

# OFFICIAL TRANSCRIPT OF PROCEEDINGS

Agency: Nuclear Regulatory Commission  
Incident Investigation Team

Title: Nine Mile Point Nuclear Power Plant  
Interview of: JIM GRAFF

Docket No.

LOCATION: Scriba, New York

DATE: Wednesday, August 21, 1991

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
INCIDENT INVESTIGATION TEAM

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Interview of :  
JIM GRAFF :  
(Closed) :  
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Conference Room B  
Administration Building  
Nine Mile Point Nuclear  
Power Plant, Unit Two  
Lake Road  
Scriba, New York 13093  
Wednesday, August 21, 1991

The interview commenced, pursuant to notice,  
at 3:32 p.m.

PRESENT FOR THE IIT:  
Michael Jordan, NRC  
John Kauffman, NRC

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

[3:32 p.m.]

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2  
3 MR. JORDAN: Good afternoon. It's August 21st,  
4 1991. It's 3:30 in the afternoon.

5 We are at the Nine Mile Point, Unit Two, in the P  
6 building. We are conducting interviews concerning the  
7 transient that occurred on August 13th, 1991.

8 My name is Michael Jordan. I am with the NRC, out  
9 of Region III.

10 MR. KAUFFMAN: John Kauffman, out of NRC  
11 headquarters.

12 MR. GRAFF: I'm Jim Graff. I'm a reactor operator  
13 at Nine Mile Point, Two.

14 MR. JORDAN: Okay, Jim. Can you just give me an  
15 idea what your background is?

16 MR. GRAFF: Okay. I was a reactor operator for  
17 six years in the Navy and I got out in 1982.

18 I was hired for Unit Two but before that they sent  
19 us over to Unit One. I licensed there as a reactor  
20 operator and then I came over to Unit Two and I have been  
21 licensed here for five to six years -- I don't know exactly.

22 MR. JORDAN: Do you know when you licensed on Unit  
23 One?

24 MR. GRAFF: Like '83 or '84.

25 I got out of the Navy in '82, so I have been here





1 almost nine years.

2 MR. JORDAN: So you are an RO?

3 MR. GRAFF: Yes.

4 MR. JORDAN: Okay. Are you on midshifts or were  
5 you on day shifts?

6 MR. GRAFF: I just came in that morning for day  
7 shift.

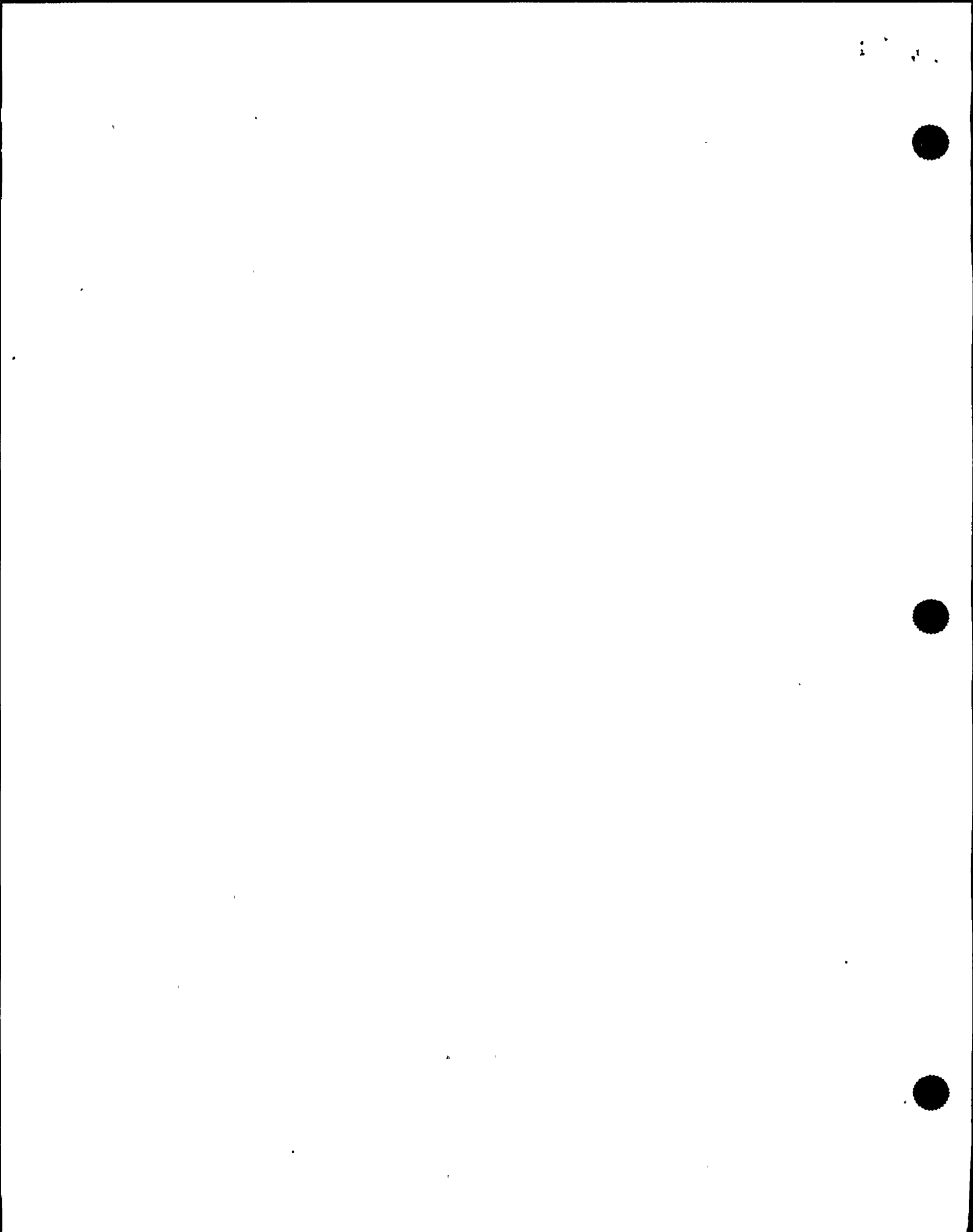
8 MR. JORDAN: Okay. Why don't you give us an idea  
9 what time you showed up and just walk us through, as you  
10 came through the gate.

