes. When you turn it on, you don't  
6 get light right away.

7 MR. HANCZYK: You don't get light right away. It  
8 takes a while for the bulb to heat up, and then it comes on.

9 MR. VATTER: Okay.  
10 So 30 seconds is not necessarily an accurate  
11 representation of --

12 MR. HANCZYK: -- representation of how long the  
13 power was out, right.

14 MR. VATTER: Okay. Can you help us, maybe, with  
15 that problem of figuring out how long that power was off?

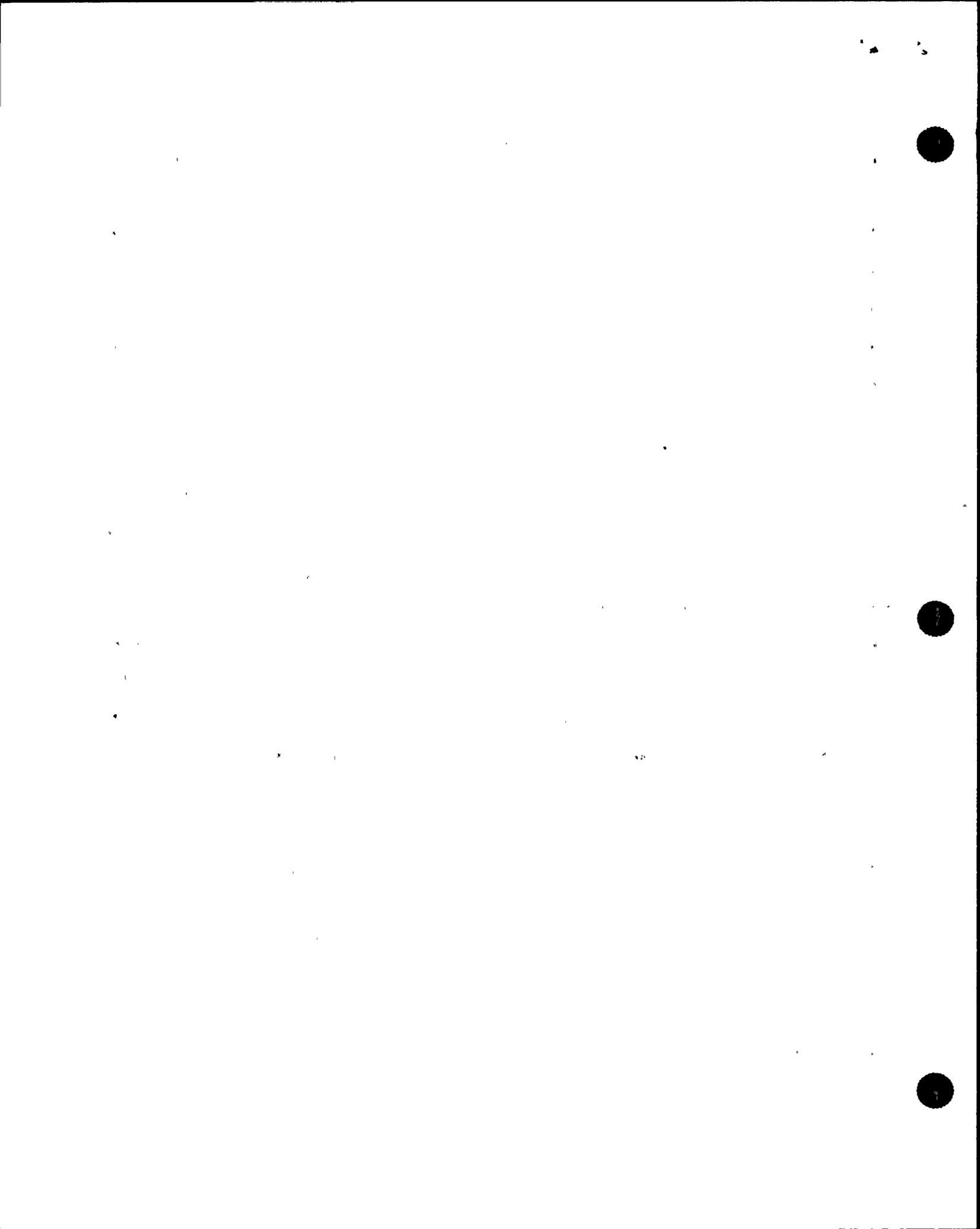
16 MR. HANCZYK: I couldn't give you an estimate of  
17 how long that power had gone down. It momentarily could  
18 have -- you know --

19 MR. VATTER: When the light comes back on, does it  
20 come on like you're turning the switch on an ordinary light,  
21 or does it just kind of --

22 MR. HANCZYK: It takes a while before you can even  
23 see it glowing.

24 MR. VATTER: It gets bright gradually?

25 MR. HANCZYK: Right. It takes a while before you



1 could even see it glow. You turn it on, and you have to  
2 wait, and then you see it come on.

3 The contactors weren't near me, so I didn't hear  
4 them go off and come back on.

5 MR. VATTER: So normally what is it? About five  
6 or ten seconds after you turn them on before you see a glow?

7 MR. HANCZYK: Yes, I would say that, yes. At  
8 least five or ten seconds before you would actually see  
9 enough of a glow to be bright enough to walk around. I  
10 mean, if you were looking right at the light -- After the  
11 lights went out, I was heading out, and I could start seeing  
12 as I was coming out.

13 MR. VATTER: Okay. So when you say that they were  
14 off for about 30 seconds, that 30 seconds is the time from  
15 when the lights --

16 MR. HANCZYK: From the time that I could see well  
17 enough and the lights have flashed back on -- you know -- it  
18 was just about returned to normal.

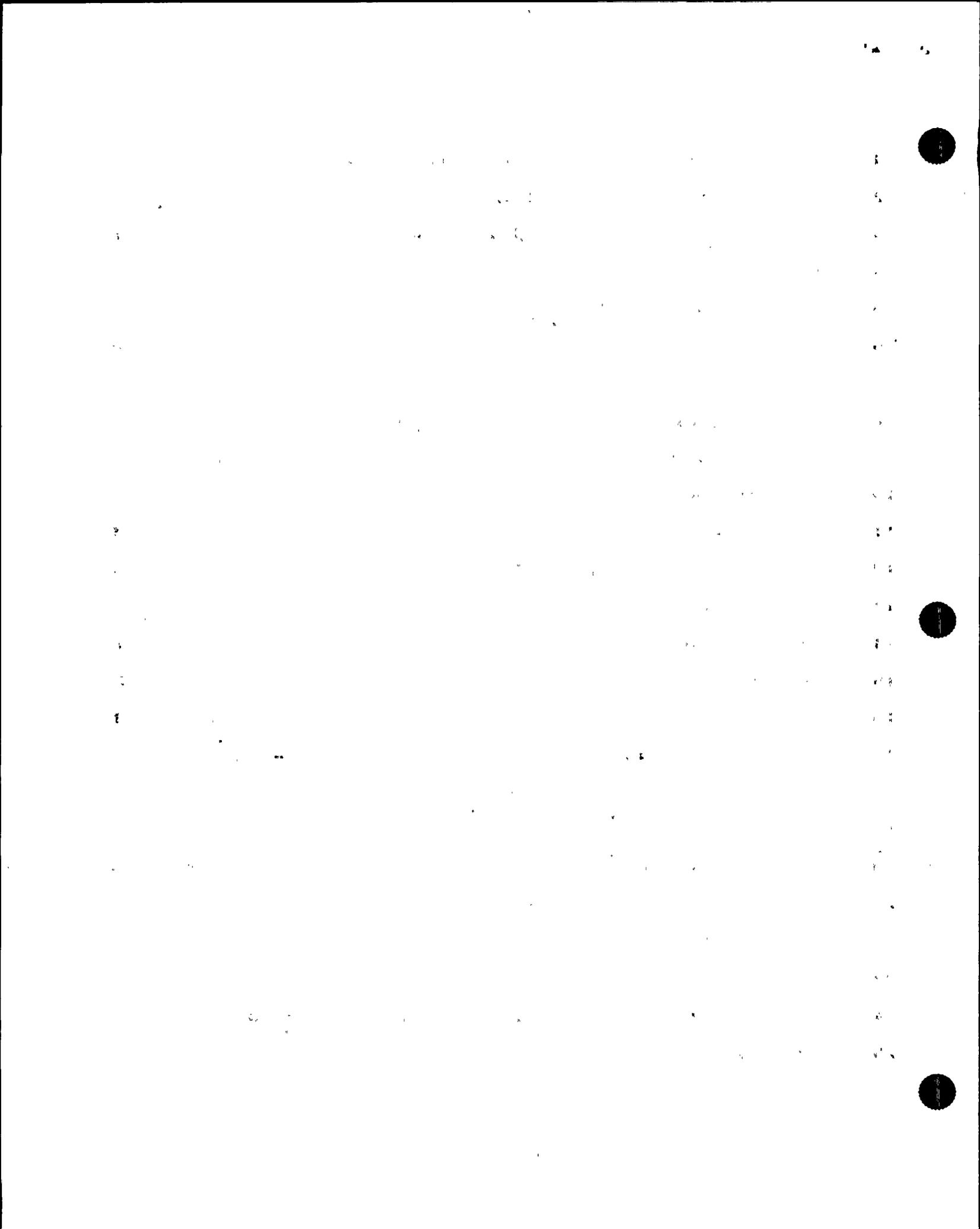
19 MR. VATTER: I'm sorry. All this hardware --

20 MR. CONTE: Can I interject a question here?

21 The lights went out.

22 Did you have emergency lighting? Was there some  
23 light?

24 MR. HANCZYK: When the lights went out, all the  
25 lights were out.



1 MR. CONTE: It was pitch black?

2 MR. HANCZYK: Yes.

3 MR. CONTE: Am I to assume you just froze? You  
4 just stayed still because you couldn't see where to go?

5 MR. HANCZYK: When I go out in the plant I always  
6 carry a flashlight with me.

7 MR. CONTE: Oh, you had a flashlight with you?

8 MR. HANCZYK: Yes.

9 MR. VATTER: What I am trying to get a feel for,  
10 Dave, is how long the power was off, because how long the  
11 power was off may be important information for us in  
12 figuring out why these UPS's didn't transfer.

13 MR. HANCZYK: Okay, the lighting for the reactor  
14 building comes off in divisional power, all right? It  
15 doesn't come off in normal power, so that drop in power,  
16 whatever dropped the lights, came off in divisional power,  
17 didn't come off the UPS's that didn't restart.

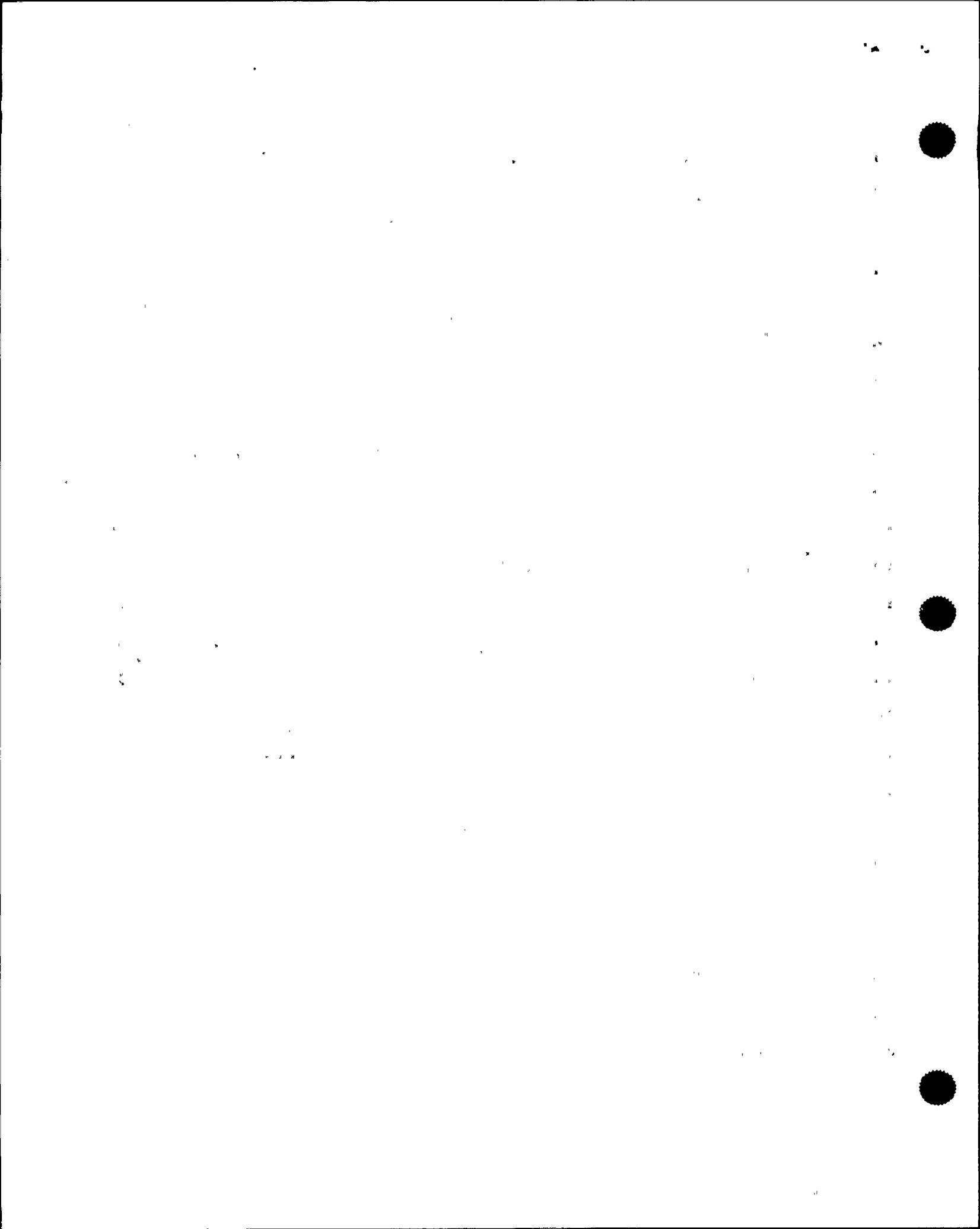
18 MR. VATTER: I understand.

19 MR. HANCZYK: Right.

20 MR. VATTER: I understand, but the divisional power  
21 is being powered from the switch yard?

22 MR. HANCZYK: Yes.

23 MR. VATTER: Through your -- at this time through  
24 the normal -- was that being powered through the normal  
25 station?



1 MR. HANCZYK: No, it is not.

2 MR. VATTER: It is powered through what I would  
3 call startup transformer. What do you call that transformer  
4 here?

5 MR. HANCZYK: Off-site power.Y

6 MR. HELKER: Reserve. Reserve transformers.

7 MR. VATTER: Reserve transformers.

8 MR. HANCZYK: Yes.

9 MR. VATTER: And what you are telling me or what I  
10 hear when you say that -- and help me to understand this  
11 right -- is there was some sort of an electrical transient  
12 on that divisional power.

13 MR. HANCZYK: Yes, there was.

14 MR. VATTER: And that transient could be the same  
15 transient that the UPS's saw and then they went and did  
16 their thing and did it bad?

17 MR. HANCZYK: Could be the same transient, yes. I  
18 would say that it was the same transient.

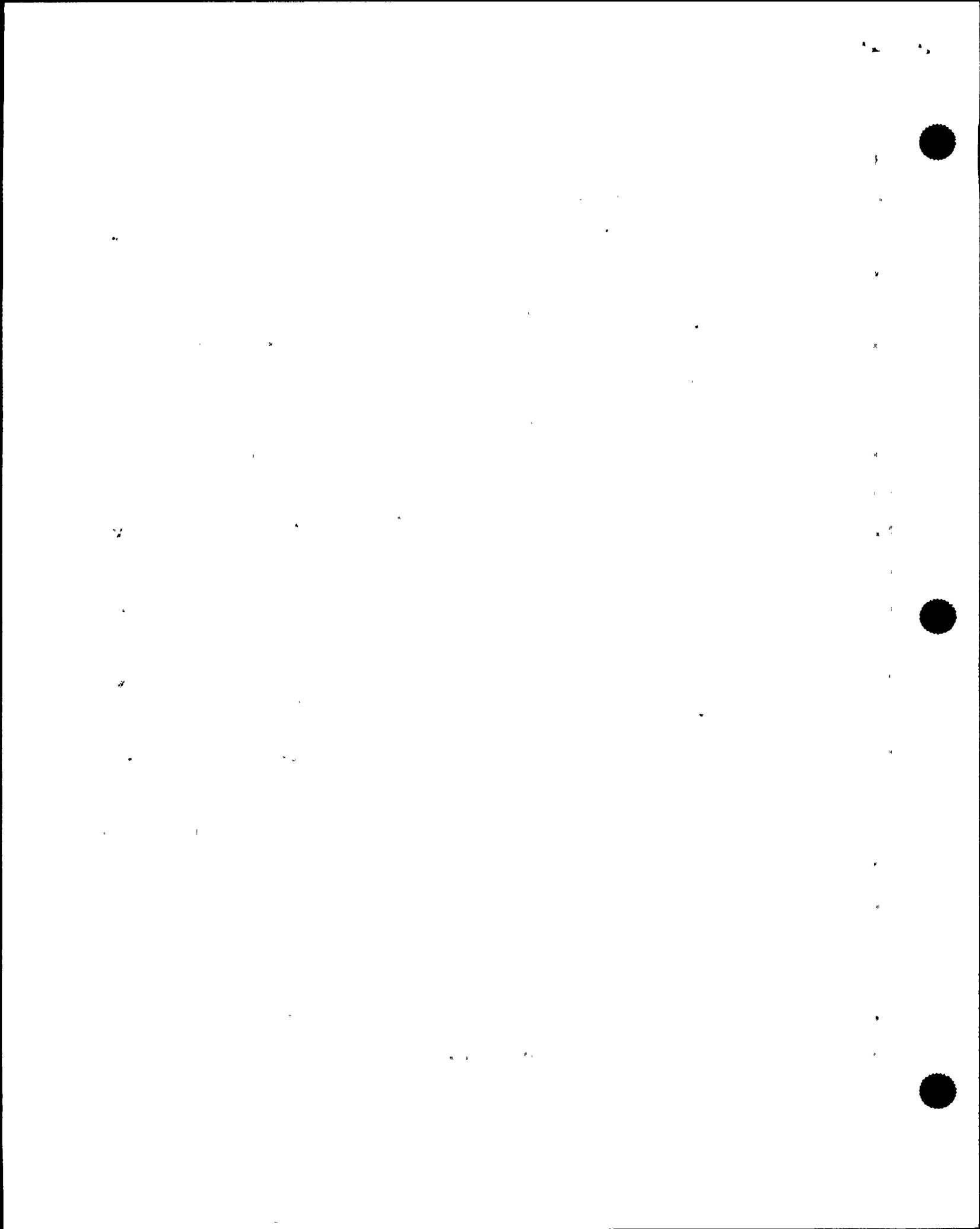
19 MR. VATTER: Seems like they are related somehow.

20 MR. HANCZYK: Yes.

21 MR. VATTER: And that is what I am trying to  
22 figure out.

23 MR. HANCZYK: Right.

24 MR. VATTER: And the length of that period of  
25 blackout in the reactor building is important to me in



1 understanding how that might have affected the UPS's.

2 MR. HANCZYK: One of the things to look at is -- I  
3 talked to Jerry about it. The diesels did not start up and  
4 we had degraded and loss of voltage for diesels to start up  
5 so if you figure out, you know, what time that was, it has  
6 to be less than that amount of time for degraded voltage and  
7 loss of voltage in order for the diesels not to have started  
8 up, so you could figure out the time that there was actually  
9 a drop in power in that division.

10 MR. VATTER: Yes. I think we have got some  
11 information. We are going to need to learn more about the  
12 lighting and how all of that with the diesels works. We  
13 don't need to get into all that in this conversation, but if  
14 I understand that correctly then, the lights went out and  
15 then went out like instantly?