11 MR. GRAFF: Okay. I got there just after 6:00 and  
12 the Security guards wouldn't let me in so I called the  
13 control room, got the ASSS that was coming on shift to tell  
14 them to let me in, so they let me in and I got to the  
15 control room about 6:10 and the first thing the SSS told me  
16 to do was to send someone down to locally find out what  
17 condenser vacuum was, because --

18 MR. JORDAN: Can I ask you, as you traversed  
19 through the gates up to the control room, did you go  
20 directly to the control room to the locker room?

21 MR. GRAFF: Directly to the control room. I knew  
22 something was wrong.

23 MR. JORDAN: In your traversing to the control  
24 room, can you give us an idea of the way you went and what  
25 the lighting was like between --



1 MR. GRAFF: The emergency lighting was on in the  
2 staircase I went up by the elevator there in the control  
3 building. I went up the stairs there and I could tell all  
4 the emergency lighting was on and everything else was off.

5 MR. JORDAN: When you say emergency lighting,  
6 there's battery packs in the wall?

7 MR. GRAFF: Right.

8 MR. JORDAN: Those were on?

9 MR. GRAFF: Yes -- well, I don't even think those  
10 were on. I think the thing was pretty much dark.

11 MR. JORDAN: It was dark?

12 MR. GRAFF: Yes.

13 MR. JORDAN: The stairwell was dark?

14 MR. GRAFF: Right.

15 MR. JORDAN: Which stairwell did you go up?

16 MR. GRAFF: By the elevator there, control room  
17 elevator.

18 MR. JORDAN: What building is that called?

19 MR. GRAFF: It's really the aux service building,  
20 I guess you would call it.

21 MR. JORDAN: That's by the elevator?

22 MR. GRAFF: Right.

23 MR. JORDAN: You took the stairway or hallway to  
24 the --

25 MR. GRAFF: 306 elevation.



1 MR. JORDAN: 306? That's the control room  
2 elevation?

3 MR. GRAFF: Yes.

4 MR. JORDAN: From the stairwell to the control  
5 room, lighting no problem or a problem?

6 MR. GRAFF: You could see but it was darker than  
7 normal.

8 MR. JORDAN: Okay, you get to the control room.  
9 How was the control room?

10 MR. GRAFF: It was quiet. All the lights were on  
11 though. At that time I didn't know -- had no idea what had  
12 even happened.

13 MR. JORDAN: A lot of people in the control room?  
14 Did it look chaotic or did it look like they were -

15 MR. GRAFF: It was calm but I didn't know what was  
16 going on. There was the SSS, the ASSS, the CSO was there  
17 and I think at that time there was like four other ROs, four  
18 or five other ROs in the room.

19 MR. JORDAN: But it looked like everything was,  
20 communications were going well?

21 MR. GRAFF: Yes.

22 MR. JORDAN: Okay, I'm sorry, you say that you  
23 were assigned?

24 MR. GRAFF: The very first thing the SSS told me  
25 was -- I told him I'm available and the very first thing he



1 told me to find out what condenser vacuum was locally  
2 because the meters were failed downscale in the control  
3 room.

4 So I had come up with a non-licensed operator up  
5 the stairs so I sent -- I went out. Well, first I tried to  
6 call him on the here-here and found out the here-here's  
7 didn't work and that's when everybody told me what  
8 happened.

9 I went out. He was in the hallway. They were  
10 going over to our room where the operators hang out, the  
11 Beehive there.

12 MR. JORDAN: Beehive.

13 MR. GRAFF: I told him we needed condenser vacuum  
14 locally so he went to go get it. I had given him a radio  
15 and then I found out those didn't work either and he went  
16 down there an I went back in the control room.

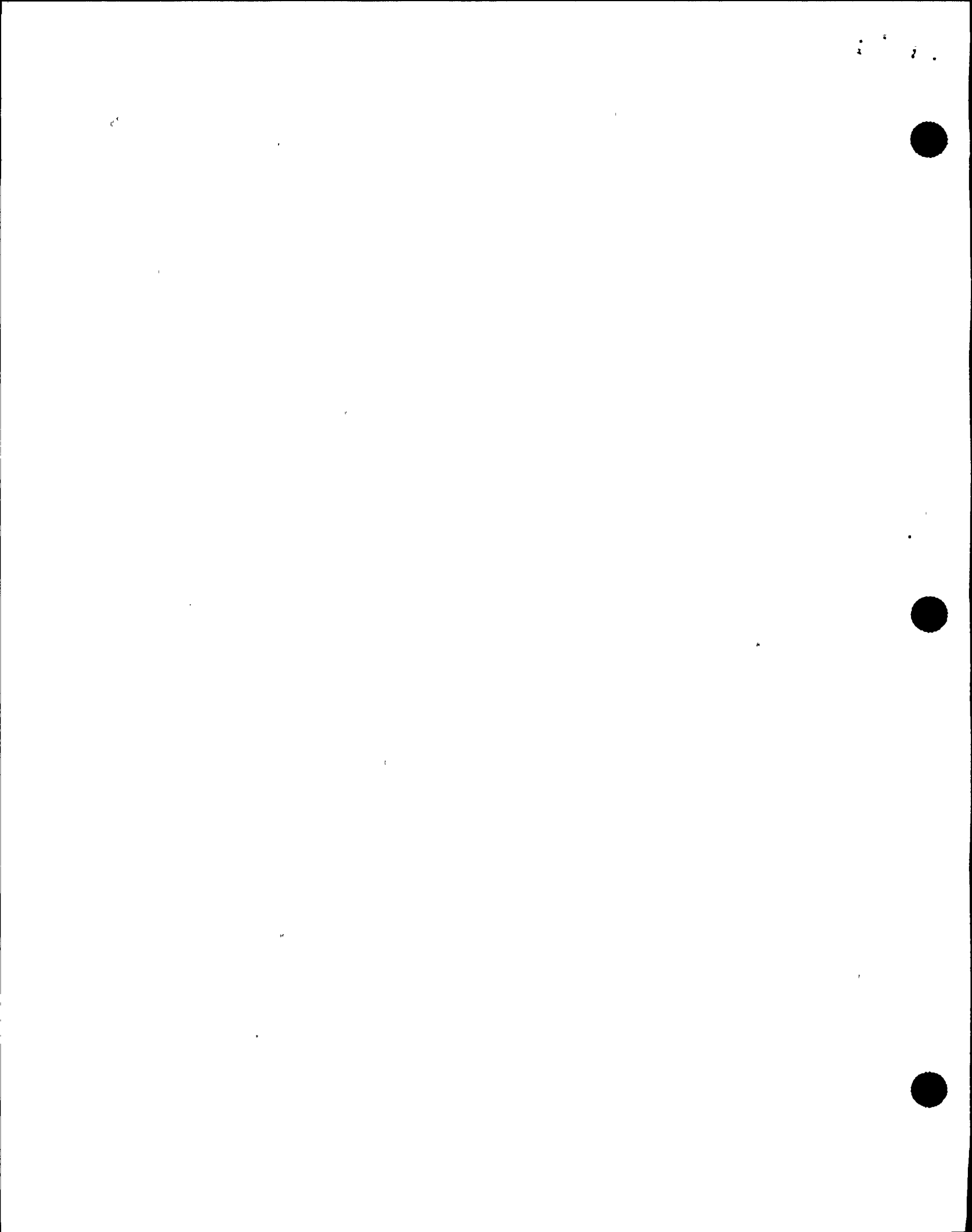
17 Before he even called back to tell me what it was,  
18 they had restored the UPS's, powered the UPS's at I would  
19 guess 630, 640, something like that.

20 We got vacuum indication back then.

21 MR. JORDAN: Okay?

22 MR. GRAFF: Okay, and then the SSS told me to get  
23 a condensate booster pump running to restore level and me  
24 and another RO, Chuck Gerberich, who was --

25 MR. JORDAN: Was this before or after the power





1 had returned?

2 MR. GRAFF: I would say after. I can't say for  
3 sure but I am pretty sure it was after the power had been  
4 returned.