16 MR. HANCZYK: Yes.

17 MR. VATTER: It didn't get dim or flicker a little  
18 bit or --

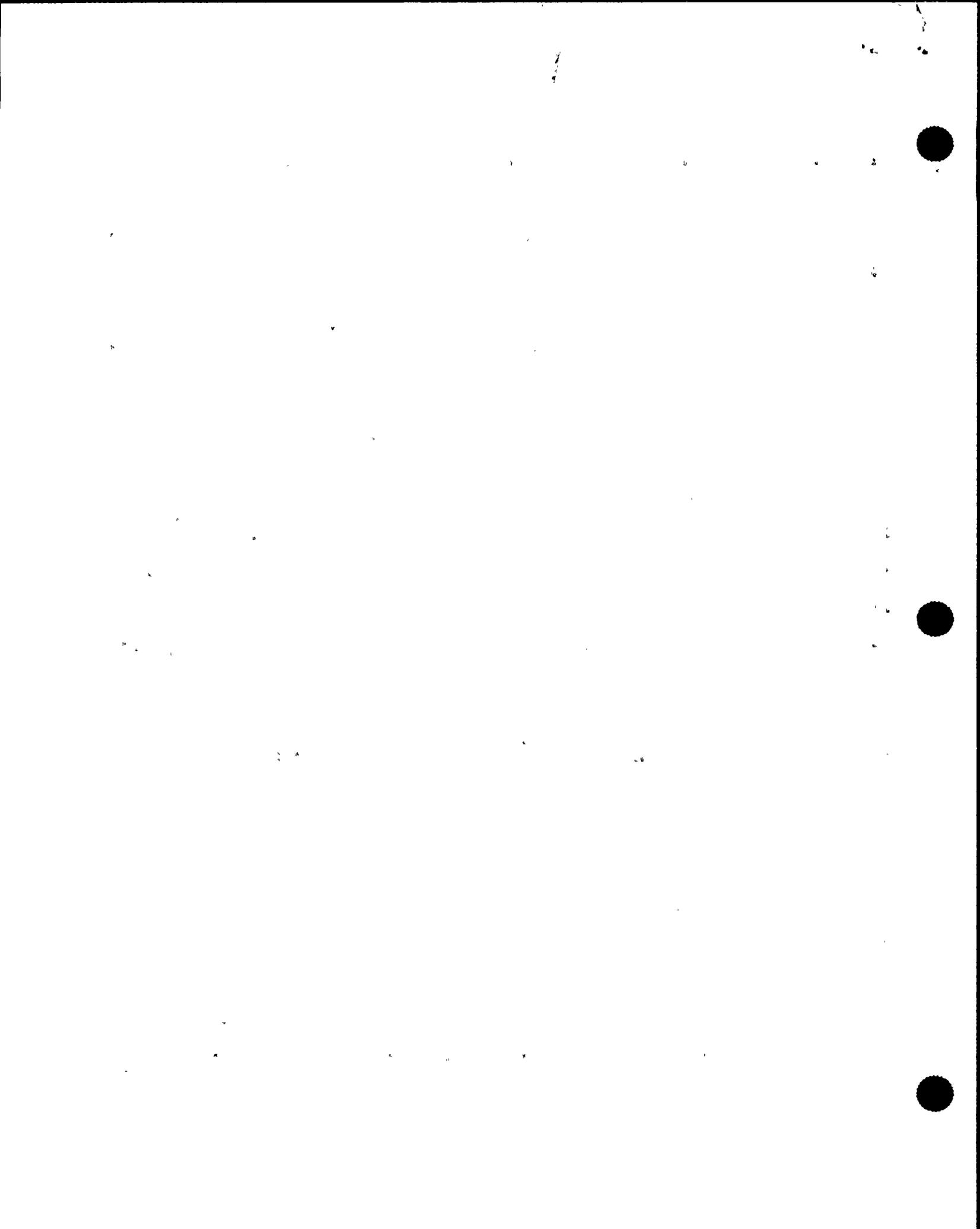
19 MR. HANCZYK: No.

20 MR. VATTER: Just plain black?

21 MR. HANCZYK: They just went out.

22 MR. VATTER: When they went out then you started  
23 going for the control room?

24 MR. HANCZYK: Yes. The first place I headed was  
25 for a hear-hear to call up, because I initially -- there was



1 one near where I was. Initially I went to that and it was  
2 dead.

3 MR. VATTER: That's a Gaitronics?

4 MR. HANCZYK: Gaitronics, and it was dead and then  
5 I headed out.

6 MR. VATTER: Okay. Do you have to climb ladders  
7 or just up stairs?

8 MR. HANCZYK: Stairs. Just had to go up the  
9 stairs.

10 MR. VATTER: And you had your flashlight?

11 MR. HANCZYK: Yes.

12 MR. VATTER: And you weren't dressed in PC's?

13 MR. HANCZYK: No, I was not.

14 MR. VATTER: So it was a relatively simple matter  
15 of going out with the flashlight?

16 MR. HANCZYK: Right, it was.

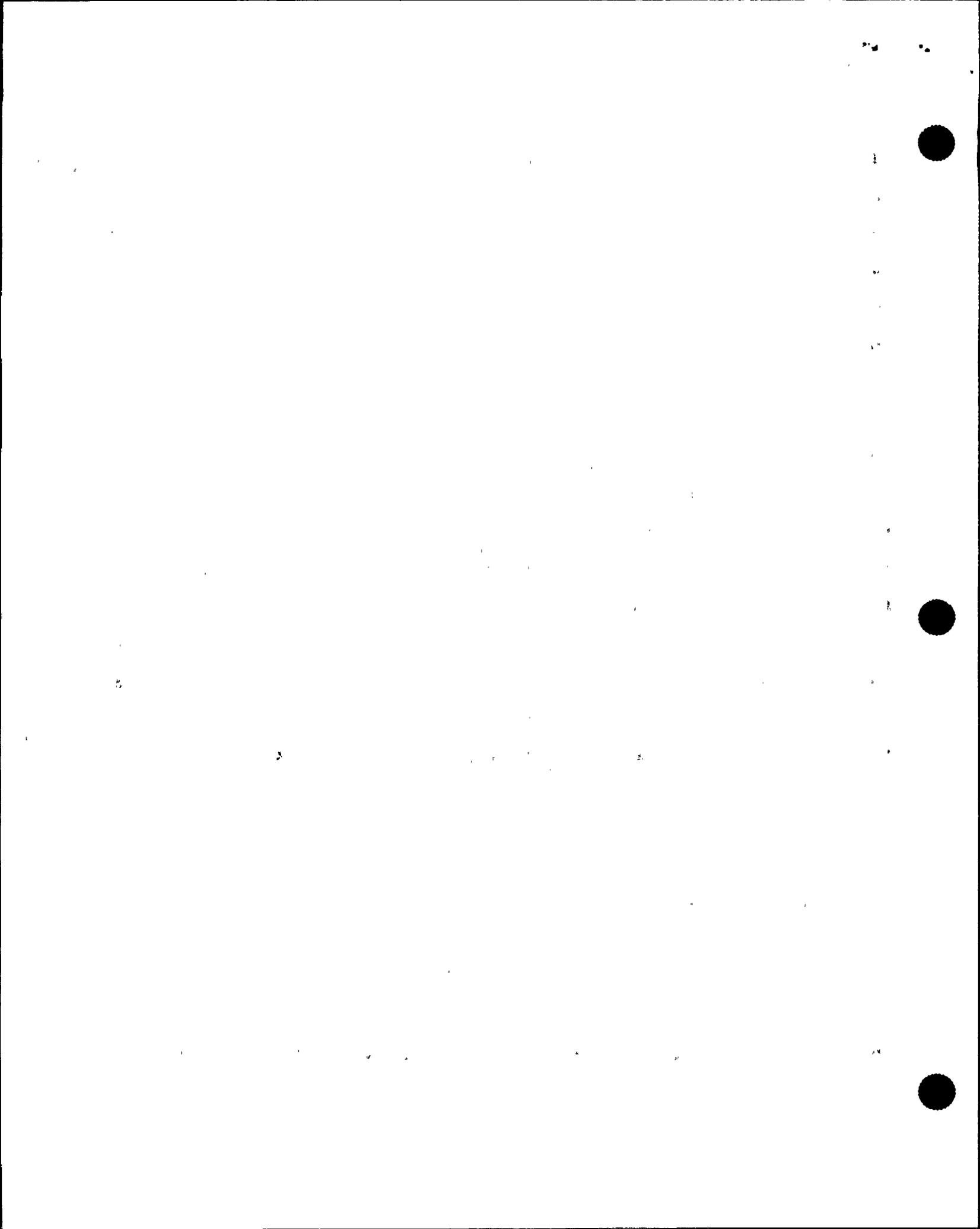
17 When I went out, when I finally got out to the  
18 trailer, I tried to call the control room on the phone, and  
19 I let it ring for maybe six, seven times and I couldn't get  
20 an answer so I hung it up and went to the Blue Goose. I had  
21 another partner with me out at the plant.

22 MR. VATTER: Okay.

23 MR. HANCZYK: Which is a frisk-all.

24 MR. VATTER: A Blue Goose is a frisk-all?

25 MR. HANCZYK: Yes, it's a booth you step into



1 to --

2 MR. VATTER: Yes, I know what a frisk-all is. I  
3 think I can understand why you call it a "Blue Goose."  
4 That's a good term for it.

5 The trailer, what were you referring to when you  
6 said "The trailer?"

7 MR. HANCZYK: They installed an outage trailer.  
8 It's a group where they put like three frisk-alls in order  
9 to expedite people getting out of the reactor building  
10 during outages and we used that. It was a new -- there was  
11 a building attached to the outside of the reactor building  
12 to expedite people getting out of the reactor building.

13 MR. VATTER: Okay.

14 MR. HANCZYK: And when I went there, made my phone  
15 call, didn't get an answer and I -- Phil Nichols who was  
16 there with me was already in the frisk-all. I went over and  
17 was going to grab another one but both of them, out of the  
18 three that were there only one of them was working at the  
19 time. I had to wait for him to get out and then I had to  
20 frisk out.

21 MR. VATTER: Do you think that those two were not  
22 working because of UPS problem or were --

23 MR. HANCZYK: They already had tape on them. They  
24 were --

25 MR. VATTER: They were broke for some other



1 reason?

2 MR. HANCZYK: They were broke for some other  
3 reason.

4 MR. VATTER: Okay. What were you thinking when  
5 the lights went out in the reactor building? Do you  
6 remember what your reaction was to that?

7 MR. HANCZYK: Yes. First thing was that's an ECCS  
8 initiation. We took a Div. I hit and then when the lights  
9 came on I says it's not a Div. I hit. That's why I tried to  
10 get a hold of the control room to find actually what was  
11 going on.

12 MR. VATTER: So when you tried to -- you went to  
13 the hear-hear to call up on the Gaitronics before the lights  
14 came back on?

15 MR. HANCZYK: Yes.

16 MR. VATTER: Then where did the lights come back  
17 on?

18 MR. HANCZYK: By the time I got out of the  
19 building.

20 MR. VATTER: So you were walking when the lights  
21 came back on?

22 MR. HANCZYK: Yes.

23 MR. VATTER: Okay. What did you think when the  
24 control room didn't answer the phone?

25 MR. HANCZYK: I thought there was something major



1 going on and I had to get up there.

2 MR. VATTER: You had better things to do than to  
3 talk on the phone?

4 MR. HANCZYK: -- have them talk to me on the  
5 phone.

6 MR. VATTER: Okay, that's understandable too.

7 Okay, so now you got to the control room and what  
8 did you see when you walked in the control room?

9 MR. HANCZYK: When I got up to the control room --

10 MR. HELKER: Can I interrupt, please?

11 MR. VATTER: Yes.

12 MR. CONTE: I think it is important that we  
13 establish what he experienced between coming out of the Blue  
14 Booth to the control room in terms of the lighting.

15 MR. VATTER: Okay.

16 MR. CONTE: Could you recount before you got to  
17 the control room a general description of the path you took  
18 and the lighting situation?

19 MR. HANCZYK: There was no lights on the stairways  
20 up to the reactor on the egress lighting up out of the  
21 reactor stairs. There was no lights there.

22 MR. CONTE: No emergency lighting.

23 MR. VATTER: That's after you go through the --

24 MR. HANCZYK: After you get through the door that  
25 actually puts you into the reactor building, once you get



1 out you go into the stairs. All the stairwell was black.

2 MR. VATTER: All of the reactor building lighting  
3 is that divisional lighting, like you said?

4 MR. HANCZYK: Right.

5 MR. VATTER: But then you come out of the reactor  
6 building and there is an air lock there.

7 MR. HANCZYK: Yes, a door, an air lock door.

8 MR. VATTER: Don't have both of them at the same  
9 time when your power --

10 MR. HANCZYK: Well, that one and there's two 'way  
11 up on top, okay? The stairs is inside the other door, okay?  
12 You've got one door on the bottom and two doors, one going  
13 out to another stairwell and one going out to the outside,  
14 or two going out to the outside, so you are actually in the  
15 reactor building. You are in between an air locked door.

16 MR. VATTER: Okay, I understand that. So it was  
17 black in the stairwell after the divisional lighting came  
18 on?

19 MR. HANCZYK: Yes. Yes, and all the fire panels  
20 were alarming on my way up.

21 MR. VATTER: Okay. Did you slow down at the fire  
22 panels?

23 MR. HANCZYK: I looked at the fire panel and there  
24 was just alarm lights. There was nothing else on them. I  
25 mean I couldn't tell what was wrong with them and I just

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1 came off from the elevation that was supposed to be alarming  
2 and there was no fire there and so I went back upstairs.

3 MR. VATTER: Okay, so when you saw the alarms but  
4 you knew there was no fire, then what did you think then?

5 MR. HANCZYK: I thought they lost power.

6 MR. VATTER: Okay.

7 MR. HANCZYK: If they -- I'm not sure if they lost  
8 power or the detectors lost power or something that made  
9 them all go into alarm at one time because you could hear  
10 them all the way up the stairwell.

11 MR. VATTER: Okay, then you came out of the  
12 stairwell at the ground elevation?

13 MR. HANCZYK: Yes.

14 MR. VATTER: And then you went for the trailer and  
15 the Blue Goose?

16 MR. HANCZYK: Yes, and there was lights in there.

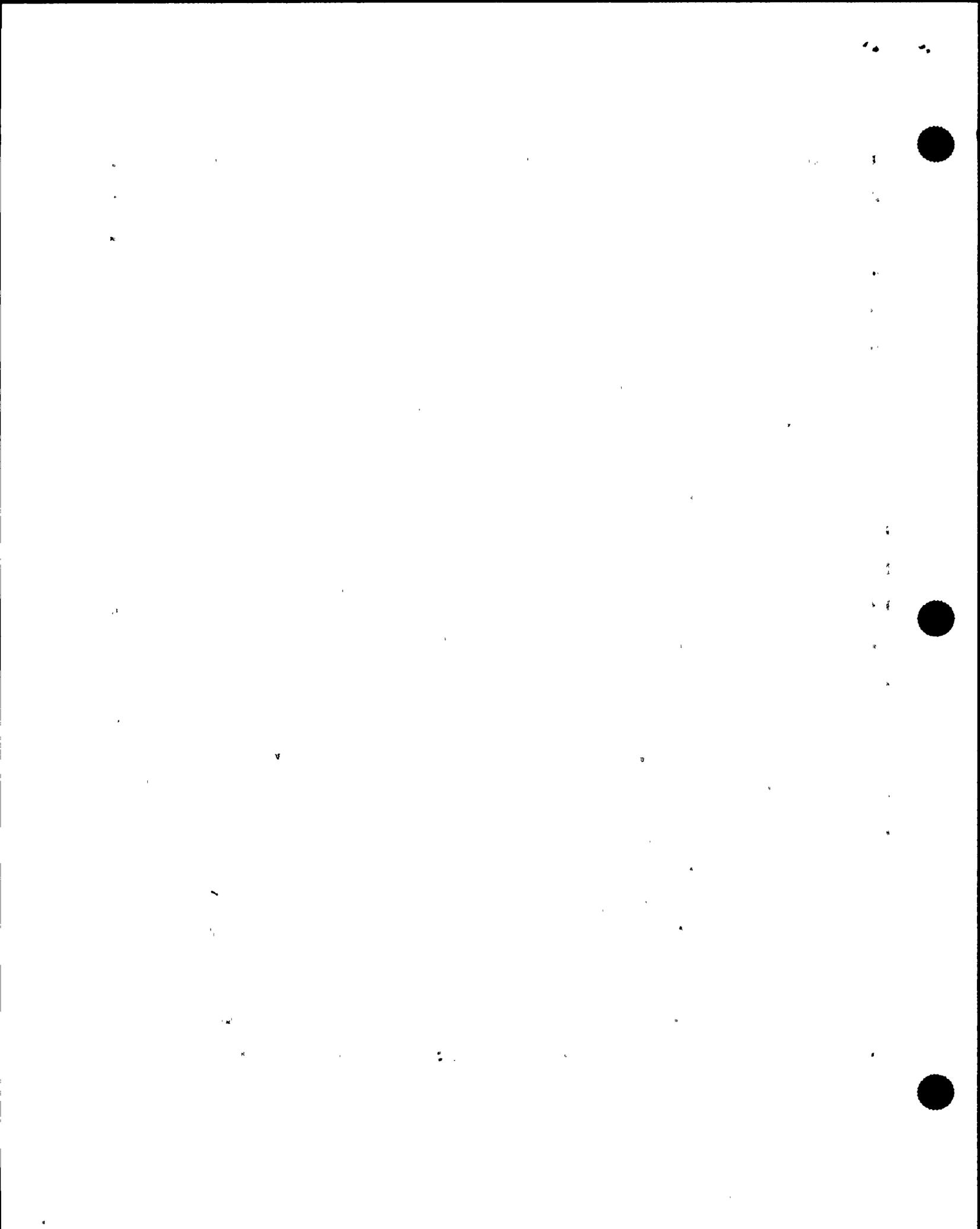
17 MR. VATTER: Okay, and after you frisked out then  
18 you went to the control room.

19 MR. HANCZYK: Yes, I did and there was normal  
20 lighting the rest of the way.

21 MR. VATTER: You didn't see any more problems with  
22 the lighting? Everything was --

23 MR. HANCZYK: No.

24 MR. VATTER: Did you see any other abnormal things  
25 as you were going to the control room, like maybe a fan



1 wasn't running that would have been running or some sound  
2 that you ordinarily would hear you didn't hear?

3 MR. HANCZYK: When I got into the control room, it  
4 was quiet.

5 MR. VATTER: On the way to the control room?

6 MR. HANCZYK: No, I didn't hear any fans that were  
7 or weren't running. At that time I was getting to the  
8 control room rapidly and I wasn't --

9 MR. VATTER: Okay.

10 MR. CONTE: The corridor leading to the control  
11 room, was that well lit, was that normally lit? Any  
12 emergency lights on there, or don't you remember?

13 MR. HANCZYK: The corridor leading --

14 MR. CONTE: Yes, right outside -- the door that  
15 you go into the control room then you come down a hallway  
16 and then out to another door, that long hallway there.

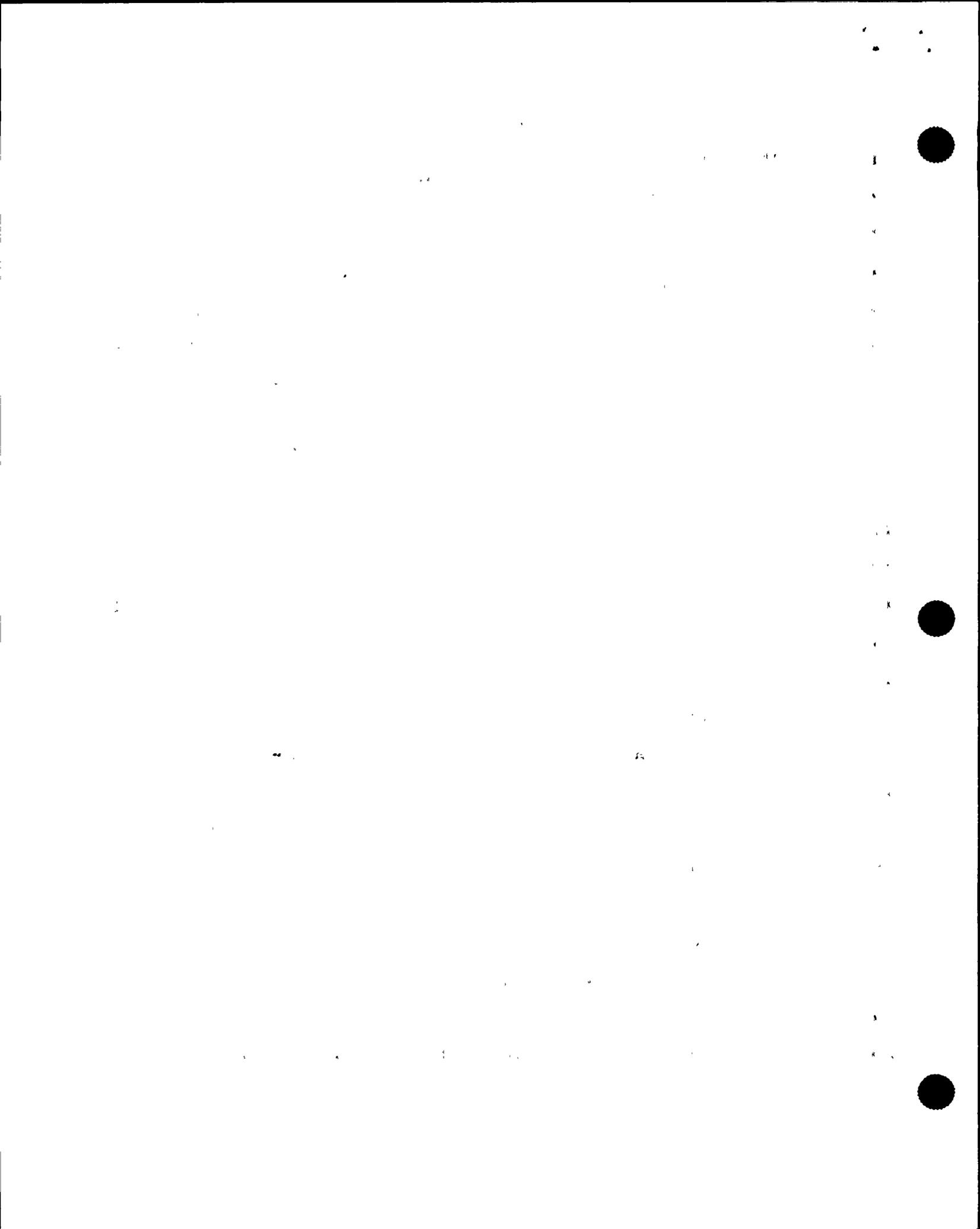
17 MR. HANCZYK: Yes, I went right into the first  
18 door into the back of the control room.

19 MR. CONTE: Oh, you went to the Beehive?

20 MR. HANCZYK: No, I didn't go that -- no. I went  
21 to --

22 MR. VATTER: What is the Beehive?

23 MR. HANCZYK: I went from where you come up to the  
24 control room, you come up the stairs, come up those stairs  
25 and you go back into -- you go by the Rad Protection Office



1 and then you go through the double doors, steel doors and  
2 then you go right into the control room. I went into the  
3 back.

4 MR. VATTER: By the mark-up desk?

5 MR. HANCZYK: By the mark-up desk.Y

6 MR. HELKER: Not the stairs by the elevator?

7 MR. CONTE: And nothing abnormal with the  
8 lighting.

9 MR. HANCZYK: I couldn't remember if there was --  
10 I could see. I didn't have to use my flashlight to go up  
11 it. I mean it was lit well enough to go up. I couldn't  
12 remember at that point -- as long as I could see I was going  
13 up the stairs. I didn't pay attention to what lights were  
14 out and what lights were there.

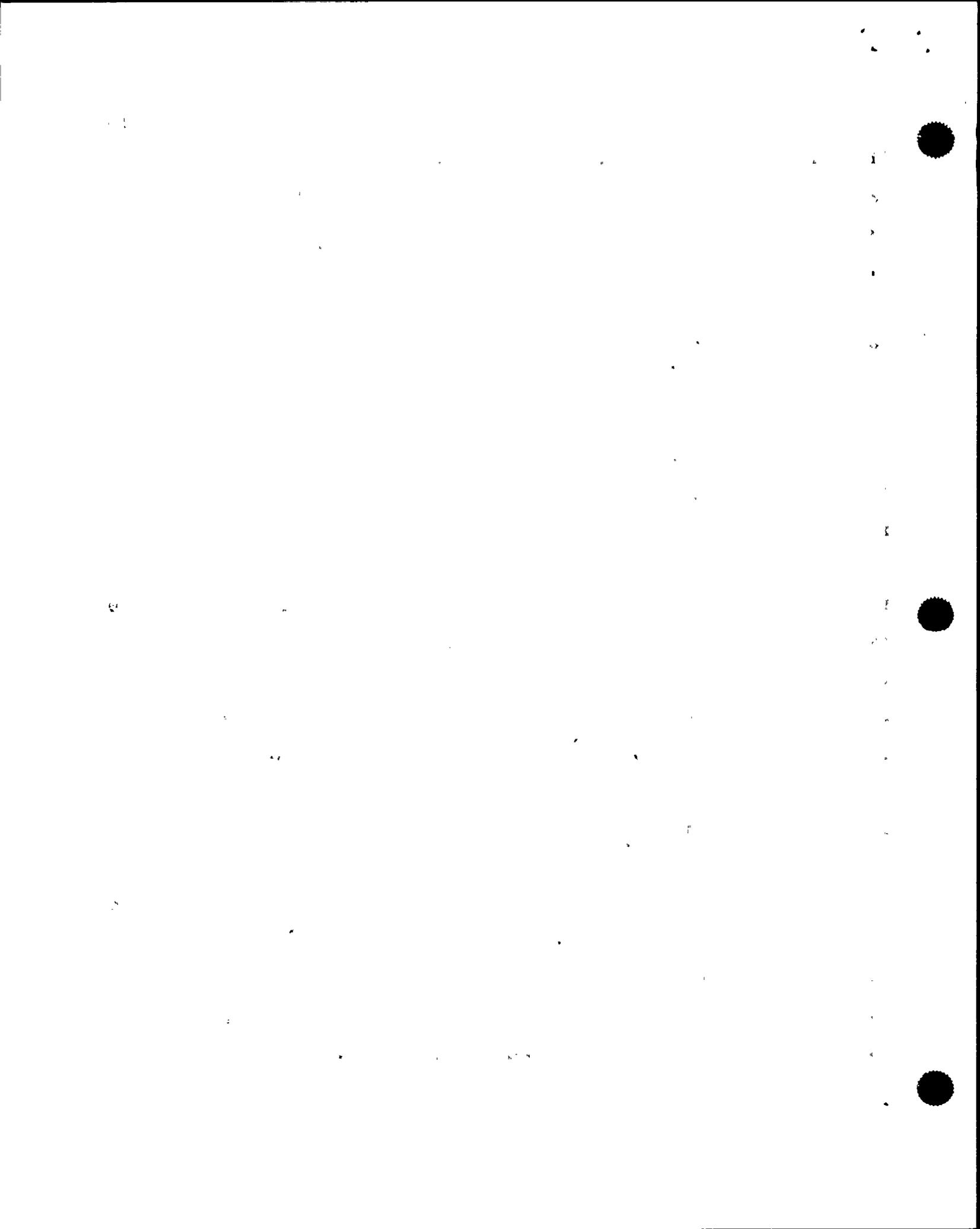
15 MR. VATTER: You don't know if some of those  
16 battery powered -- you know, the little flood-like things?  
17 You wouldn't have noticed whether they were on or not?

18 MR. HANCZYK: No, I did not. I did not notice any  
19 of them in the reactor building. I don't even know if they  
20 have them on the -- up there or not.

21 MR. VATTER: Okay. You went into the control room  
22 in the back door --

23 MR. CONTE: An approximate time that you got to  
24 the control room?

25 MR. HANCZYK: An approximate time. They declared



1 the site area emergency at 6:00.

2 MR. CONTE: How did you know that? Put yourself  
3 in the situation of coming up. Did you hear a site  
4 emergency declared?

5 MR. HANCZYK: I called for the site emergency. I  
6 called over to Unit One to call it so I was --

7 MR. CONTE: So between 0548 and six o'clock, you  
8 were --

9 MR. HANCZYK: I had --

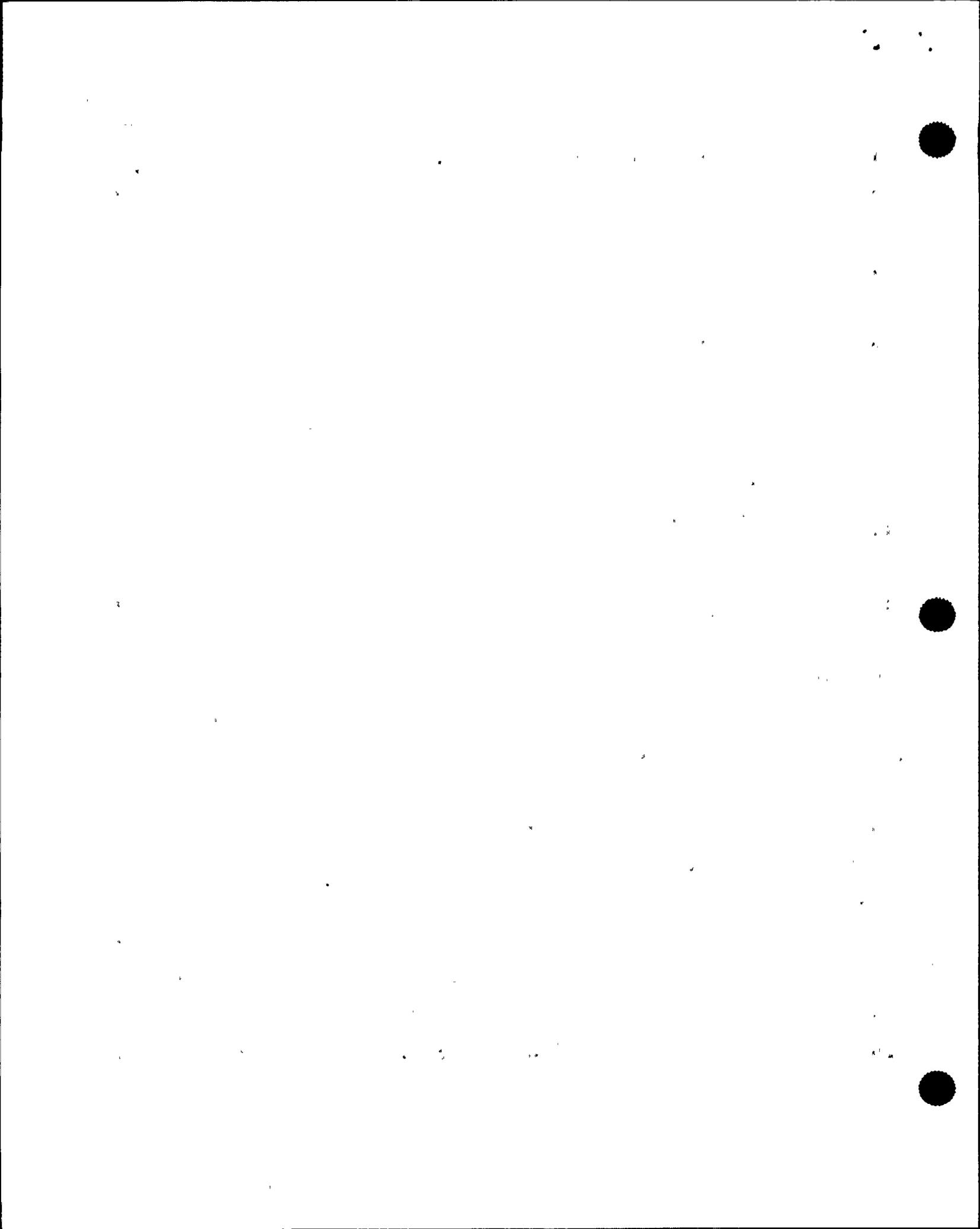
10 MR. CONTE: -- in less than 12 minutes you made it  
11 to the control room.

12 MR. HANCZYK: Yes. I have made it to the control  
13 room before that, I made it before six o'clock because I had  
14 done, had gone to the electrical board to look at that. I  
15 went and looked at --

16 MR. VATTER: I am a little confused now. You  
17 started out. You were in the reactor building and you saw  
18 the lights go out and you couldn't call on the phone and you  
19 headed for the control room.

20 About how long after the lights went out do you  
21 think you got to the control room?

22 MR. HANCZYK: I would be guessing to tell you what  
23 time. I mean when you are in that kind of an emergency  
24 situation time doesn't -- I mean as fast as I could get my  
25 legs up there I got up there. I mean you've got to realize



1 I spent a minute in the frisk-all. It's going to take me a  
2 minute or two to get out of the reactor building. It would  
3 take me a minute to get up there.

4 If I was up there in seven minutes, that would  
5 have been good because I was up there and there was a couple  
6 things I did before he declared the site area emergency and  
7 I know that wasn't quite six o'clock.

8 MR. VATTER: Okay, ball park -- seven minutes.

9 MR. HANCZYK: Say seven minutes.

10 MR. VATTER: The door that you went into the  
11 control room by is the one that comes in in the area of the  
12 back panels.

13 MR. HANCZYK: Yes.

14 MR. VATTER: Not up in the front, by the  
15 supervisor's office.

16 MR. HANCZYK: That's right. That's correct.

17 MR. VATTER: Okay.

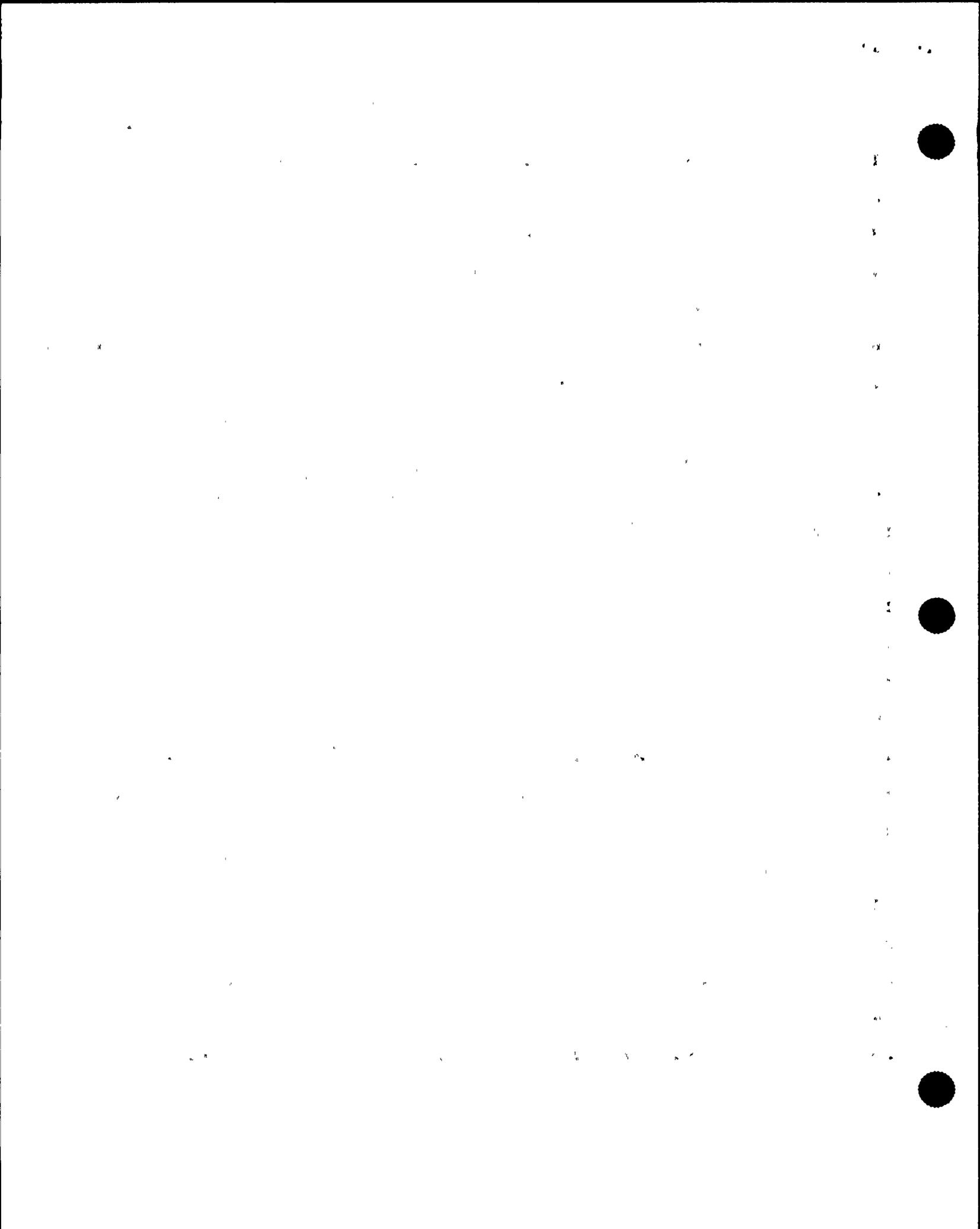
18 When you walked in the door, what did you see, or  
19 what did you hear?

20 MR. HANCZYK: Quiet.

21 MR. VATTER: It was quiet.

22 MR. HANCZYK: No fans, no annunciators, nothing --  
23 I didn't hear anything going off, and that's unusual -- no  
24 typer.

25 MR. VATTER: So your impression was, quiet.



1 MR. HANCZYK: Yes. My impression was, I've never  
2 heard it that quiet.

3 MR. VATTER: Okay. And then you couldn't see  
4 anybody right away.

5 MR. HANCZYK: No.

6 MR. VATTER: Okay.

7 So then you went up out to the area, at the  
8 controls area.

9 MR. HANCZYK: Right.

10 MR. VATTER: And what did you see when you walked  
11 out there?

12 MR. HANCZYK: I didn't see any annunciators lit,  
13 except for like six on panel 601.

14 MR. VATTER: Okay. But you don't know which ones  
15 those were.

16 MR. HANCZYK: If I went up there, I could point  
17 out the six they were. They're on 601, the 100-series.  
18 There were two annunciators for annunciator power supplies  
19 and four right above it.

20 MR. VATTER: So you know that there were six that  
21 were lit.

22 MR. HANCZYK: Yes.

23 MR. VATTER: And that's all that were lit.

24 MR. HANCZYK: That's all that were lit.

25 MR. VATTER: I keep forgetting I'm getting this on



1 type; I don't need to write it down.

2 [Laughter.]

3 MR. VATTER: Who was there?

4 MR. HANCZYK: The SSS, the ASSS, the CSO, Eric  
5 Hoffman --

6 MR. VATTER: Who is he?

7 MR. HANCZYK: He's an NAOC. He was on 601, with  
8 Brian Hilliker, who was also on 601, running RCI.

9 MR. VATTER: So he had been doing some work on  
10 RCI at the building.

11 MR. HANCZYK: No. RCI is the system they use for  
12 level and pressure control, for level control, when I was up  
13 there, by the time I got up there.

14 MR. VATTER: Okay. I'm sorry. These two guys,  
15 Eric and --

16 MR. HANCZYK: Brian.

17 MR. VATTER: -- Brian were over there at the  
18 controls for RCI.

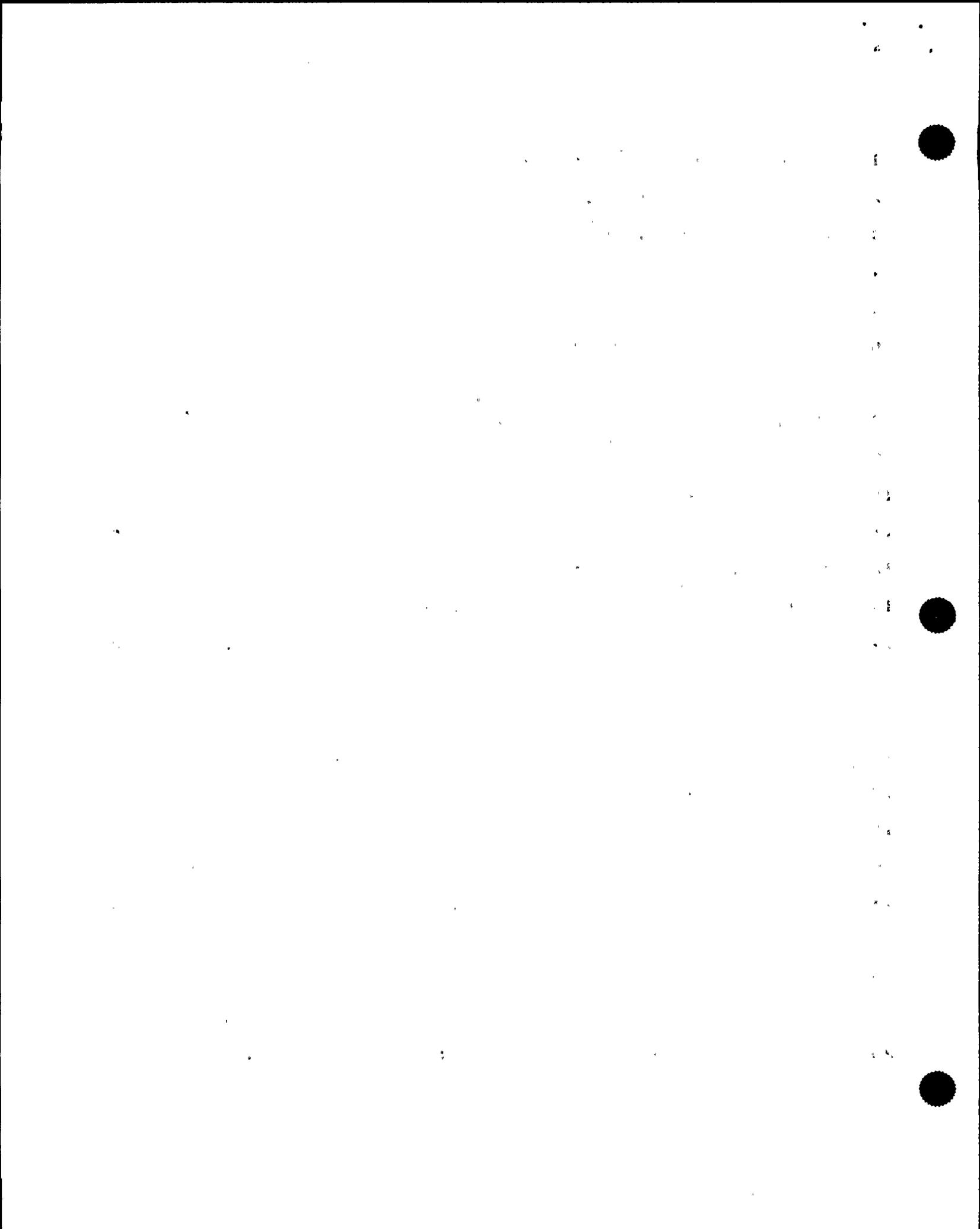
19 MR. HANCZYK: Yes.