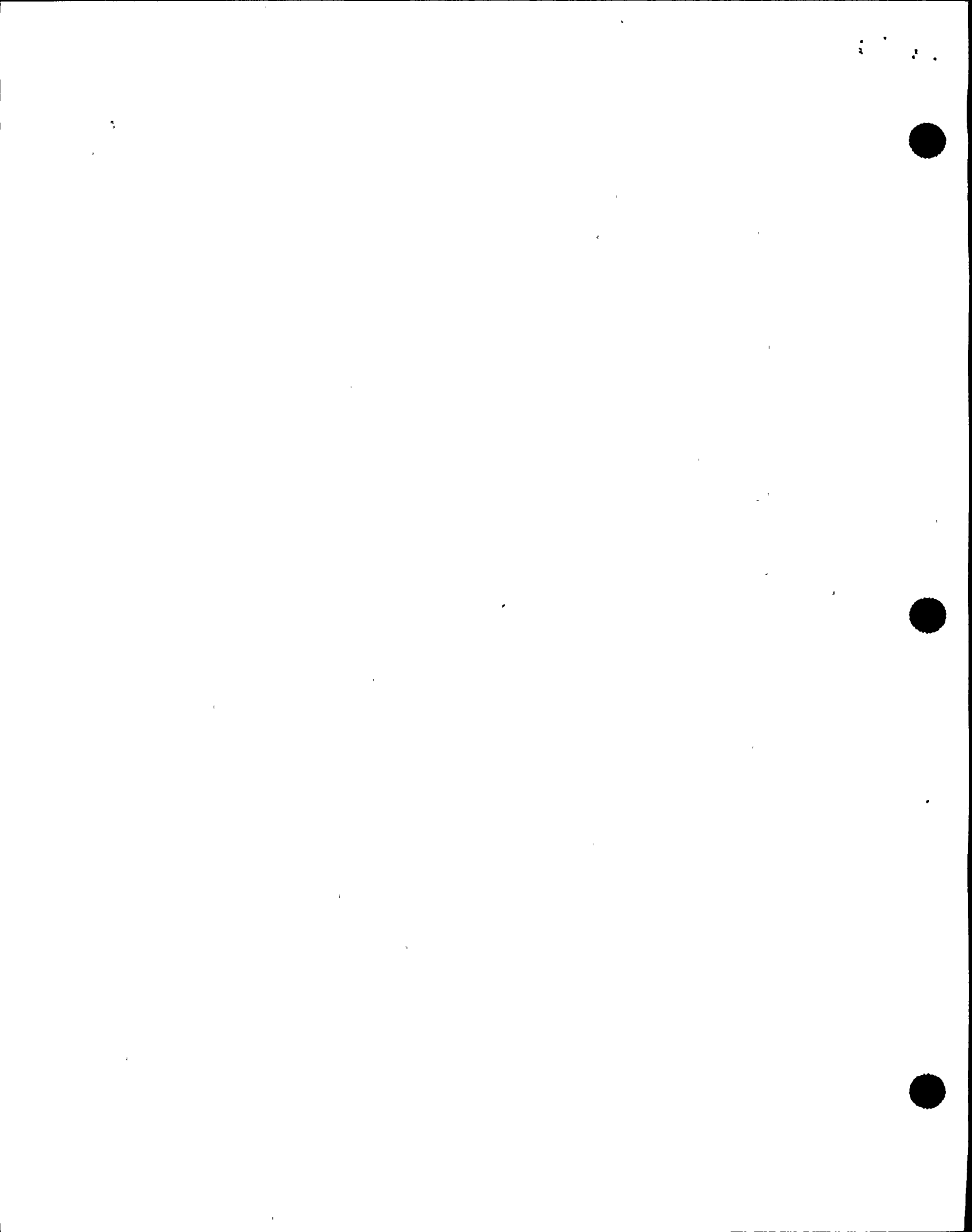
5 MR. JORDAN: Did he say get condensate-condensate  
6 booster --

7 MR. GRAFF: The condensate booster pump running,  
8 so by that time there was a lot more operators in the  
9 control room and there was a couple -- I'm told a couple of  
10 non-licensed operators to go down, make sure the AA booster  
11 pumps are ready to run and one of them to go to the con-  
12 demin panel to make sure everything looked all right there,  
13 so they took off to go do that and then maybe ten minutes,  
14 fifteen minutes later they called back and said everything  
15 looked good down there. We started the AA condensate  
16 booster pump up.

17 MR. JORDAN: Were no condensate booster pumps  
18 operating?

19 MR. GRAFF: Right. When I went in there the only  
20 thing running was the AA condensate pump. Everything else  
21 was green flagged. I didn't know it at the time but  
22 afterwards they told me they had shut them off. I knew they  
23 didn't trip because they weren't red flagged. They were  
24 green flagged.

25 MR. JORDAN: So no condensate pumps tripped. Did



1 they turn off all the condensate water booster pumps?

2 MR. GRAFF: I guess they got up to level two -- or  
3 202 inches in the vessel so they shut everything but the AA  
4 condensate pump off.