20 MR. VATTER: Okay. And the CSO, where was he?

21 MR. HANCZYK: At that time, he was just back at  
22 his desk. He had just backed away from 601. There was also  
23 Mark Bodoh, who was on 603.

24 MR. VATTER: And who is Mark?

25 MR. HANCZYK: He was the control room E.



1 MR. VATTER: Okay. That's the same job that you  
2 had, except he was assigned to the control room, and you  
3 were assigned to the plant.

4 MR. HANCZYK: Right. Same job. We alternate  
5 days.

6 MR. VATTER: Okay.

7 And the ASSS, where was he?

8 MR. HANCZYK: He was getting readings on various  
9 panels for the SSS.

10 MR. VATTER: And the SSS, where was he?

11 MR. HANCZYK: He was into the EOPs. He was right  
12 in front of the EOP board.

13 MR. VATTER: Okay. Who else was there?

14 MR. HANCZYK: Back in the back, I saw Jim Emery.  
15 I'm not sure what he was doing, but I was traveling through.

16 MR. VATTER: Who is he? What kind of job does he  
17 have?

18 MR. HANCZYK: He was an oncoming RO. He was going  
19 to be relieving Mark Bodoh.

20 MR. VATTER: Okay.

21 MR. CONTE: Could you tell me, is Eric -- You  
22 mentioned two names, the NAOC was Eric and Brian Hilliker.  
23 Are they part of your shift?

24 MR. HANCZYK: Brian Hilliker was not. Eric  
25 Hoffman that week was part of the shift. He was covering

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1 for a person on vacation.

2 MR. CONTE: And which shift was Brian with?

3 MR. HANCZYK: Brian is on relief shift.

4 MR. CONTE: Thank you.

5 MR. VATTER: So Brian was working with you, had  
6 come in early?

7 MR. HANCZYK: It was just during the time when  
8 everybody would be coming in for shift turnover -- or it's  
9 the time that everybody who is on relief shift comes in to  
10 do their day work. They come in at 6 o'clock. They come in  
11 at 6; they come in a little bit earlier than 6, some of them  
12 do. They do a turnover.

13 MR. CONTE: And you say Brian was dedicated to RCI  
14 at that time.

15 MR. HANCZYK: Yes, he was.

16 And Eric Hoffman was giving level and pressure to  
17 the SSS, from the PAM recorders.

18 MR. VATTER: Why don't you tell us then what  
19 happened, after you got there. I understand what you saw.

20 MR. HANCZYK: Okay. When I knew that the  
21 Gaitronics was down and there were no annunciators, I walked  
22 in and I looked at the electrical panel, and everything else  
23 appeared to be normal, other than, we didn't have  
24 annunciators, computers, Gaitronics; the radio was out. I  
25 looked at that, and I says, Well, it's got to be the UPS's



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1 that are down.

2 MR. VATTER: Why did you think that?

3 MR. HANCZYK: That's the things that power all  
4 that.

5 MR. VATTER: Okay.

6 MR. HANCZYK: I just know what they power.

7 MR. VATTER: So you were just thinking, your  
8 stuff's not working; where is it coming from?

9 MR. HANCZYK: Yes, and then, UPS.

10 MR. VATTER: Okay.

11 MR. HANCZYK: The CSO had already thought of that  
12 and sent some of the non-licensed operators down to the  
13 UPS's. There was no communications, so, by the time I came  
14 back up, by the time I was up there, those guys were coming  
15 back in reporting, UPS 1 series were all tripped.

16 MR. VATTER: So they hadn't done anything with  
17 them.

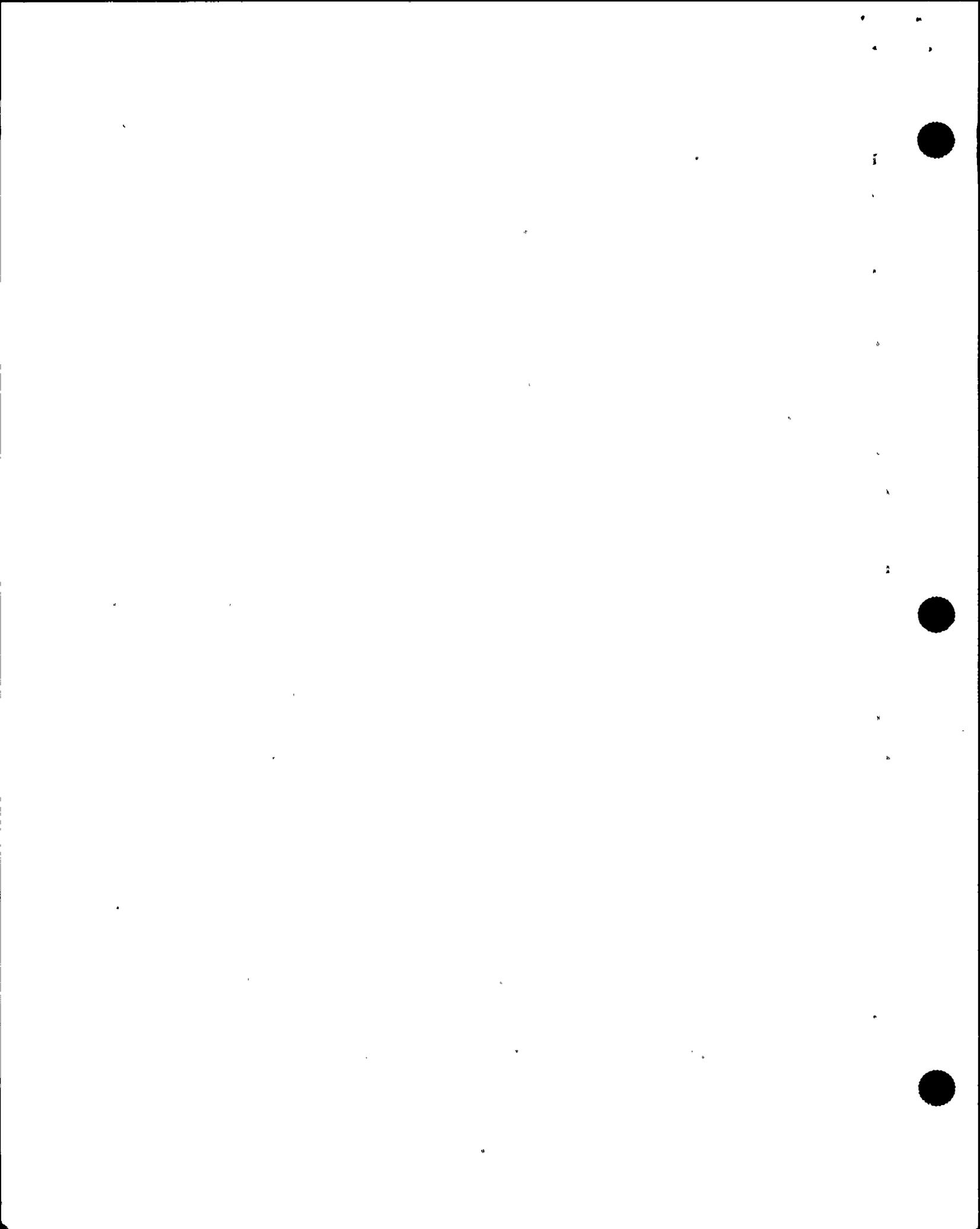
18 MR. HANCZYK: No, they hadn't.

19 MR. VATTER: They just went down to look.

20 MR. HANCZYK: They just went down to look. They  
21 couldn't communicate, to say, Hey, can we try to get these  
22 back, or whatever. They couldn't do it.

23 MR. VATTER: They didn't try anything on their  
24 own, to your knowledge.

25 MR. HANCZYK: No. They didn't try to do anything.



1 They were sent back down to try to get them to restart, to  
2 try to get them to start back up, after. In that period of  
3 time, Aaron Armstrong went down, and Jim Stevens went down.  
4 I went back, and they were still discussing indications of  
5 power's down-scaled, so I ran back and just verified that  
6 power was downs-scaled. I verified that our main steam line  
7 rad monitors were actually -- if they had gone into low  
8 trip, or were we actually putting steam out, or what was  
9 actually going on with steam out of the plant. We were at  
10 low trip for our steam line rad monitors.

11 MR. VATTER: What does that mean?

12 MR. HANCZYK: That means that they were not at a  
13 radiation level that would indicate 100 percent power or  
14 steam going out.

15 MR. VATTER: They go to low trip when there's no  
16 steam, right?

17 MR. HANCZYK: When there's no steam. They go low  
18 trip; there's no radiation going by them, so they go to low  
19 trip. In other words, they're below their downs-scales.

20 MR. VATTER: But they were still working.

21 MR. HANCZYK: They were still working, yes. In  
22 fact, their displays come up automatically, and all their  
23 displays were on -- when you go to low trip.

24 MR. VATTER: So you can actually get an indication  
25 of steam flow from those rad monitors.



1 MR. HANCZYK: It's not as much an indication of  
2 steam flow, but knowing that there is a rate -- you know,  
3 when you're at 20 percent power, between here and here would  
4 be normal steam flow. At 100 percent, it's between 600 and  
5 400 and normally running around 500. If they're down on the  
6 low-scale trips, we're not putting any steam flow out; we're  
7 not significantly throwing any -- I was concerned about  
8 that and concerned that, if something else had happened and  
9 we didn't have any annunciators, we would never even have  
10 known if we had a fuel element failure or something; that  
11 trip wouldn't come in, and I didn't know if it would or not.  
12 That's why I wanted to look, to make sure that -- If we  
13 were going something like that, we had to get the MSIVs  
14 closed, but obviously we weren't.

15 MR. VATTER: But the indication was normal for the  
16 reactor being shut down --

17 MR. HANCZYK: Clean scram. Yes, it was.

18 MR. VATTER: Okay.

19 Then what did you do?

20 MR. HANCZYK: I came back up.

21 MR. VATTER: Back up. That was out --

22 MR. HANCZYK: No, that was in the back of the  
23 control room.

24 MR. VATTER: Okay.

25 MR. HANCZYK: I came back up to the front of the



1 control room. I talked to the SSS; I said, I'm available.  
2 He said, Do EOP 6, attachment 1 for level 3, which is to  
3 check our initiations and our isolations and what actually  
4 happened.

5 I grabbed it out of the book and started checking  
6 off the things that I could check off. There was a lot that  
7 you could, but there was a lot that you couldn't check off.  
8 I couldn't check off "Reactor scram," because, yes, I  
9 realized we should have had a scram, but we couldn't verify  
10 all rods in at that point; we still had to have power back.

11 MR. VATTER: Okay.

12 MR. HANCZYK: B point subpoint set-down, I  
13 couldn't verify that.

14 MR. VATTER: This is a book that supplements the  
15 flow chart procedure.

16 MR. HANCZYK: Yes. It's what we use. It is  
17 procedures we use to implement the EOPs, to do the jobs that  
18 have to be done in the EOPs.

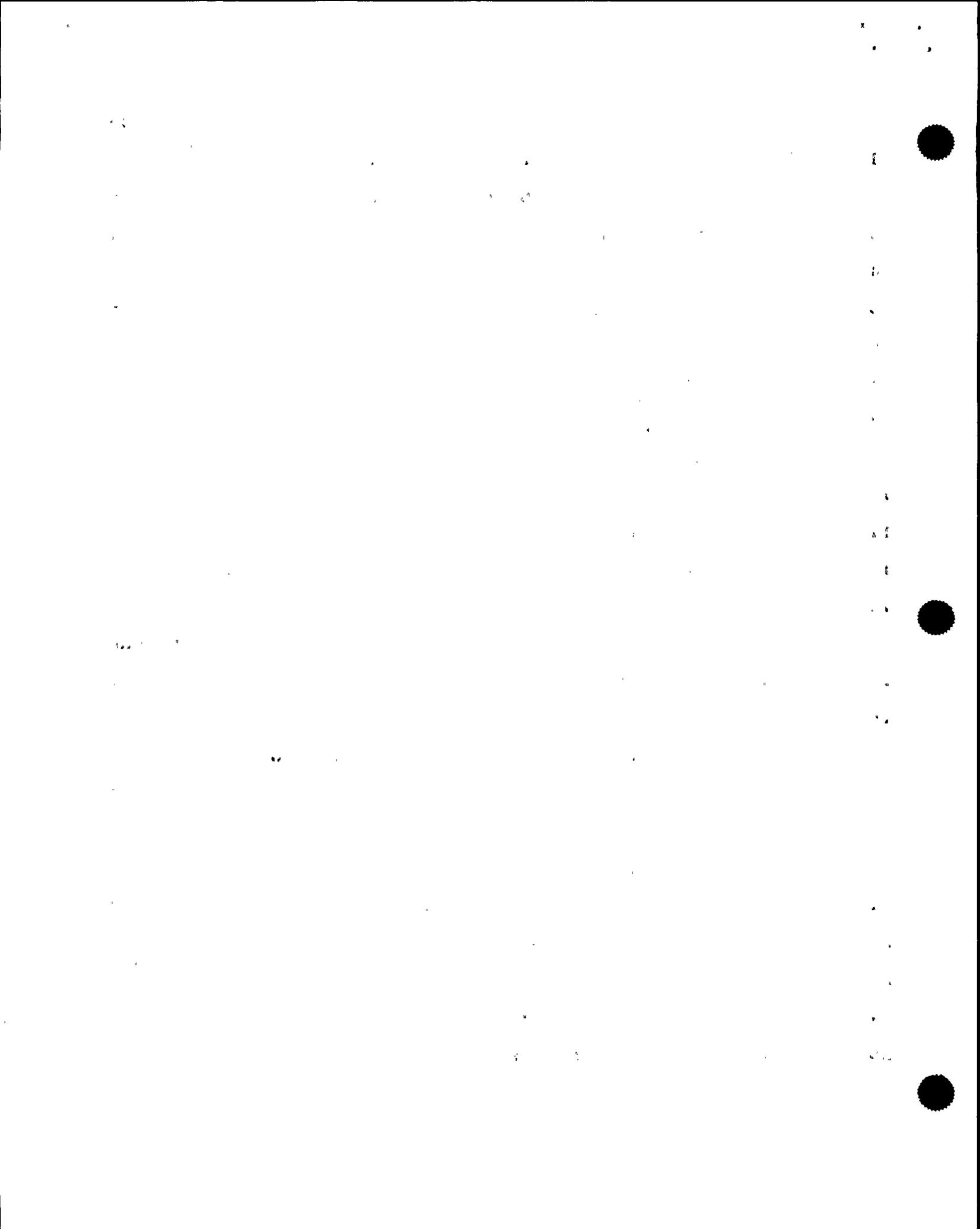
19 MR. VATTER: Okay. Were you actually checking  
20 off, like putting marks on the page?

21 MR. HANCZYK: Sure was.

22 MR. VATTER: Do we know if that has been saved?

23 MR. HANCZYK: I gave it to the --

24 MR. HELKER: I've got a copy of that. I don't  
25 know where the original is.



1 MR. VATTER: Okay.

2 So you marked with ink on the page the things that  
3 you were able to do.

4 MR. HANCZYK: Yes.

5 MR. VATTER: Then did you leave blank the ones  
6 that you were not able to do?

7 MR. HANCZYK: I wrote down notes of what I wasn't  
8 able to do, and I went back and completed the check-off when  
9 I came back up from restoring power.

10 MR. VATTER: Do you think we'd be able to tell, if  
11 we looked at that, which ones were done before you went to  
12 restore power and which ones were done afterwards?

13 MR. HANCZYK: If I looked at it, I could tell you  
14 which ones were done. I know I couldn't setpoints set down,  
15 because it's a little yellow light, and there was no light  
16 on it.

17 MR. VATTER: We may need you to help us figure  
18 that out later, if it turns out that that's important  
19 information.

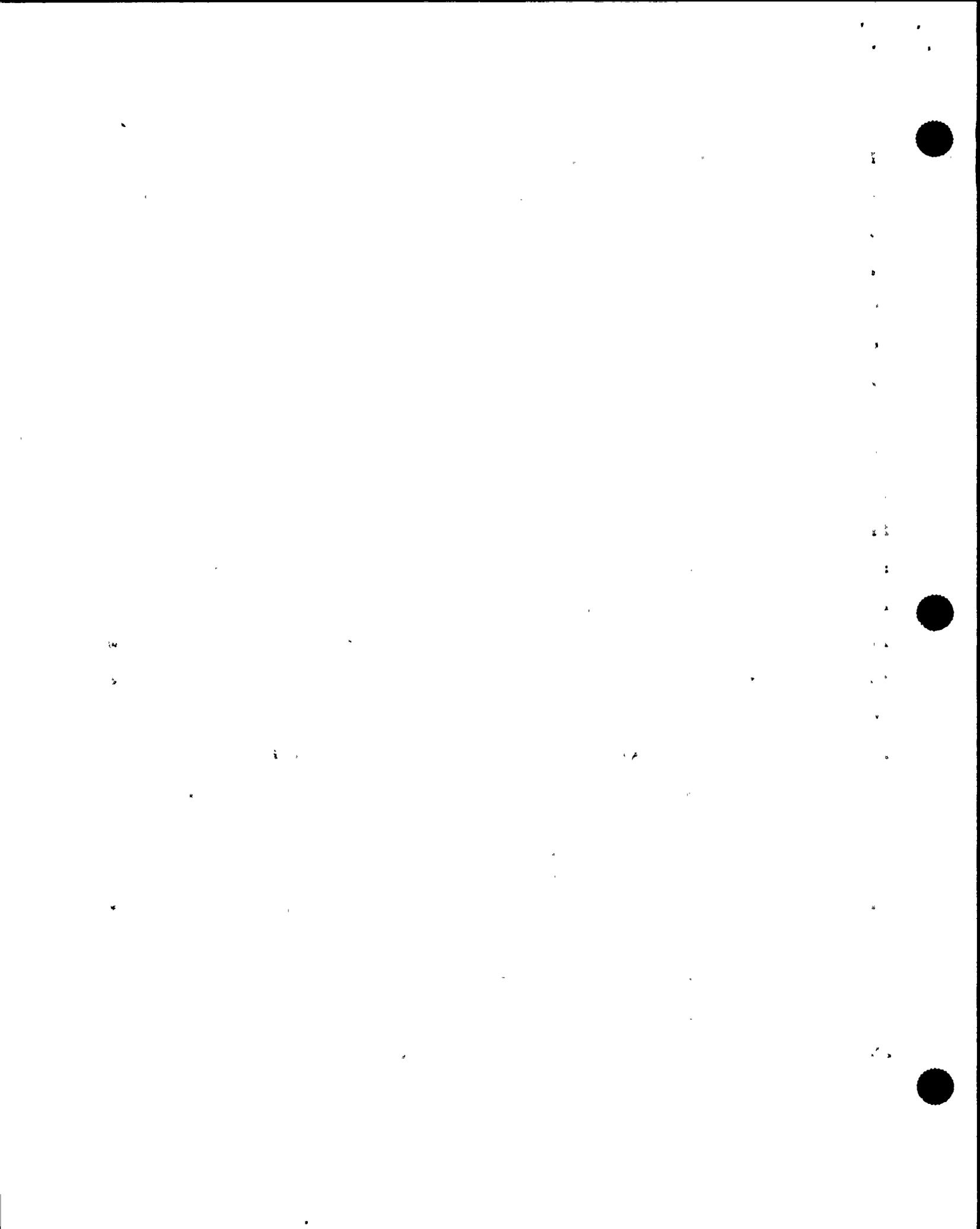
20 One of the things we're trying to understand is  
21 what was gone and what wasn't. That seems a little fuzzy.