5 MR. KAUFFMAN: By "green flag" you mean the  
6 breaker position --

7 MR. GRAFF: Took it to stop. Right, if you go to  
8 stop you got a green flag.

9 MR. KAUFFMAN: You're not talking the light,  
10 you're talking the --

11 MR. GRAFF: Well, right. You have the green  
12 light.

13 MR. KAUFFMAN: Right.

14 MR. GRAFF: But you also have the green flag,  
15 right? If it tripped, if it was running and it tripped you  
16 would have the green light and a red flag.

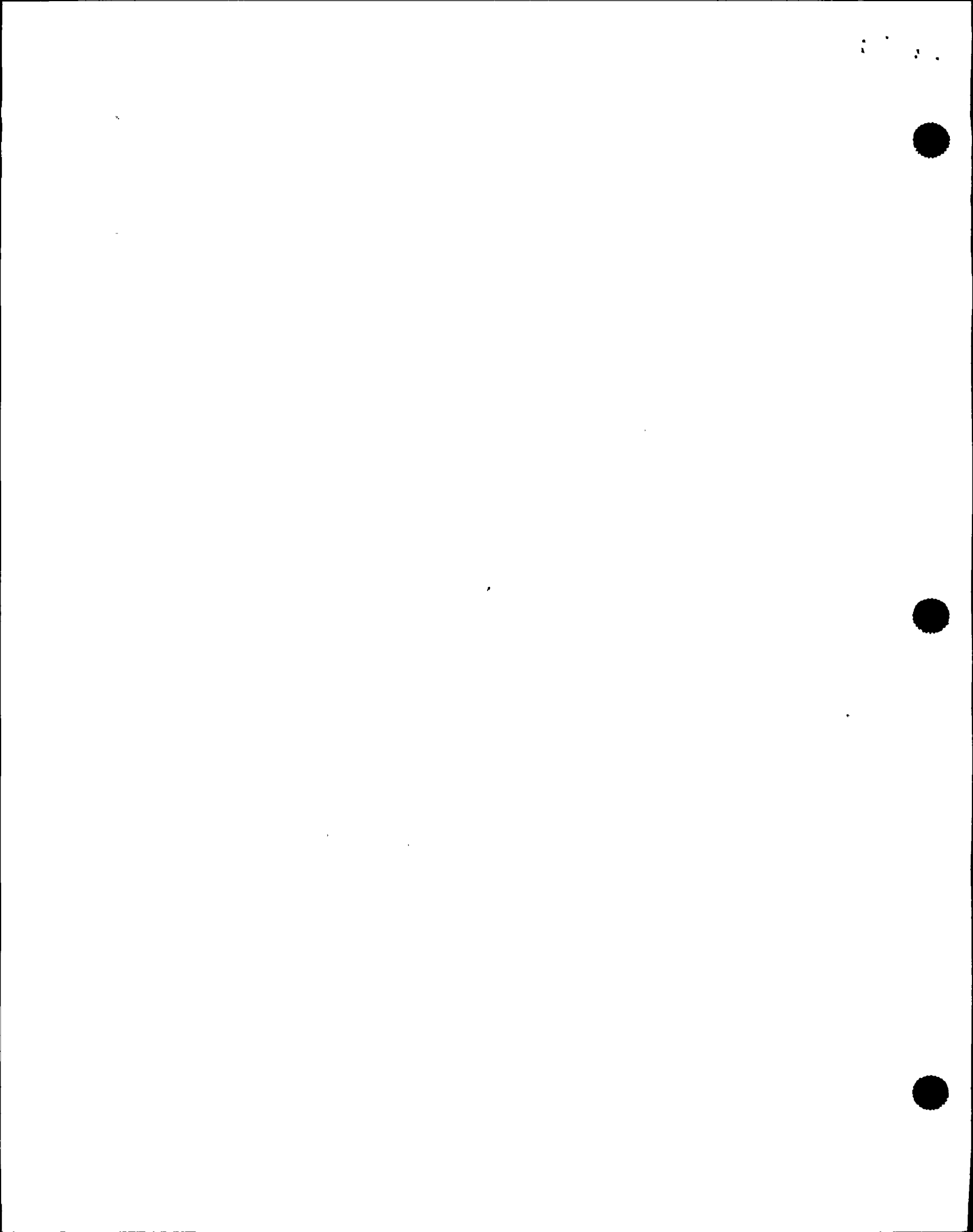
17 MR. JORDAN: Okay, so all the green flags were  
18 aligned with the green lights --

19 MR. GRAFF: Right.

20 MR. JORDAN: Which indicated that they were  
21 turned off?

22 MR. GRAFF: Someone turned them off.

23 MR. JORDAN: So that any condensate pump running  
24 and you're getting ready to start the A condensate booster,  
25 right? Okay.