22 MR. HANCZYK: That was it.

23 MR. VATTER: Okay.

24 Is it okay if we mark on this?

25 MR. HELKER: I believe so. I'm not sure where the



1 original is. Maybe you could do it in pencil or in a  
2 difference color or something.

3 MR. VATTER: Yes. That would work.

4 You actually put these checks -- this is your  
5 handwriting; is that right?

6 MR. HANCZYK: Yes, it is. That is my handwriting.

7 MR. VATTER: Okay.

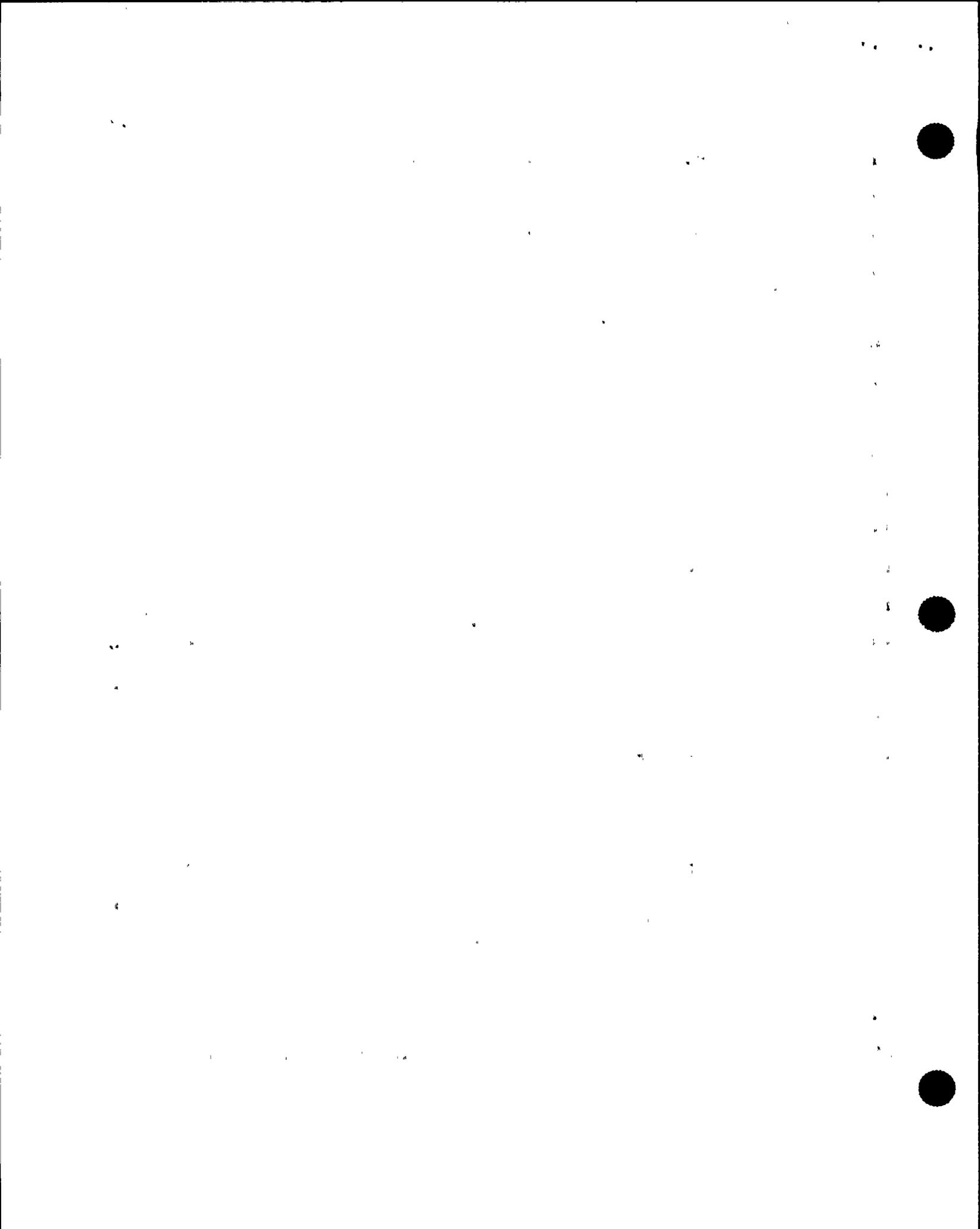
8 MR. HANCZYK: And you see, for reactor scram, I  
9 put question mark, right?

10 MR. VATTER: Okay.

11 MR. HANCZYK: There's a question mark there,  
12 because we didn't know if we had a reactor scram. That's at  
13 the time I did this.

14 Feed point setpoint set valve I was unable to do  
15 and went back to do it. That one I did not get right off  
16 the bat.

17 The PAM recorders to fast speed, I didn't get to  
18 write what was left on this. This said, Except no power on,  
19 and this was supposed to be on the fuel zone. I couldn't  
20 tell -- I put my thumb on the fuel zone to see if it had  
21 gone to fast speed, and it wasn't moving in fast speed like  
22 the other two PAM recorders were. They were actually moving  
23 at fast speed; you could feel them. That's a good way to  
24 tell, because they go three quarters of an inch a minute  
25 versus three quarters of an inch an hour. I couldn't tell;



1 If it's a difference in a lot of speed, you can tell.

2 It seemed to be indicating, but I couldn't see the  
3 PAM recorder itself moving in fast speed.

4 MR. CONTE: Excuse me. Let me identify that we're  
5 pointing to and using a document that is labeled attachment  
6 1, various pages, 1 through 8, on EOP 6, TCN 4, rev 00.

7 A lot of that is blank.

8 MR. HANCZYK: Yes.

9 MR. CONTE: That means you couldn't do it?

10 MR. HANCZYK: We didn't meet the conditions for  
11 it.

12 MR. CONTE: Okay. I understand.

13 MR. HANCZYK: By my indications, I had a  
14 containment purge isolation, so you can see I went through  
15 and checked all those off, too.

16 MR. VATTER: This was done before you went down to  
17 restore power.

18 MR. HANCZYK: Yes.

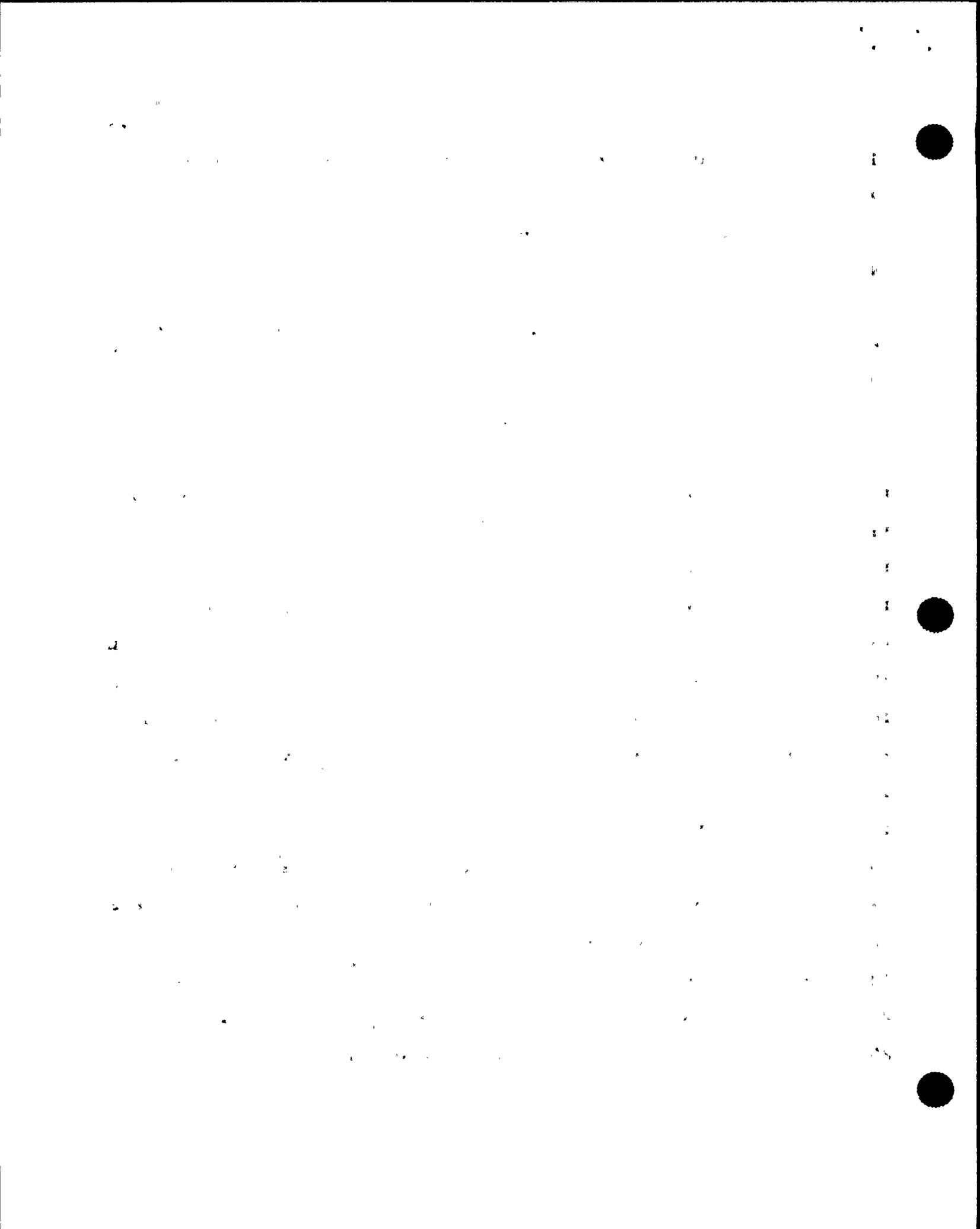
19 MR. VATTER: Okay.

20 If I can go back and summarize, the only things  
21 that you marked after you had restored power were this FWS  
22 setpoint set-down --

23 MR. HANCZYK: Set-down.

24 MR. VATTER: -- and the reactor scram.

25 MR. HANCZYK: And the reactor scram. That one was



1 marked just like it was. I didn't get back to check that  
2 one.

3 MR. VATTER: It looks like somebody has checked it  
4 here.

5 MR. HANCZYK: I put a check on it, because the  
6 other two -- and then I wrote, Except no power on, and then  
7 I explained it to the SSS when I turned it in, that I  
8 couldn't tell if the recorder for the fuel zone had actually  
9 gone into fast speed.

10 MR. VATTER: Okay. So you went through this  
11 checklist.

12 MR. HANCZYK: At that point, I was told to call  
13 over to Unit One and tell them to make the announcement and  
14 give them the reason for a site area emergency.

15 MR. VATTER: Okay. And then what?

16 MR. HANCZYK: I asked the SSS -- the site  
17 emergency director; basically, that's what he becomes at  
18 that time --

19 MR. VATTER: Is he not working with the EOP  
20 anymore?

21 MR. HANCZYK: He is still working with the EOP;  
22 now he becomes the site emergency director -- as soon as he  
23 declared that, he becomes the acting site emergency  
24 director, and I asked him if I could go down and assist the  
25 non-LOPs in trying to get the UPS power back.

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1 MR. VATTER: The non- --?

2 MR. HANCZYK: Non-LOPs, non-licensed personnel.

3 MR. VATTER: Okay.

4 MR. HANCZYK: He said yes, because he had  
5 indications that power was down-scale. He had water level  
6 and pressure under control, and he didn't actually,  
7 physically need me at that time, and I could go try to  
8 assist in restoring power.

9 MR. VATTER: He had already sent the non-LOPs, as  
10 you call them, down to turn the UPS's on.

11 MR. HANCZYK: To try to restore the UPS's, yes.

12 MR. VATTER: Okay. Is there some kind of  
13 procedure for doing that?

14 MR. HANCZYK: There is, but it doesn't match the  
15 condition that we're in. When I got down there, they were  
16 looking through the procedure, and it says, Make sure this  
17 is open, this is open -- which are two breakers, CB-1 and  
18 CB-3 -- and we went down there, and then the next thing is,  
19 Make sure CB-4 is -- CB-1 and CB-2 are open, and then it  
20 says, Make sure CB-4 is closed. At that point, you're like,  
21 Okay. CB-4 is not closed, and it's not closed on any of  
22 them. We had to make a decision at that point, how you're  
23 going to get CB-4 to get closed, and the only way to do that  
24 is to open up the case, the actual operator case for CB-4,  
25 and manually close them in. At that point you had power



1 back, and there was no sense in even going any farther with  
2 the UPS's, because you've got power to everything.

3 MR. CONTE: Excuse me. Could you identify who was  
4 at the UPS when you arrived there?

5 MR. HANCZYK: Aaron Armstrong.

6 MR. CONTE: Is he a licensed operator or not?

7 MR. HANCZYK: He's an NAOC, not a licensed  
8 operator.

9 MR. CONTE: NAOC. Okay.

10 MR. HANCZYK: And Jim Stevens.

11 MR. CONTE: Jim Stevens?

12 MR. HANCZYK: Yes.

13 MR. CONTE: He was a non-LOP also?

14 MR. HANCZYK: Yes.

15 And Phil MacEwen.

16 MR. CONTE: What's his normal position?

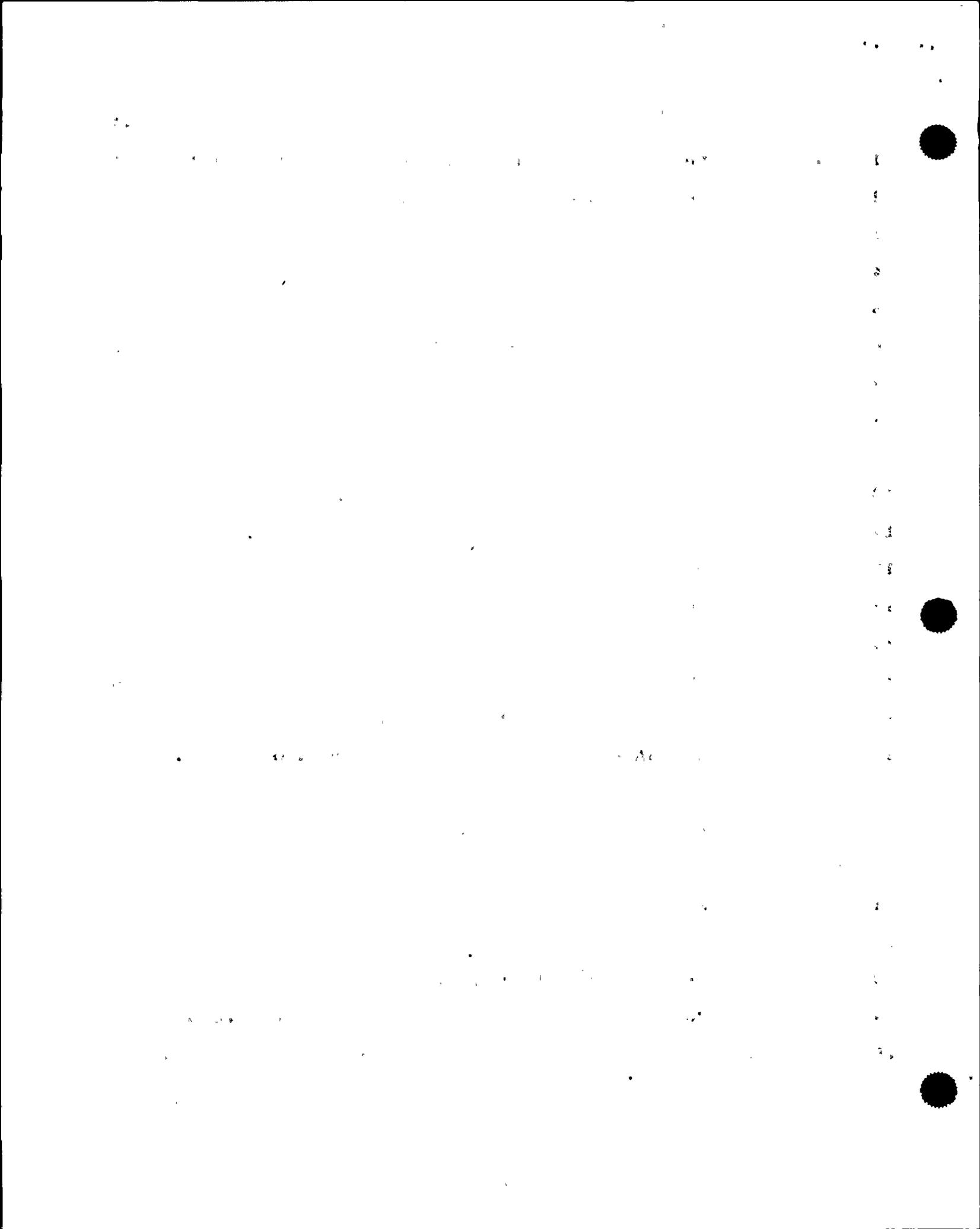
17 MR. HANCZYK: He's a non-licensed operator.

18 MR. CONTE: There were no maintenance personnel,  
19 support personnel?

20 MR. HANCZYK: No one else was down there. I had  
21 people show up after I showed up down there, two more ROs  
22 and another non-LOP.

23 MR. CONTE: All right.

24 Continue with your observations. You're at the  
25 point where the procedure said to make sure CB-4 is closed.



1 Who made the decision to manually override the motor?

2 MR. HANCZYK: I did.

3 MR. CONTE: You did.

4 MR. HANCZYK: Yes.

5 MR. CONTE: Okay. How did you know to do that?

6 MR. HANCZYK: Start-up testing, and there was a  
7 problem with UPS BBB-1-Bravo. It was having a problem with  
8 the CB-3 breaker before. Bob Crandall showed me -- I was  
9 down there working with him, and he showed me how to open  
10 and close that. I did it with him before, but I just wanted  
11 -- [Pause]

12 MR. VATTER: I'm having a little trouble following  
13 everything that's going on. Maybe it's because I'm not  
14 familiar with this uninterruptable power supply. Is there a  
15 way for us to just maybe walk down there and have you just  
16 sort of show us, First I came in here, and this is what I  
17 saw, and then I went and I did this, and then I did this  
18 other.

19 MR. HANCZYK: We can sort of just draw it and show  
20 you.

21 MR. VATTER: Okay.

22 I'll need to go down there later and look at that,  
23 and make sure I've got a feel for it.

24 MR. HANCZYK: [Indicating:] This is CB-2. CB-3  
25 is out. The other power supply is CB-4. This is CB-1.



1 MR. VATTER: Where is the load on this thing?

2 MR. HANCZYK: The load is down here. This is the  
3 load.

4 MR. VATTER: Okay.

5 AC, DC.

6 MR. HANCZYK: Yes.

7 MR. HELKER: What I did is, I drew a sketch, your  
8 basic one-line, of how a UPS works, showing the different  
9 circuit breakers, the inverter, where the battery ties in.  
10 You've got basically three different power supplies  
11 available, a normal AC, DC from the battery, and then a  
12 maintenance supply AC. Normally power comes in straight  
13 through here from the normal AC supply to the loads. On a  
14 loss of the normal AC, the DC breaker would close in to pick  
15 up the loads.

16 MR. VATTER: This is how it is all the time?

17 MR. HANCZYK: That CB breaker is closed.

18 MR. HELKER: It's got, I guess, some kind of a  
19 diode arrangement --

20 MR. HANCZYK: It's got a blocking diode in it.

21 MR. HELKER: -- such that power can flow into this  
22 way rather than charge the battery.

23 MR. VATTER: Okay.

24 MR. HANCZYK: So this automatically up the load,  
25 and then maintenance is also available.



1 MR. VATTER: Okay. When you've got down there  
2 which breakers were open --

3 MR. HANCZYK: CB-1 was trip-free. CB-2s were  
4 trip-free. CB-3s we didn't see, but they were off; their  
5 indication was off. And the CB-4 was off.

6 When we went out on damage control, some of the  
7 CB-3s -- I'm not sure if all the CB-3s, because we didn't  
8 check -- You'd have to talk to Bob Crandall to see if all  
9 the CB-3s were trip-free, but some of the CB-3s, I know,  
10 were trip-free.

11 MR. VATTER: All of the UPS's are down in that  
12 same room?

13 MR. HANCZYK: No, they are not. Four of the UPS's  
14 are in 237, the normal switchgear room, and one of the  
15 UPS's is on 214 in the control building.

16 MR. HELKER: Of the ones that we lost power to.  
17 There are other ones in that particular room, UPS-3-Alpha  
18 and Bravo are also located in switchgear 237.