1 MR. GRAFF: So we got the procedure out and we  
2 went per the startup procedure and later on that sort of  
3 messed us up a little, caused a problem later down the line  
4 after we got - well, we got the pump started and it started  
5 fine. Everything was good and reactor pressure at that time  
6 was like 640 or so and we had like 680 discharge pressure,  
7 the booster pump, and so we thought we were all ready to  
8 feed up and we tried feeding with an LB55 valve and we  
9 couldn't get any flow. I think level at this time was like  
10 133 inches.

11 I wasn't getting flow so we tried the LV137 which  
12 has its own separate, that bypass -- well, we got the  
13 booster pump running and in the startup procedure for the  
14 booster pump one of the first things is to verify that the  
15 suction valves, the 84 valves, of the feed pump, shut those.

16 So those were shut --

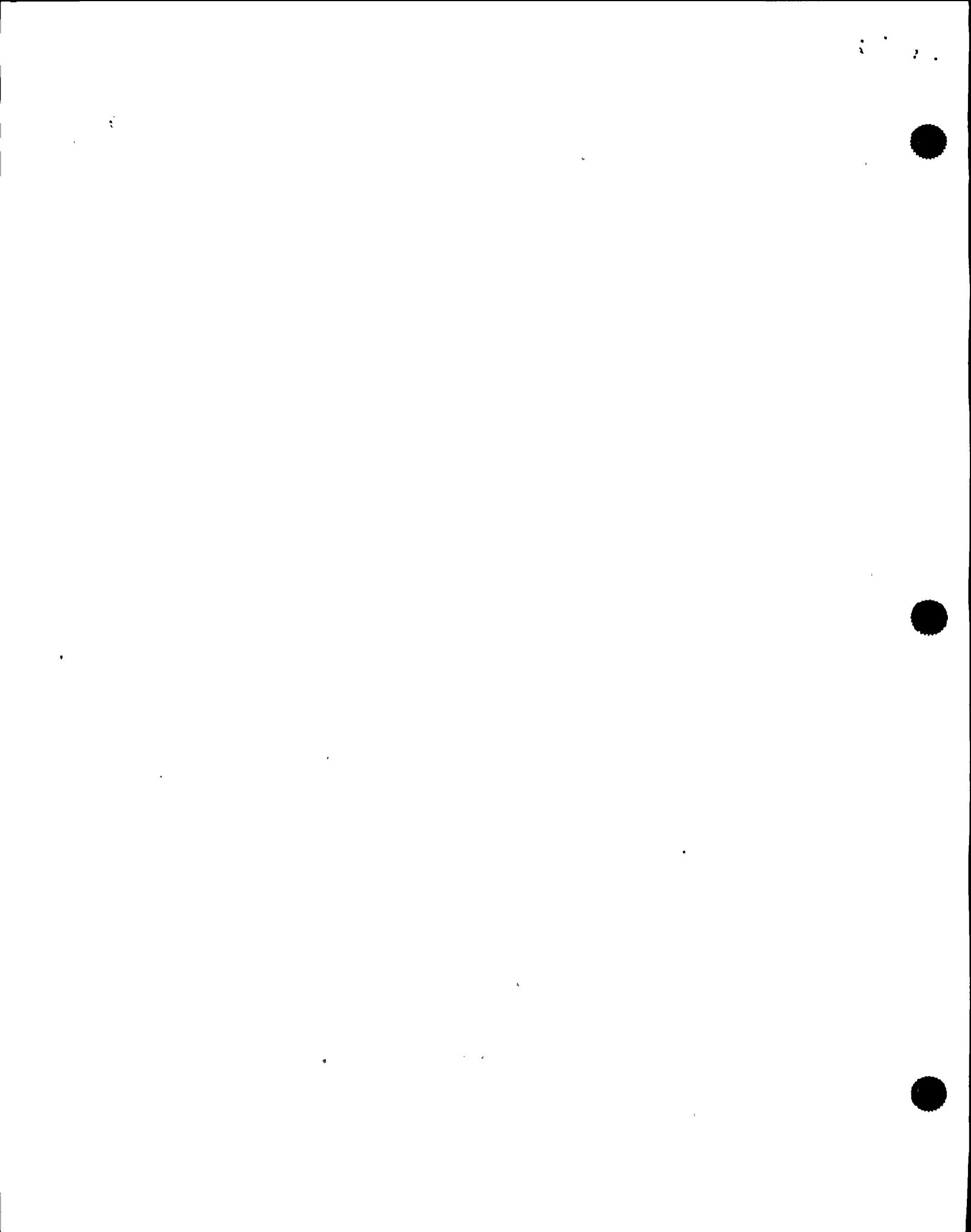
17 MR. JORDAN: What were those numbers?

18 MR. GRAFF: 84s.

19 MR. JORDAN: 84s to the suction to the --

20 MR. GRAFF: -- feed pump. I went to open on it  
21 and I had the green and the red light which I thought the  
22 valve was stroking open, so that's when I tried to feed  
23 while it was going open but I didn't get an indication that  
24 I was feeding.