19 MR. VATTER: Are these all the same kind of UPS?

20 MR. HANCZYK: Those five that lost power, yes.

21 MR. VATTER: Is this the same battery that's going  
22 into all of them?

23 MR. HANCZYK: No, it is not.

24 MR. VATTER: Different battery for each one?

25 MR. HANCZYK: H is supplied by Charlie battery.



1 MR. VATTER: I guess we can get a print-out and  
2 figure it out.

3 MR. HANCZYK: Yes. They don't all come off the  
4 same battery.

5 MR. VATTER: Okay.

6 Now, with all the breakers tripped, then what did  
7 you do?

8 MR. HANCZYK: Procedure says, make sure that these  
9 -- Well, first we tried to do this with the procedure, left  
10 it in auto-restart. The procedure says, Make sure this is  
11 open, that's open. Then it says, Make sure that CB-4 is  
12 closed. We said, Well, we can't close the CB-4, so we tried  
13 to close the CB-1 breaker. We closed the CB-1 breaker, and  
14 we waited just a couple seconds to see if the unit would try  
15 to auto-restart, and it would not. It did not try to auto-  
16 restart.

17 MR. VATTER: The procedure says, Make sure this  
18 one is closed --

19 MR. HANCZYK: Right.

20 MR. VATTER: -- when you close this one.

21 MR. HANCZYK: Right. But there's no physical  
22 control of that breaker, other than opening that handle --  
23 opening up the operator and physically turning up that  
24 breaker. There is no other control on that that you can,  
25 use.



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1 MR. VATTER: So how does it -- It doesn't sound  
2 like it's one that opens up very much, then.

3 MR. HANCZYK: It normally never closes.

4 MR. VATTER: Oh, it normally never closes.

5 MR. HANCZYK: Normally, when you're operating,  
6 this one, that one, and that one always close. If you lose  
7 AC power, it goes under the battery, and that one stays  
8 closed.

9 MR. VATTER: Okay. So this was in its normal  
10 position.

11 MR. HANCZYK: Right. It was in normal, off. When  
12 we opened these up, these CB-4s were not tripped. They were  
13 not trip-free; they were just off.

14 MR. VATTER: Like they would have been anyway.

15 MR. HANCZYK: Right.

16 MR. VATTER: In your procedure, though, it says to  
17 make sure this is on.

18 MR. HANCZYK: Make sure this is on.

19 MR. VATTER: Okay.

20 MR. HANCZYK: But the procedure never addresses  
21 you how to get this CB-4 closed. It never addresses you how  
22 to open that box and get it closed.

23 MR. VATTER: But you knew how to do that.

24 MR. HANCZYK: I knew how to do that.

25 MR. VATTER: But the other guys didn't.

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1 MR. HANCZYK: No.

2 MR. VATTER: How come you knew how to do it and  
3 you didn't?

4 MR. HANCZYK: Because I went through CB-3 with Bob  
5 Crandall, and I went through start-up with him down there,  
6 and I knew how to do it.

7 MR. VATTER: So, because you've been around a long  
8 time and you knew the right guys, you happened to know the  
9 right information.

10 MR. HANCZYK: Yes.

11 MR. VATTER: Okay. I can understand that.

12 MR. CONTE: Let me interject.

13 Did you understand why CB-4 was not closed? Did  
14 you expect it to be closed?

15 MR. HANCZYK: I expected it to be closed. I knew  
16 that power was lost. When I went down there, I couldn't  
17 understand why it wasn't closed.

18 MR. VATTER: I thought you said before it was  
19 never closed.

20 MR. HANCZYK: Only if you lose CB-1 and CB-2 does  
21 CB-4 close.

22 MR. VATTER: Okay. So it closes automatically if  
23 you lost CB-1 and CB-2.

24 MR. HANCZYK: That's correct. To supply power to  
25 the load.



1 MR. VATTER: Oh, okay. That would be the basis of  
2 doing that auto-restart: that that would happen like that.

3 MR. HANCZYK: Right.

4 MR. VATTER: Okay.

5 MR. HANCZYK: That's why I tried to close CB-1,  
6 and I did get closed CB-1, and I did get closed CB-2, but I  
7 couldn't get anything else to go onto the -- it wouldn't  
8 auto-restart, so we took it to maintenance, to manual-  
9 restart. To prevent any of the breakers from operating by  
10 themselves, we opened up the CB-4 and closed the min and got  
11 power.

12 We tried it on one, and we didn't know what the  
13 status of the UPS's were, and we went to the rest of them  
14 and closed all the CB-4 breakers in.

15 At this point, my concern wasn't why this UPS  
16 didn't work. My concern was to get power back. Everything  
17 we had --

18 MR. VATTER: I thought working CB-4 all by itself  
19 would get power back.

20 MR. HANCZYK: That's what it did, and that's what  
21 we did. That's what my concern was.

22 MR. VATTER: Okay. And when you closed CB-4, you  
23 got power back, and then took this thing to auto-restart,  
24 then?

25 MR. HANCZYK: No. We put it in manual restart.



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1 MR. VATTER: Before you closed CB-4.

2 MR. HANCZYK: Right.

3 MR. VATTER: And is there a manual restart  
4 procedure?

5 MR. HANCZYK: Yes, there is a manual restart  
6 procedure?

7 MR. VATTER: And what does that tell you to do?

8 MR. HANCZYK: I don't know. I didn't read the  
9 procedure, because I didn't want -- At that point, I got  
10 power back to where I wanted to get power back to. I got  
11 power back to all my UPS loads that were coming off there,  
12 and I needed to get back up to the control room. Once I got  
13 power back, my concern was to get back up and assist the  
14 control in any way I could, because power was back, the  
15 UPS's could be dealt with at any later time.

16 MR. VATTER: Okay. Did you guys have the  
17 procedure there with you, and you were trying to make it  
18 work?

19 MR. HANCZYK: Yes.

20 MR. VATTER: And it wouldn't work.

21 MR. HANCZYK: And it wouldn't work, no.

22 MR. VATTER: And then, when it wouldn't work, you  
23 did what you had to do to get power back.

24 MR. HANCZYK: Yes.

25 MR. VATTER: And you didn't have a procedure,



1 because none was available to you right there; you would  
2 have had to go to the control room and --

3 MR. HANCZYK: No. We had a procedure there.

4 MR. VATTER: Okay.

5 MR. HANCZYK: We have a procedure located right  
6 there.

7 MR. VATTER: So you have a procedure for manual  
8 restart that's there, but you weren't looking at it at the  
9 time.

10 MR. HANCZYK: No.

11 MR. CONTE: There's some sensor lights relay  
12 indication, alarm lights on the panel there that we observed  
13 yesterday in the walk-down.

14 MR. HANCZYK: Yes.

15 MR. CONTE: Did any of that make sense to you or  
16 did you get the opportunity to observe it in terms of  
17 explaining to yourself why CB-4 was not closed?

18 MR. HANCZYK: I could not. I had voltage  
19 differential light, a UV, an OVUV light, and I didn't notice  
20 it but Aaron Armstrong did. He said there was the UVOV  
21 transfer light lit. It didn't make sense why both the CB-1  
22 and the CB-2 went to trip-free position and CB-4 didn't  
23 close in. I -- my assumption was that that CB-4 would  
24 close and it didn't.

25 MR. CONTE: Okay. Did you try and implement a



1 procedure? That wasn't helping you very much.

2 MR. HANCZYK: It wasn't helping me because once  
3 you got through making sure CB-1 and CB-2 was open, it says  
4 make sure CB-4 is closed and it was like, okay, there's no  
5 control switch -- how do I do the CB-4? Hold that open and  
6 go like that? Now you are sort of out of the round of what  
7 the procedure wants because once you do that you have got to  
8 adjust the breaker-indicated position inside the operator.  
9 There is a screw that the electricians use, a screwdriver,  
10 and electricians move it to the on position and then they  
11 can re-set it in, but we don't do that. I mean that's  
12 something we don't -- we start it from that kind of dead --

13 MR. CONTE: Which UPS were you working on at this  
14 point?

15 MR. HANCZYK: Well, the first one we did was 1-D.

16 MR. CONTE: 1-D.

17 MR. HANCZYK: Yes.

18 MR. CONTE: Do you remember the sequence? You saw  
19 that you had success by closing CB-4 on the 1-D.

20 MR. VATTER: Could you tell me you got power back  
21 when --

22 MR. HANCZYK: Yes.

23 MR. VATTER: -- when CB-4 was kicked in?

24 MR. HANCZYK: Yes.

25 MR. VATTER: How could you tell?



1 MR. HANCZYK: We had no outlet power. He had inlet  
2 power. We didn't have any outlet power.

3 MR. VATTER: Okay, was there a voltmeter there?

4 MR. HANCZYK: Yes, a voltmeter.

5 MR. VATTER: You saw the voltmeter come up when  
6 questioned CB-4?

7 MR. HANCZYK: Yes.

8 MR. CONTE: Do you remember the sequence -- then  
9 you ran down a line of CB-4's?

10 MR. HANCZYK: I had -- like I said, at that time  
11 there was -- I had, how many did I have? Three in the  
12 beginning -- myself and Phil Nichols came down there.

13 MR. CONTE: You said Jim Stevens, Aaron Armstrong  
14 and Phil MacEwen?

15 MR. HANCZYK: Right, and then Phil Nichols showed  
16 up with me, Mike Garbus and Bob Spooner showed up and we had  
17 more than enough people. As soon as we showed them how to  
18 open up CB-4 and close it in, they just, everybody went to  
19 their own CB-4 and closed them in, breakers on the UPS's and  
20 then I went downstairs to the computers. That's GULF.

21 MR. CONTE: That's the last one.

22 MR. HANCZYK: That's the last one that went in was  
23 the computers.

24 MR. VATTER: Did you check all the other UPS?

25 MR. HANCZYK: No. The non-LOPs, Aaron Armstrong



1 and Jim Stevens, had already checked them and said they were  
2 running and putting out power.

3 MR. VATTER: So the non-LOPs that had gone down  
4 there at the time that you were coming up to the control  
5 room from the reactor building came back with the  
6 information "this is where the trouble is?"

7 MR. HANCZYK: Yes. These UPS's were down.

8 MR. VATTER: The guys that went to close in the CB-  
9 4s, did you give them any instruction on like take it to  
10 manual --

11 MR. HANCZYK: Well, we were all together. They  
12 were right next to each other. Everybody was right -- the  
13 distance between them is if you put a CB -- if you put one  
14 unit there on the edge on that wall and that wall and this  
15 wall -- I don't know, what is the length of this room?  
16 There are probably -- this probably 8 foot wide. That's  
17 about how far it is. We put them on manual and closed them  
18 in.

19 MR. VATTER: I guess what I would really like, if  
20 we could do this, Dave, is if maybe you could walk down  
21 there with me and show me, you know, point to the ones. We  
22 don't have to really operate anything but, you know, so that  
23 I can get a feel for all of that, because it is just not  
24 coming together in a picture in my head and that's what I'm  
25 trying to get.



1           Okay, let's move on to what you did then  
2 afterwards.

3           MR. HANCZYK: After that? I went down -- I did  
4 all of the -- we did A, B, C and D. We did all four of those  
5 and then I went downstairs and got GULF and then I ran all  
6 the way up the stairs to assist in the control room and the  
7 rest of the shutdown.

8           MR. VATTER: Okay, and then you went into the  
9 control room and what was going on then?

10          MR. CONTE: Approximate time you got into the  
11 control room? The power was restored at 6:22.

12          MR. HANCZYK: I'm going to say by 6:30 -- 6:22 it  
13 was there. Power was restored to almost everything at 6:22.  
14 Well, if they say 6:22 that must be the last time I got GULF  
15 so it's going to take me three minutes to get upstairs, 6:25  
16 by the time I get up there.

17          MR. CONTE: Okay, go ahead.

18          MR. HANCZYK: I came up to the control room and  
19 there was a lot of our ROs in the control room, a lot of  
20 non-LOPs in the control room just looking for, you know,  
21 some of them had different functions and different duties  
22 that were given. They were -- one was given booster pumps  
23 to get back up. One was controlling steam pressure with the  
24 steam lines. I was -- myself I came in and I looked and I  
25 saw that vacuum was going, it was becoming more positive.



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1 MR. VATTER: Going away.

2 MR. HANCZYK: Yes, going away.

3 I formed the SSS. He gave me directions per 101-C  
4 to follow down and re-establish, try to re-establish vacuum  
5 with the "hoggers."

6 MR. VATTER: A hogger is a motor --

7 MR. HANCZYK: A motor-driven vacuum pump.

8 MR. VATTER: Your normal air ejectors are steam-  
9 driven?

10 MR. HANCZYK: Yes, they are, and we have off-gas  
11 isolation with a -- it was a high rad that was in -- on the  
12 off-gas system so the steam jet air ejector was just pushing  
13 steam into the off-gas.

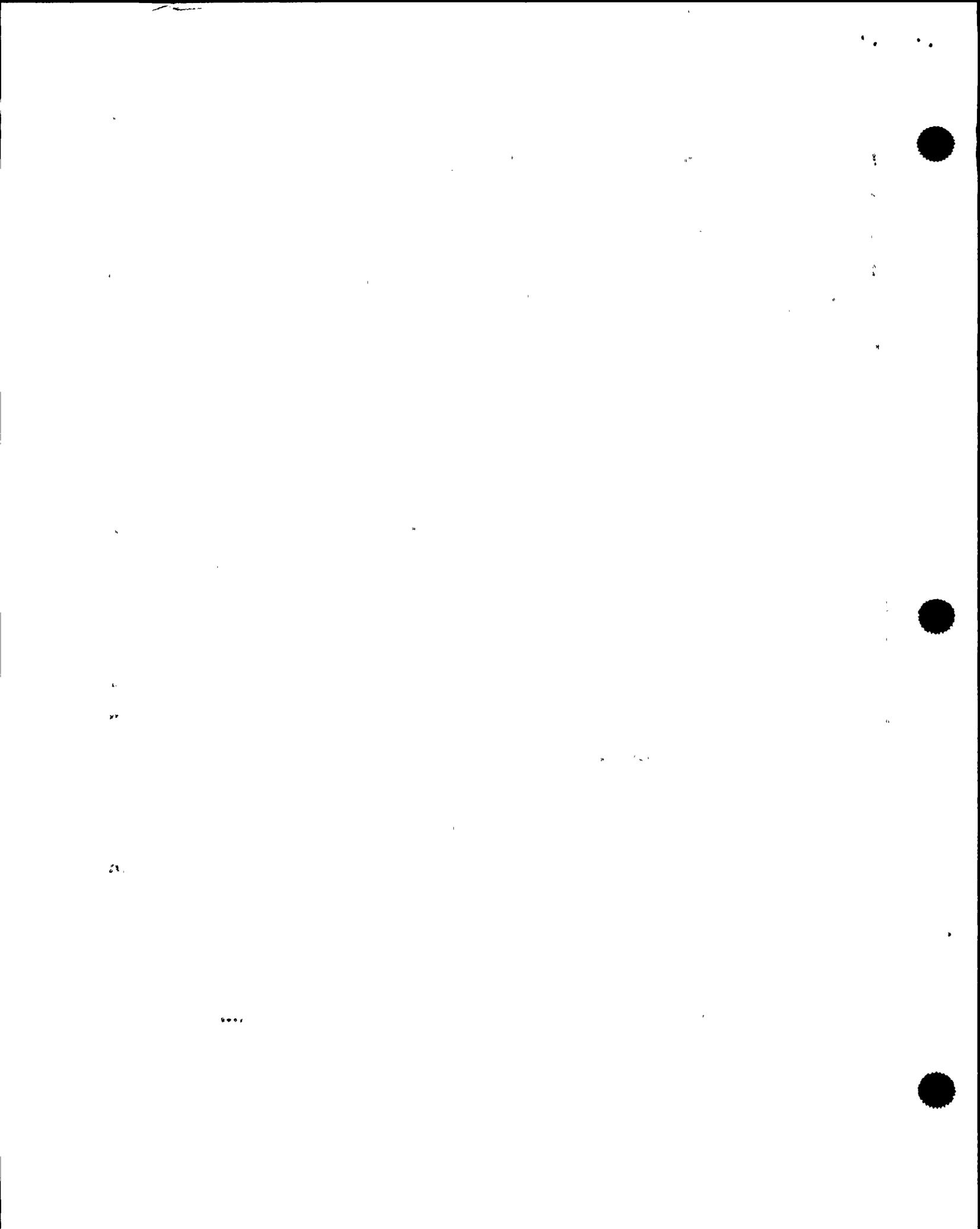
14 MR. VATTER: The hogger bypasses that?

15 MR. HANCZYK: Yes, it does.

16 MR. VATTER: What was the high rad on the off-gas?

17 MR. HANCZYK: We lost the power to the computer  
18 and lost power to the rad monitors. They weren't being  
19 pulled. We had no idea why that was in the annunciator  
20 responses to verify that it's a true, a true high rad, and  
21 we couldn't. There was no way to do it because we had to  
22 go on out to the rad monitor itself.

23 The computer at DRMS was not pulling any of the  
24 rad monitors so we didn't know, so we couldn't un-isolate  
25 it.



1 MR. VATTER: Okay. I am a little bit confused now  
2 because I remember your saying that the main steam line rad  
3 monitor was working.

4 MR. HANCZYK: Yes, it was.

5 MR. VATTER: But this is different.

6 MR. HANCZYK: This is different.

7 MR. VATTER: This is the power supply?

8 MR. HANCZYK: This is when I came back in. All the  
9 annunciators were bad, all right, and the annunciator was in  
10 was off-gas high rad, which isolates the off-gas system.

11 Now whether that came from the power spike or --

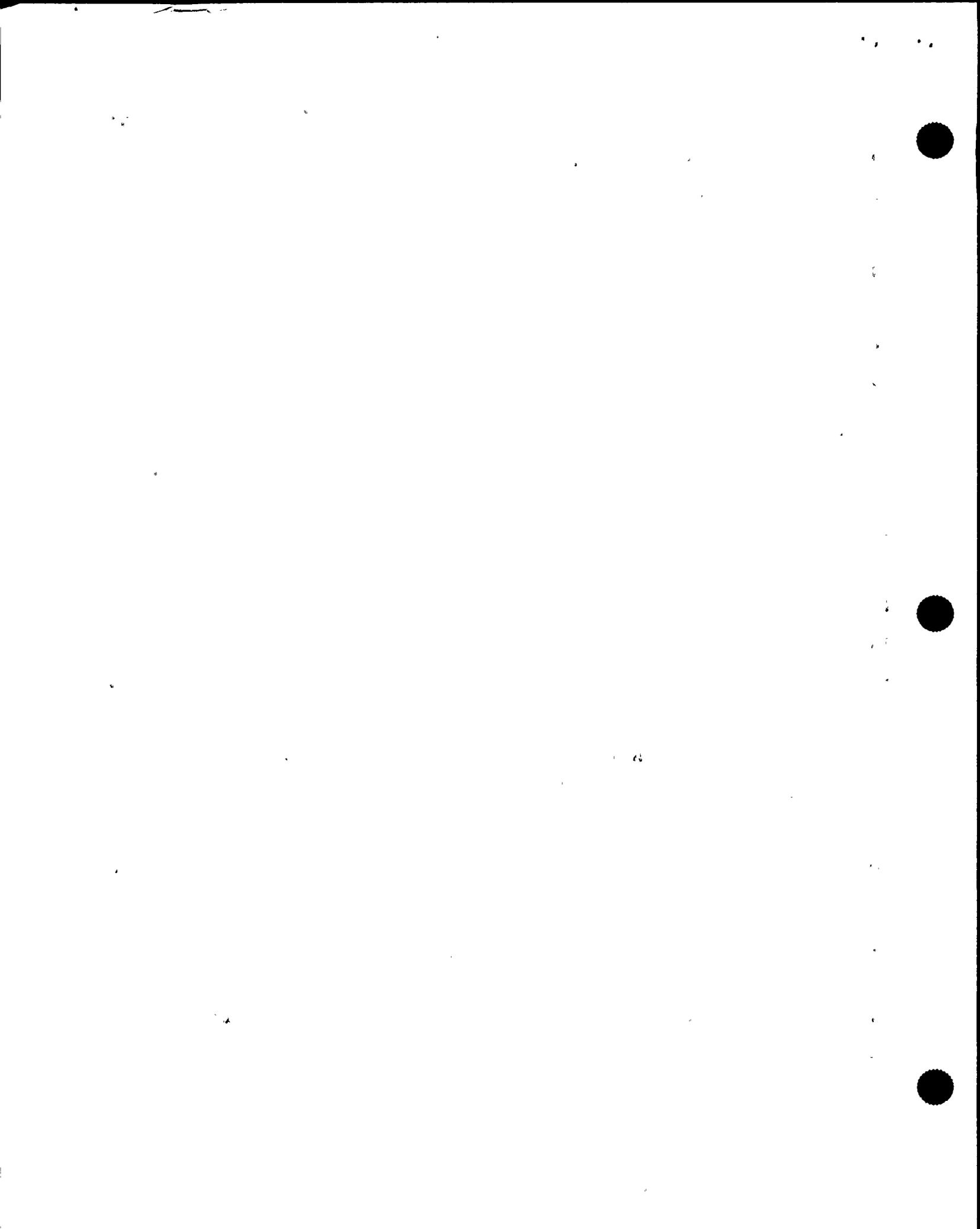
12 MR. HELKER: We found out that off-gas rad  
13 monitors 13-ELF and Bravo did lose power and that's what  
14 caused the isolation as well as we lost -- we had off-gas  
15 isolation plus we had the group nine isolation for the same  
16 reason, the rad monitor, GTS RE-105 had lost power.

17 MR. VATTER: Okay, some of the rad monitors lost  
18 power and then you got it back.

19 MR. HANCZYK: Right.

20 MR. HELKER: DRMS rad monitors lost power. Steam  
21 line rad monitors are not considered part of the DRMS.

22 MR. VATTER: Okay. Now when you went to put the  
23 hogger on and you had that alarm in for high rad on the off-  
24 gas, were you able to look at the radiation monitor and see  
25 what it was really reading?



1 MR. HANCZYK: No. We were not.

2 MR. VATTER: So how do you know that there was no  
3 a true high rad condition there?

4 MR. HANCZYK: How do I know that was not? Because  
5 we had rad protection -- well, we had rad protection out  
6 there to verify and by the time we got the hoppers on, we  
7 had already had DRMS and off-gas back or the rad monitors  
8 back on, before we got the hoppers on.

9 We had to clear everybody out of the turbine  
10 building because we had cams going off and we didn't know  
11 what the situation in the turbine building was so that  
12 slowed down the process of doing anything.

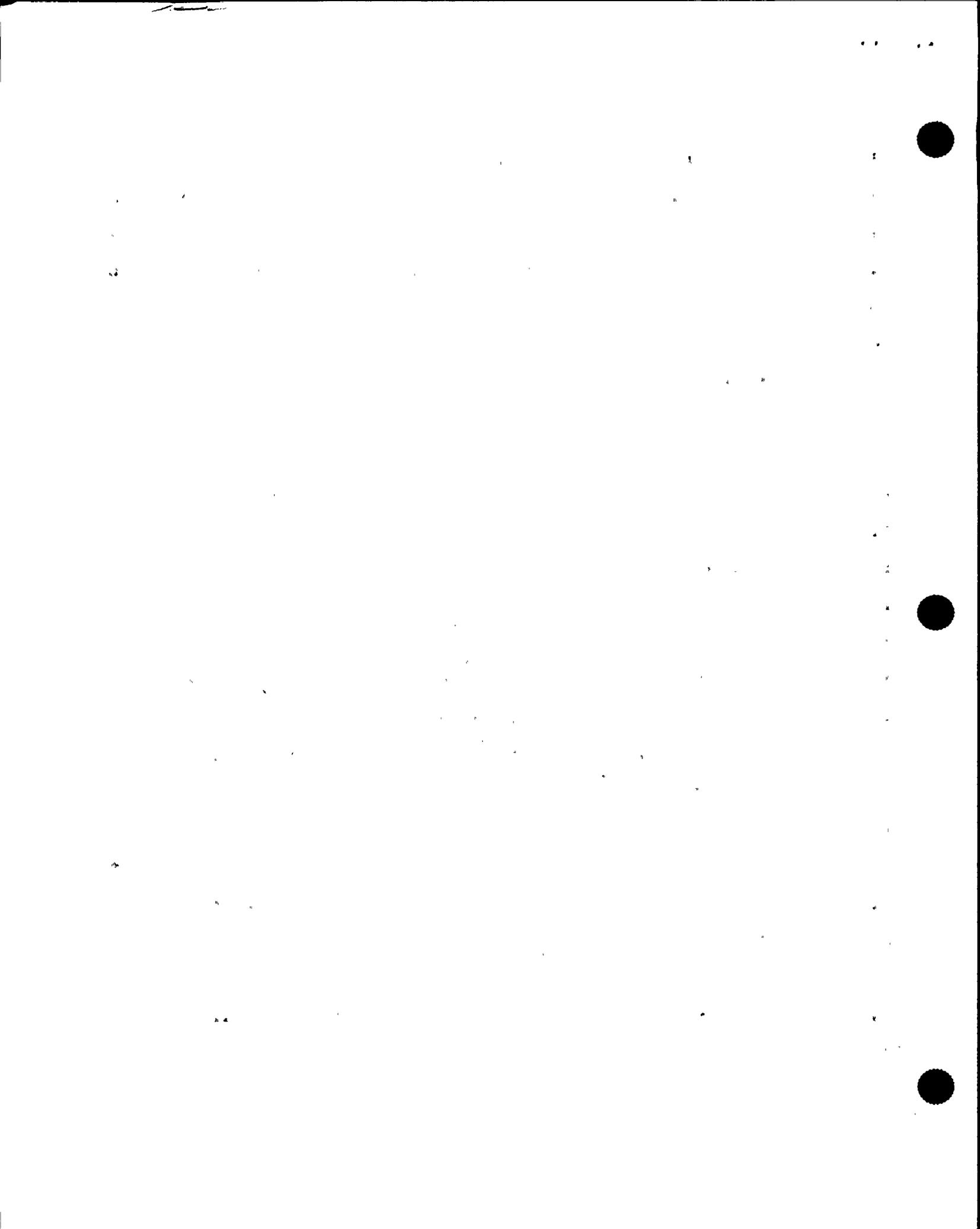
13 MR. VATTER: But you put the hoppers on from the  
14 control room?

15 MR. HANCZYK: Yes, we did. We also had an  
16 operator out in the plant. In order to do that, you have to  
17 do that from -- you have to have somebody out in the plant.

18 MR. VATTER: Okay, now at the time you put the  
19 hogger on you did not have an indication yet on the rad  
20 monitor?

21 MR. HANCZYK: Yes, we did, by the time we had  
22 that. Yes, we did. That was already back from 13s or the  
23 13s were already being pulled and they were okay, it was  
24 just that that seals in, that alarm still seals in.

25 MR. VATTER: Okay, so the rad monitor was



1 indicating but there was no flow for it to indicate.

2 MR. HANCZYK: Right. Rad monitor was then  
3 indicating and it didn't have a high rad condition then. It  
4 has its own little pump to pump in and out.

5 MR. VATTER: And was that working?

6 MR. HANCZYK: It didn't indicate equipment failed,  
7 so I would have to assume that it was working.

8 MR. VATTER: But there was no flow coming from the  
9 condenser so whatever --

10 MR. HANCZYK: Yes, it was still -- the steam jet  
11 air ejectors were still trying to push everything into that  
12 off-gas system.

13 MR. VATTER: But it wasn't going anywhere because  
14 it was isolated?

15 MR. HANCZYK: Right. It was just packing that  
16 system full non-condensables and steam.

17 MR. VATTER: Okay, so it might have still had some  
18 stuff going in with pressure going up?

19 MR. HANCZYK: Right. Pressure was going up and we  
20 did -- like I said, they were still working. The hoppers  
21 have to come on before the air ejectors go off, so there was  
22 actually flow into the off-gas system.

23 MR. VATTER: Okay. Then what?

24 MR. HANCZYK: In trying to do that they were still  
25 having problems with the reactor as far as verifying how



1 many rods were out and how many rods were not out but not  
2 indicating full in, and they didn't have a match on a lot of  
3 the rods, so I looked up and I noticed that the rod drive  
4 sequence control system had gone to an inop status.

5 MR. HELKER: The rod drive control system.

6 MR. HANCZYK: Rod drive and rod drive sequence  
7 control, isn't it?

8 MR. HELKER: Rod drive control.

9 MR. HANCZYK: Rod drive control system, and I  
10 ended up -- I pointed that out --

11 MR. VATTER: Is that the full floor display?

12 MR. HANCZYK: That's what let's the full floor  
13 display -- that's what gives all the lights to the full  
14 floor display. That is what allows it to change its update.

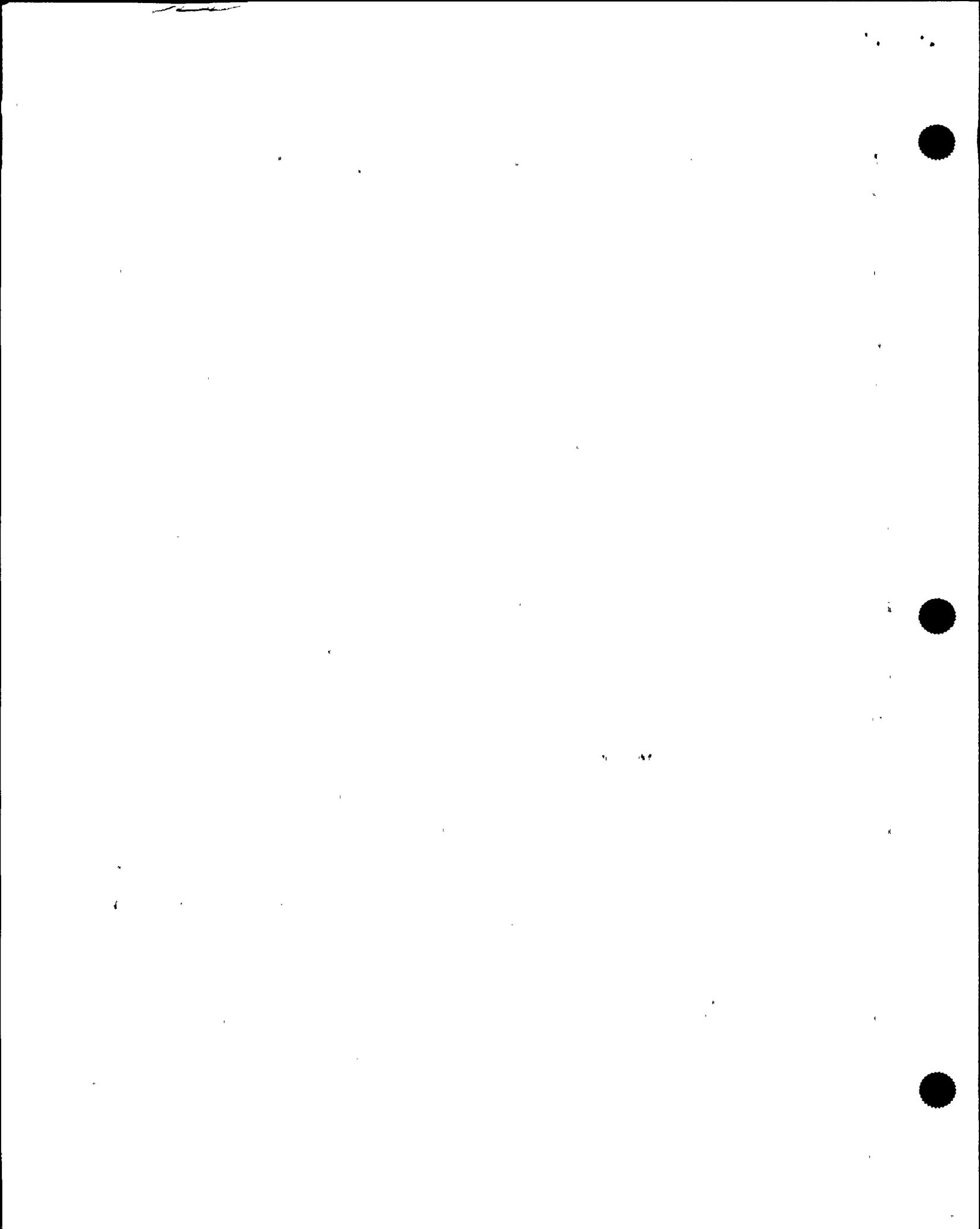
15 MR. VATTER: Okay, and that's what gives you the  
16 four rod display also?

17 MR. HANCZYK: Yes.

18 MR. VATTER: Okay, so that guy turned off and --

19 MR. HANCZYK: Well, it went into inop for I don't  
20 know what reason and I went back and hit the reset and had  
21 them check after I hit the reset which helped them out. I  
22 don't know how much it helped them out. They got a better  
23 update on some of their stuff and they were still left with  
24 six rods not indicating full in.

25 I made a suggestion to the operator that was on



1 the 603, Dave Rathbun, that he should suggest to the Site  
2 Emergency Director to jumper out the scram or get the scram  
3 re-set for -- because sometimes it's been a known problem  
4 that sometimes we can get the rods to indicate full in if  
5 you can get that scram signal out of the circuitry and then  
6 the rods will pick up and he did make that suggestion.

7 It was done and then we got all our rod  
8 indications.

9 MR. VATTER: Why would the scram signal be -- keep  
10 you from having a rod full-in position?

11 MR. HANCZYK: It drives the rod past the fully  
12 inserted position. It drives it past that read switch.

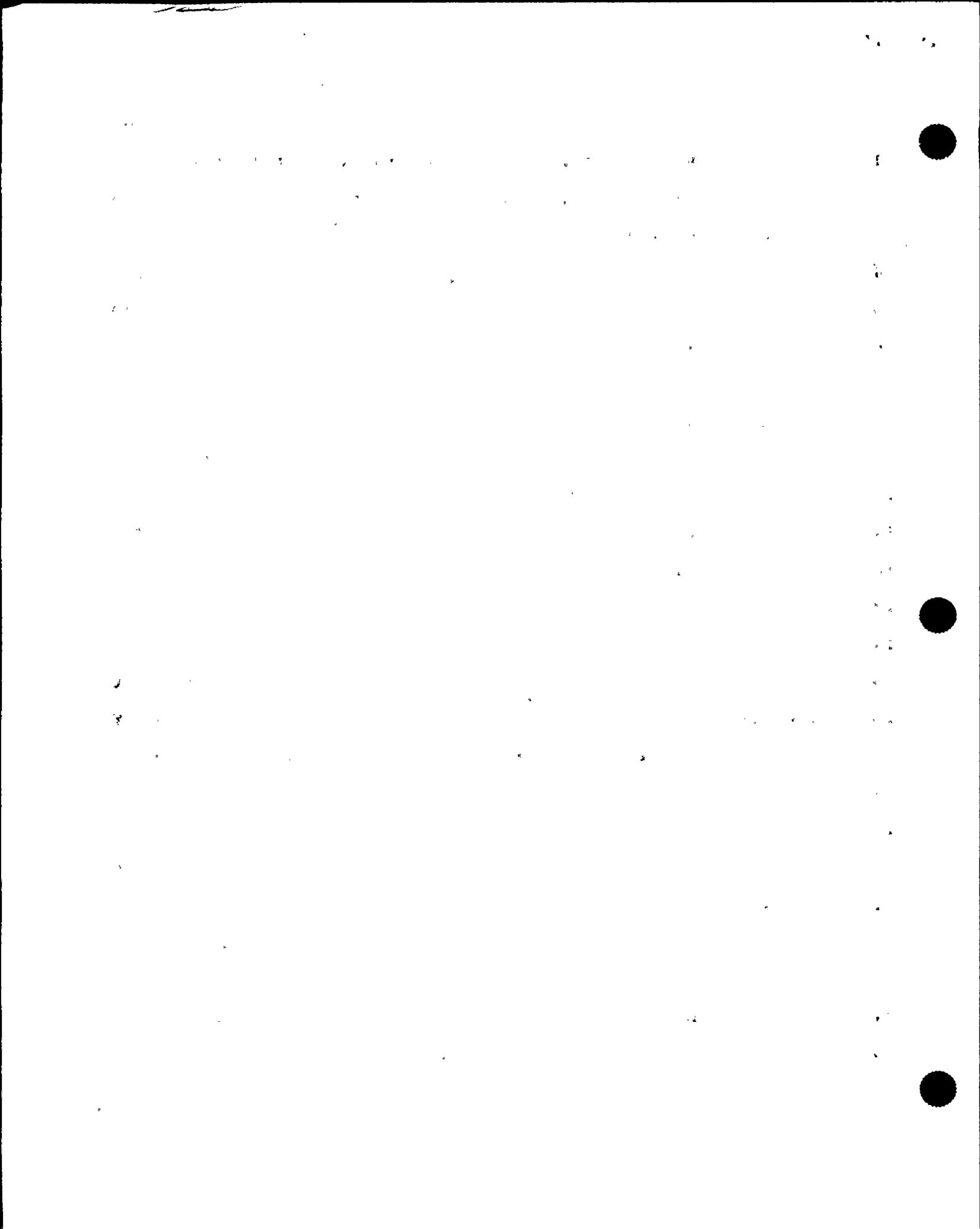
13 MR. VATTER: Okay, so those rods were indicating  
14 nothing then?

15 MR. HANCZYK: Yes, non-blank. When they did get  
16 that reset then I guess they got all of them and then there  
17 was one rod that was flipping back and forth that was -- I  
18 am not sure if it was reading xx and 00.

19 You'll have to talk to Mark Vogle about that. He  
20 was the one who was watching it.

21 Then we just assisted on the recovery and ended up  
22 later on doing crowd control, kicking people out of the  
23 control room but didn't actually have a job and putting them  
24 back into the Beehive.

25 MR. VATTER: What is the Beehive?



1 MR. HANCZYK: It's an operator's staging area.  
2 It's where -- we'll go over there and we can get our  
3 operators readily if we need them for jobs.

4 It's right across the hall.

5 MR. VATTER: What time do you normally go home?

6 MR. HANCZYK: What time do I normally go home?

7 Normally we start turnover at 6:00 and we're out of the  
8 control room by a quarter after 6:00 OR 6:30, depending on  
9 the length of material that had to be turned over that day.

10 MR. VATTER: Do you turn over the plant in a OE  
11 routine in the control room?

12 MR. HANCZYK: Yes, I do.

13 MR. VATTER: So what time did you finally get  
14 relieved and could get out of the control room then?

15 MR. HANCZYK: I got relieved at 11 o'clock. Then  
16 I had to fill out my sheet before they would let me leave.

17 MR. VATTER: I can't think of anything else that I  
18 want to ask right now. Rich, do you?

19 MR. CONTE: Besides putting the hogger on, was  
20 there anything, any other system that you manipulated from  
21 the time -- you said you got involved with crown control.  
22 Did you actually get back on the panels to the operating  
23 equipment? Did you see any malfunctions?

24 MR. HANCZYK: I assisted in -- I assisted in  
25 getting the clean steam reboiler back on the aux boilers.



1 I didn't actually do the manipulations but I was  
2 helping and trying to get the -- giving suggestions for  
3 trying to get the little air booster pump started back up.

4 MR. CONTE: You were out in the plant or in the  
5 control room?

6 MR. HANCZYK: In the control room.

7 MR. CONTE: Anything else that you were doing in  
8 the time period from the hogger to the time you got  
9 relieved?

10 MR. HANCZYK: Oh, yes, I ended up going after  
11 that, after I did the hogger, I ended up going to damage  
12 control party and --

13 MR. CONTE: Where is that?

14 MR. HANCZYK: I went to the OSC over at Unit One.  
15 It was damage control party to try to restore the UPS's and  
16 find out what was wrong with them.

17 We ended up getting three out of five.

18 MR. CONTE: This was -- they were already in the  
19 maintenance. This was to get them back to the normal  
20 supply?

21 MR. HANCZYK: Yes.

22 MR. CONTE: I see. Who was heading up that effort  
23 in the OSC?

24 MR. HANCZYK: I was coordinating with Bob Crandall  
25 through John Conway -- is that his name?

10

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1 MR. HELKER: John's not in the OSC.

2 MR. HANCZYK: No. I can't remember who was in the  
3 OSC but I went through Bob, I was going through Bob Crandall  
4 and that's who the electrician was that was down there with  
5 me.

6 MR. CONTE: Did you get relieved in the OSC?

7 MR. HANCZYK: No, I did not. I got relieved in  
8 the control room. I did a turnover in the control room.

9 MR. CONTE: When did you get back into the control  
10 room to do this turnover to the OSC?

11 MR. HANCZYK: About 11 o'clock.

12 MR. CONTE: So I guess you got the word somehow  
13 somebody said you're a mid-shifter, you need to get relieved  
14 and go back to the control room?

15 MR. HANCZYK: We were all done with the UPS's and  
16 they didn't need our damage control party anymore and they  
17 said that we could go back to the control room.

18 MR. CONTE: When you say you were all done with  
19 the UPS's, you were done with the plans for restoring to  
20 normal?

21 MR. HANCZYK: We were done restoring as many UPS's  
22 as we could.

23 MR. CONTE: Oh, okay, so you were giving advice  
24 in the OSC and somehow transmitting communications out in  
25 the plant or were you actually going out?



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1 MR. HANCZYK: I was out in the plant.