25 MR. JORDAN: Which valves did you try to open?



1 MR. GRAFF: 84A.

2 MR. JORDAN: So originally you had closed them--

3 MR. GRAFF: Per procedure.

4 MR. JORDAN: To start the A condensate booster  
5 pump?

6 MR. GRAFF: Right. We closed all three of them  
7 per procedure.

8 MR. JORDAN: Then after you got the pump  
9 operating --

10 MR. GRAFF: I attempted to open it.

11 MR. JORDAN: You tried to open the 84s?

12 MR. GRAFF: Right.

13 MR. JORDAN: And A84 and --

14 MR. GRAFF: -- and then I had a red and a green  
15 light, indicating to me that the valve's gone open, so I'm  
16 figuring while it's partially open I am going to try to  
17 feed, but I couldn't with the LV55. I couldn't get any  
18 flow in.

19 MR. JORDAN: The LV55s were closed?

20 MR. GRAFF: They were closed originally so -- and  
21 we also tried to feed with an LV10A which you have meters  
22 for flow indication and I wasn't getting anything so we  
23 decided to go try the 137, because that bypasses the feed  
24 pumps.

25 Then after a while we said, well, let's see what





1 happens when we go closed with the 84 valve and the close  
2 light immediately came on, indicating to us that it never  
3 stroked at all.

4           Once I opened the LV137, that has a separate  
5 meter. I was putting in about 600 gallons per minute and  
6 level was -- Mark Bodoh, he was monitoring reactor water  
7 level, and --

8           MR. JORDAN: How many gallons? What did you say?

9           MR. GRAFF: 600 -- and he told me we were  
10 increasing about one inch every five to ten minutes, level  
11 was going up. The SSS was happy with that because earlier he  
12 had told me not -- once I get feed established, not to feed  
13 to fast because he didn't want to cool down too fast, so we  
14 had a good feed rate and we were in control of it.

15           MR. JORDAN: About one inch per minute?

16           MR. GRAFF: About one inch every five minutes I  
17 would say it was going up.

18           MR. JORDAN: Sorry, go ahead.

19           MR. KAUFFMAN: Do you have any explanation for why  
20 the 84 valve didn't open?

21           MR. GRAFF: I think there's just too much of a  
22 differential pressure across the valve and the procedure  
23 that we were using was assuming the system shut down and  
24 there is a manual bypass valve around the 84 and we asked  
25 the SSS can we send someone out there but at the time they



1 didn't know what the radiation levels in the turbine  
2 building were because all the radiation monitoring was down  
3 because of the problem, so he said no, as long as we are  
4 feeding with the 137 we are not going to send anybody in to  
5 open that bypass.

6 Normally you would open the bypass and then open  
7 that valve and close the bypass but the procedure we were  
8 using was for starting up cold.