2 MR. CONTE: Doing the transfer?

3 MR. HANCZYK: Doing the transfer, yes.

4 MR. CONTE: Were you using any procedures to do  
5 the transfer?

6 MR. HANCZYK: No.

7 MR. CONTE: Verbal direction from who?

8 MR. HANCZYK: Now my head's going, I just  
9 mentioned his name -- Bob Crandall. Bob Crandall, system  
10 engineer.

11 We --

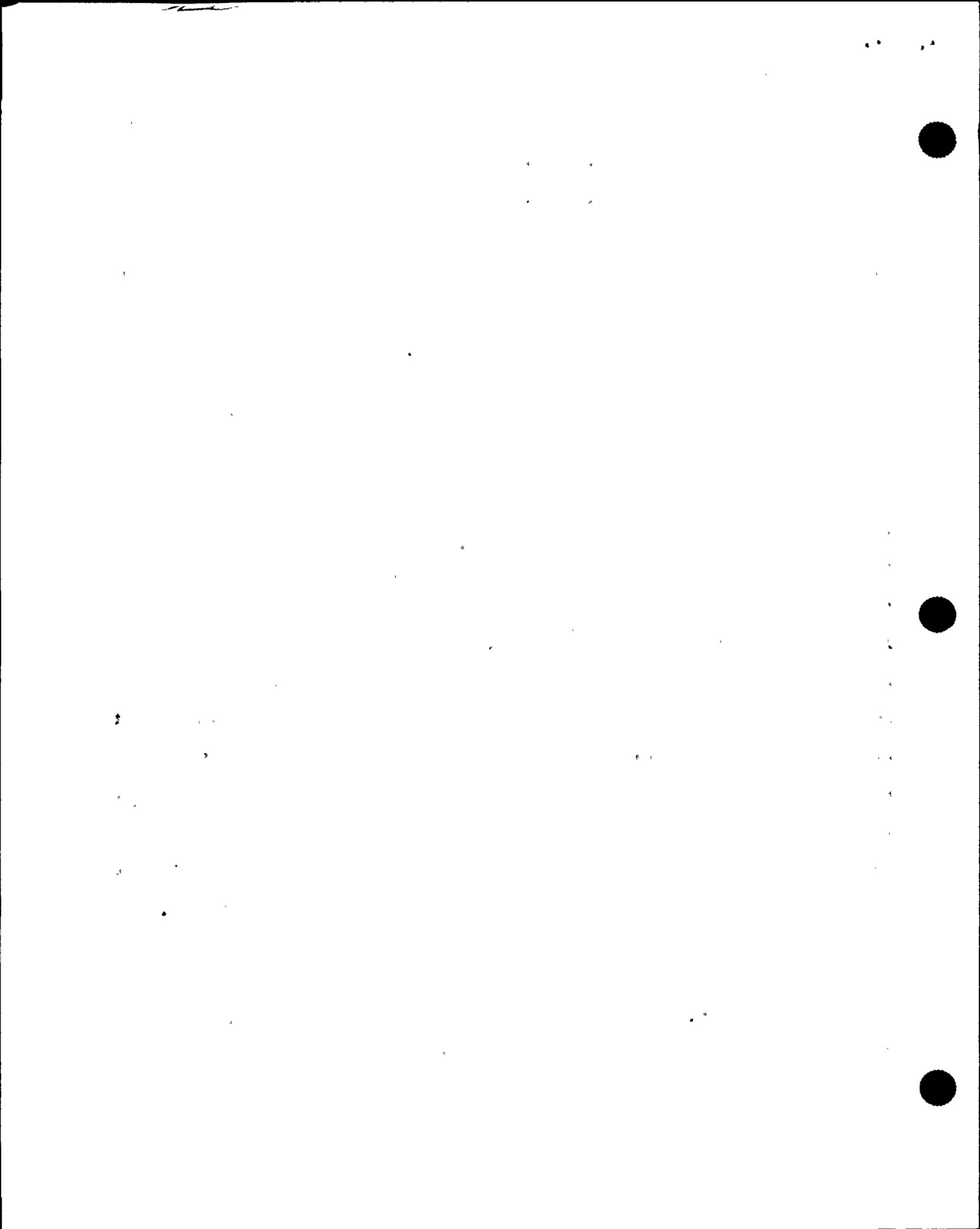
12 MR. CONTE: And you were successful in what you  
13 were doing?

14 MR. HANCZYK: Yes, we had -- there was a few logic  
15 problems within that -- they kept trying to open the CB-4  
16 breakers when we tried to put them back on. We shut off the  
17 logic in and then turned the logic back on. That's  
18 something that's not in any procedure that I know of, to do  
19 that.

20 MR. CONTE: You didn't have to use the disconnect  
21 on that? You didn't disconnect that manually, the motor?

22 MR. HANCZYK: That was open already and they  
23 actually had to turn them -- they already had to turn them  
24 and do that.

25 There was a P-6 plug you had to pull and that's in



1 the procedure but actually doing that, that was a part of  
2 the procedure that you would have had to have done anyways  
3 to get them back on line.

4 MR. CONTE: But once again you're saying that the  
5 party that went out there was not using procedures. There's  
6 electricians that knew what to do--

7 MR. HANCZYK: Bob Crandall --

8 MR. CONTE: Like Bob Crandall was out there with  
9 you supervising?

10 MR. HANCZYK: He was the electrician that was out  
11 there and Perry --

12 MR. HELKER: Bob's the Assistant Engineer --

13 MR. HANCZYK: And Perry --

14 MR. HELKER: Perry Burch, the IT technician.

15 MR. HANCZYK: You'll see that on, if you look at  
16 the OSC damage control team, you'll see who was out there.

17 MR. CONTE: Were you the only licensed operator on  
18 that team?

19 MR. HANCZYK: No.

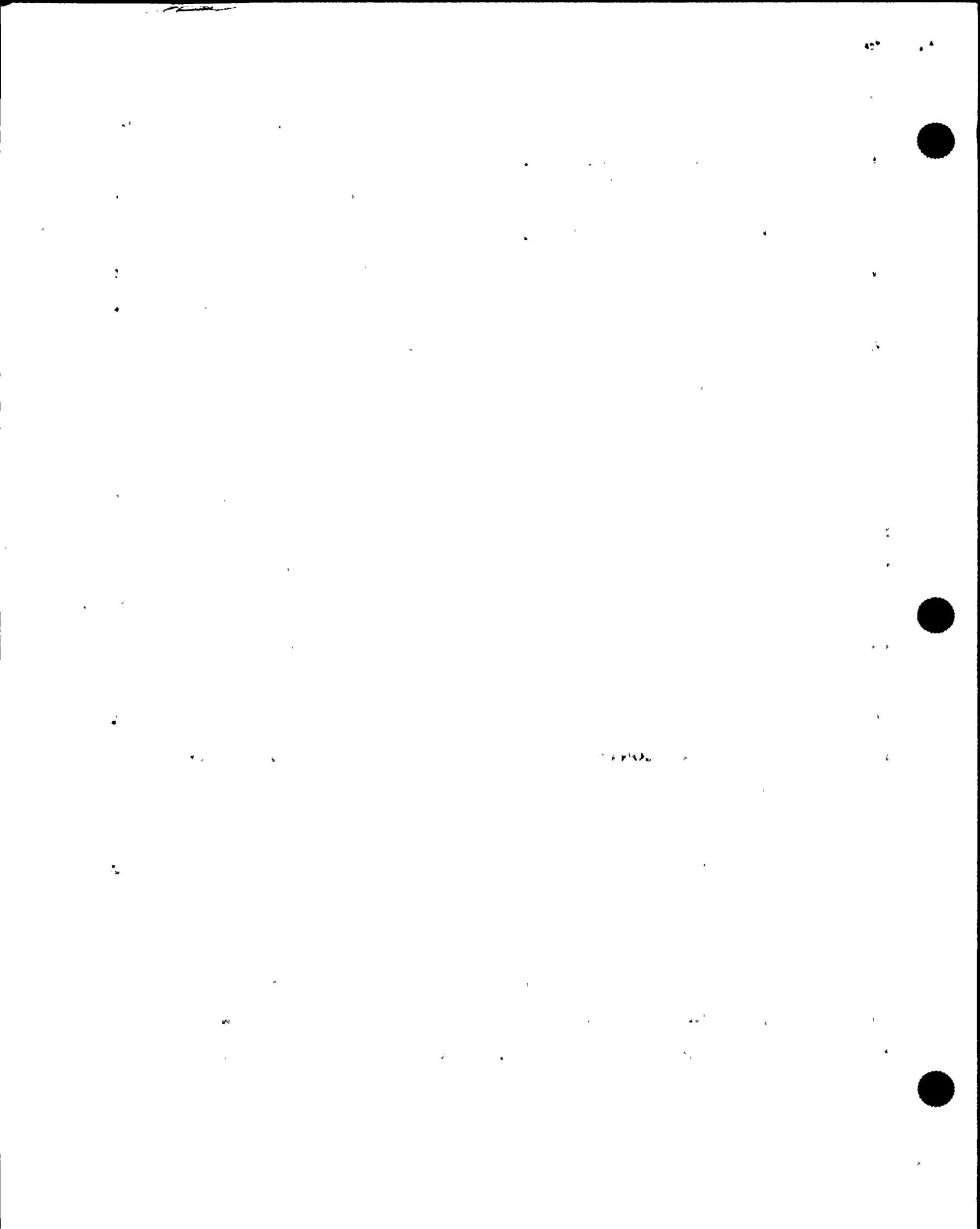
20 MR. CONTE: Any SROs?

21 MR. HANCZYK: No, no SROs. Bob Bergenstock was  
22 with me.

23 MR. CONTE: Bergenstock. He's an RO?

24 MR. HANCZYK: Yes, he is.

25 MR. CONTE: Okay. I guess that takes us to the



1 day, the end of your day.

2 I would like kind of a retrospective question in  
3 the area of your -- I think you gave us a good feel for your  
4 past experience and what you knew how to do.

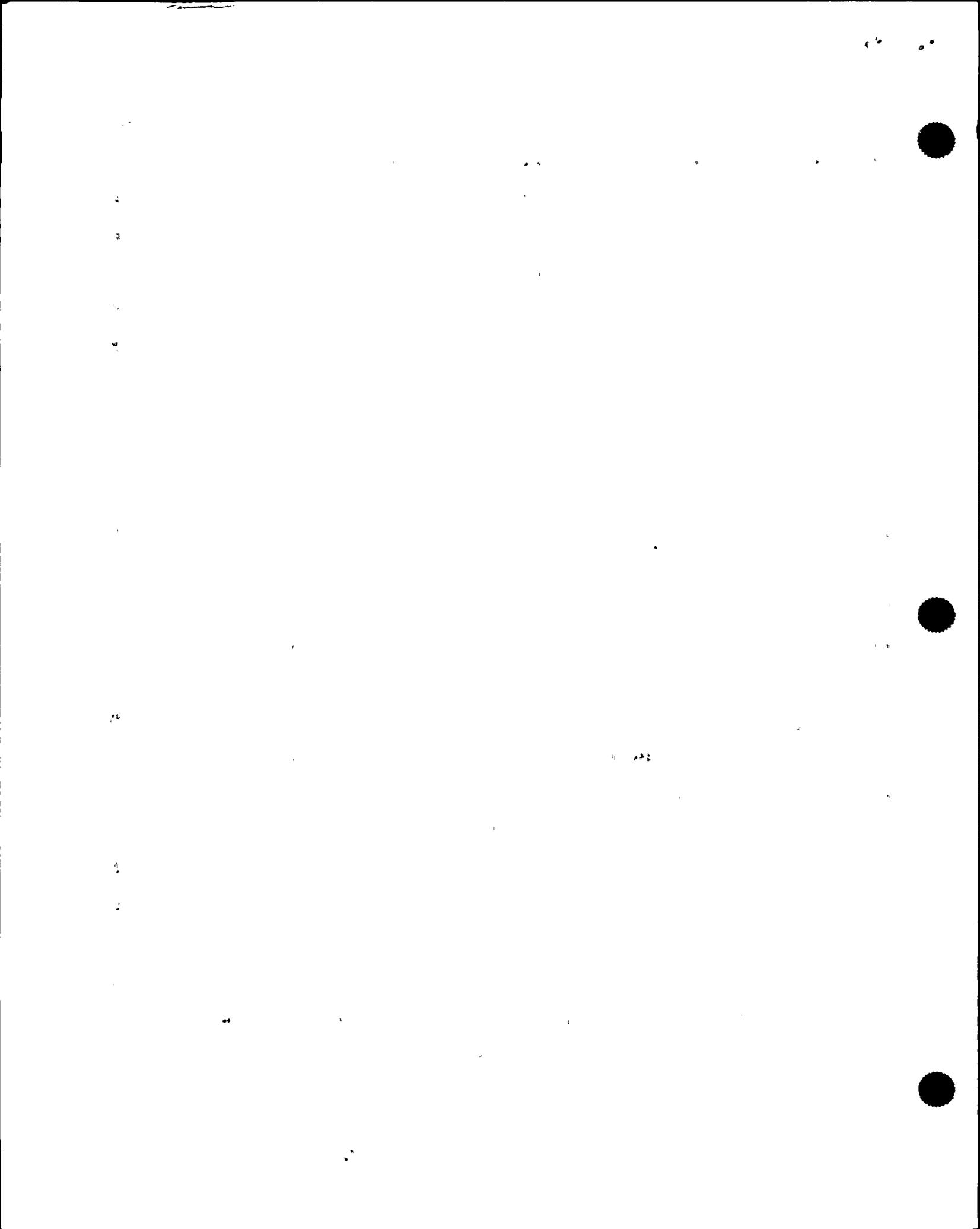
5 Is there something in your mind with respect to  
6 training that kind of prepared you or not prepared you for  
7 this event? Is there something positive or negative about  
8 both that you can share?

9 MR. HANCZYK: Sure. I think that our simulator  
10 training is -- it prepares you for this type of event -- not  
11 specifically this event because I don't think this was like,  
12 I don't think anybody thought this was possible but we have  
13 had electrical system failures and combatting those kinds of  
14 casualties is something that we do and training did train us  
15 well for that.

16 The physical -- the thing that they didn't do that  
17 was really tough is -- what probably would have saved us a  
18 lot of time is physical hands-on training with the UPS's.

19 I realize it's got to be hard to do something like  
20 that. If you could get a mock-up or something where you  
21 could physically put your hands on this thing and say, yes,  
22 this is what I have got to do, you know.

23 Our procedure has us try to transfer our quals has  
24 us try to do this, as a qual type of thing but it's a  
25 simulator and you don't learn as much from a simulator as



1 you do from a perform, if you can actually go down and put  
2 your hand on that breaker and feel how it is to grab that  
3 roll-bar and lift it up and how to grab it and push it back  
4 in.

5 MR. CONTE: When you talk about UPS's you are also  
6 referring to the safety UPS's. You really haven't had  
7 hands-on for those in combatting power.

8 MR. HANCZYK: In combatting power?

9 MR. CONTE: Outages or losses of those UPS's?

10 MR. HANCZYK: No. You know, you don't do that as  
11 a routine. That's a simulate more than there is a perform.

12 You'd be putting a lot of strain on those machines  
13 if you would, you know, do that. You would have to come up  
14 with some sort of mock-up for it in order to do it.

15 We have taken down in our last outage, we have in  
16 fact I took a UPS down and I brought a UPS back up and when  
17 we have divisional outages the last refuel outage we had  
18 divisional outages and I have done it then.

19 MR. CONTE: Is there anything else that you could  
20 think of, positive or negative, with respect to what  
21 training does to prepare you or not prepare you for this  
22 event, type of event.

23 MR. HANCZYK: No. As long as they keep up the  
24 simulator training, I am more than happy with that.

25 They are -- we do a good job on simulator. We do



25 2

1 a lot of reviewing of what we did good and what we did bad  
2 and our style of training is very, very appropriate for a  
3 situation like this.

4 MR. CONTE: Okay. I think I'm about out of  
5 questions at this time.

6 MR. VATTER: I'm about out in a lot of ways.

7 [Laughter.]

8 MR. CONTE: Time for a break? We've been going  
9 about an hour and a half?

10 MR. HELKER: Just a point of interest, Bob  
11 Crandall and I had talked about a week before about UPS  
12 training and they felt that operators needed more training  
13 so he'd written up a training request for that.

14 MR. CONTE: Did he write a training request?

15 MR. VATTER: I'm sorry, didn't you all get UPS  
16 training -- that's the kind of thing

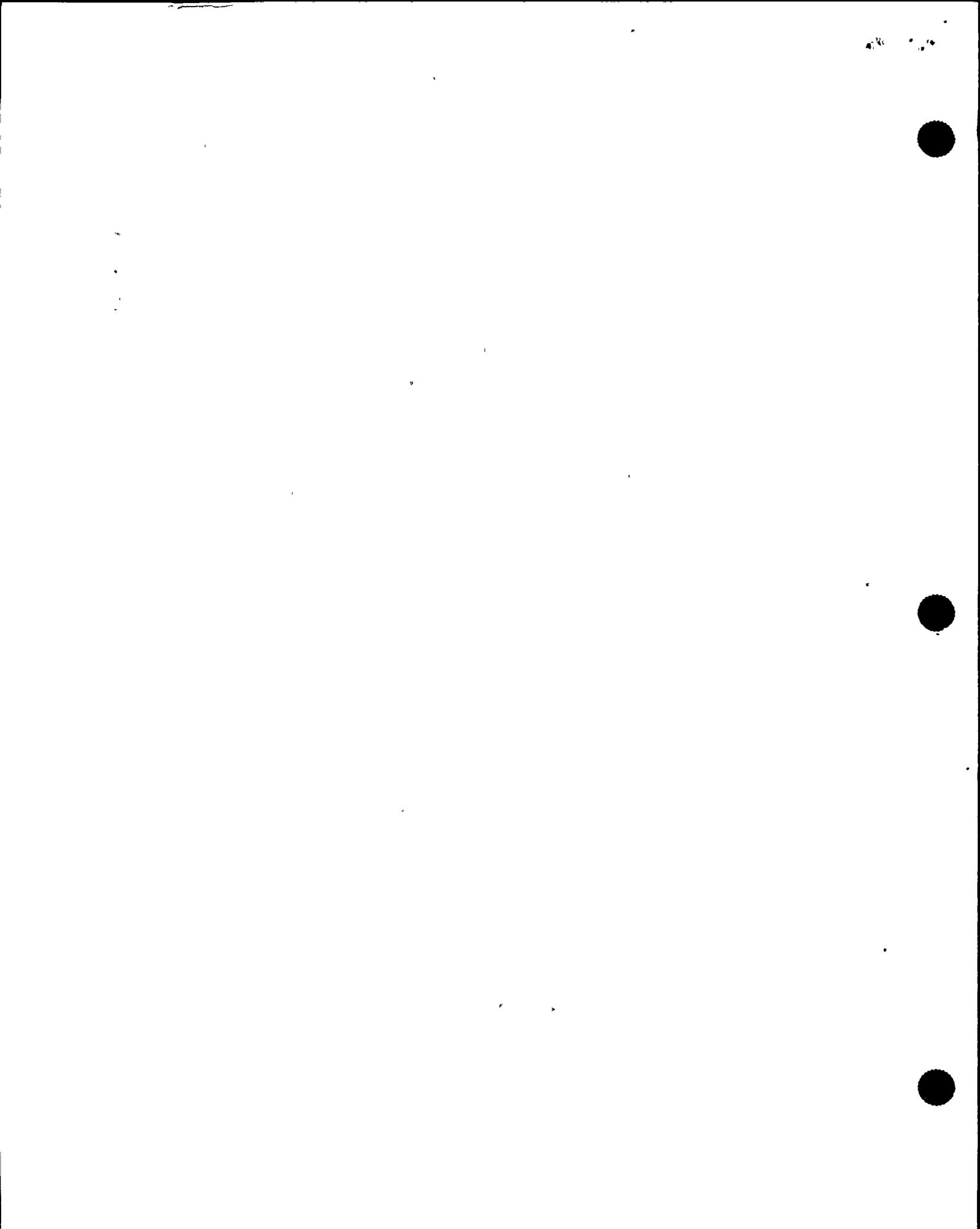
17 MR. HELKER: That was identified as Bob thought  
18 that we needed more training about a week before and he'd  
19 come to me and talked about it.

20 MR. VATTER: I'll let you say it --

21 MR. CONTE: I guess we're done with the interview,  
22 is that right? Let's stop the machines.

23 [Whereupon, at 12:50 p.m., the taking of the  
24 investigative interview was concluded.]

25



REPORTER'S CERTIFICATE

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

in the matter of:

NAME OF PROCEEDING: Int. of DAVID HANCZYK

DOCKET NUMBER:

PLACE OF PROCEEDING: Scriba, N.Y.

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.

  
\_\_\_\_\_

JON HUNDLEY

Official Reporter  
Ann Riley & Associates, Ltd.

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PHYSICS DEPARTMENT

PHYSICS 311

1952