9 MR. KAUFFMAN: Do you happen to know the number of  
10 that procedure?

11 MR. GRAFF: I think it is OPE-3.

12 MR. JORDAN: Is that your normal startup  
13 procedure?

14 MR. GRAFF: Yes, for condensate system.

15 MR. JORDAN: Okay, so now you got the AA  
16 condensate pump on. You've got the AA condensate booster  
17 pump on.

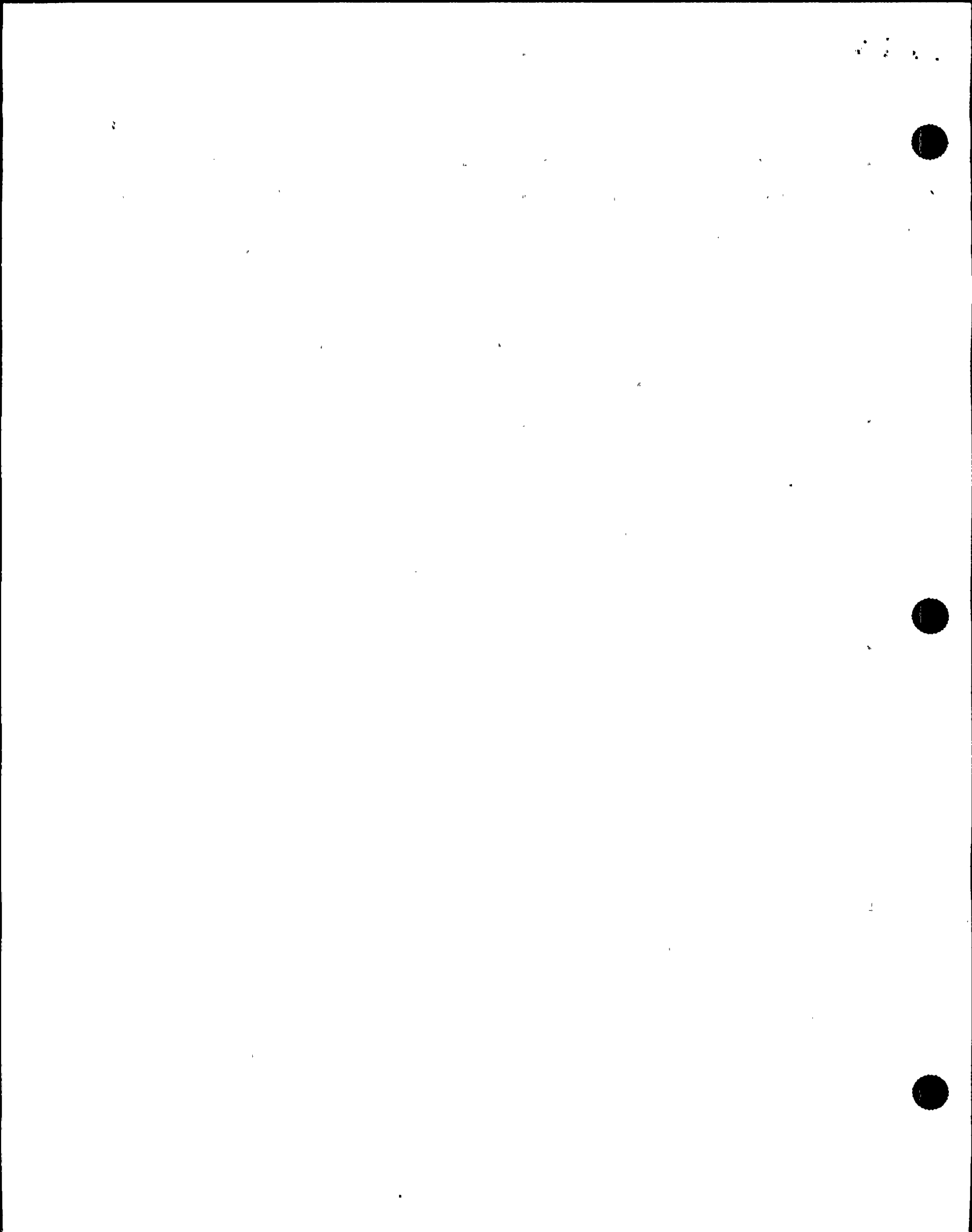
18 MR. GRAFF: Okay -- then some time in there --

19 MR. JORDAN: You are feeding through the LV137--

20 MR. GRAFF: Right.

21 MR. JORDAN: -- water is going to come up about an  
22 inch per five minutes.

23 MR. GRAFF: The we got an annunciator for high  
24 starter temperature on the AA condensate pump, so we told  
25 the SSS that and we all decided -- well, he told us just get



1 another condensate pump running, so we started the B  
2 condensate pump and within five minutes that starter water  
3 high temperature alarm had cleared and when we started that  
4 our discharge pressure out the booster pump went up to like  
5 740, 760, so that increased our feed a little bit more.

6 MR. KAUFFMAN: Do you have an explanation for why  
7 starting that pump would have caused the pump starter water  
8 temperature to come down?

9 MR. GRAFF: Yeah, it was working too hard. It was  
10 supplying all the suction for the booster pump.

11 MR. JORDAN: How do you normally operate? Do you  
12 normally operate -- 12 on 1, 3 on 1?

13 MR. GRAFF: Normally we, up at power, 100 percent  
14 power, we have three condensate pumps and two booster pumps.

15 MR. JORDAN: And how many feed?

16 MR. GRAFF: Two.

17 MR. JORDAN: Two feedwater pumps.

18 MR. GRAFF: Right.

19 MR. JORDAN: Okay -- discharge from the  
20 condensate, from the booster pump increased after starter --  
21 how did the flow increase? The flow go up also?

22 MR. GRAFF: A little bit, yes, 50, maybe 50  
23 gallons per MOR. It's basically the same flow rate -- or  
24 basically the same feed rate, a little better.

25 MR. JORDAN: Okay.



1 MR. GRAFF: The rest of the time I monitored water  
2 level increasing, and kept the SSS informed and meanwhile he  
3 told another RO, R.J. Reynolds, to commence a cooldown, so  
4 he was doing that and the two of us were sort of working  
5 together because as he cooled down I was feeding more.

6 MR. JORDAN: Does this got an automatic level  
7 controller?

8 MR. GRAFF: Yes, it does.

9 MR. JORDAN: That you can put it on? Did you put  
10 it on level or did you maintain manual?

11 MR. GRAFF: I maintained manual. It was full open  
12 the whole time until we started to get up close to the band.  
13 Then he gave me a band of 159.3 to 202.3 and we ended up  
14 getting in a normal band and stabilizing and putting it in  
15 auto.

16 MR. JORDAN: But you did put it in auto?

17 MR. GRAFF: Yes.

18 MR. JORDAN: And it looked okay in auto, it  
19 fluctuated --

20 MR. GRAFF: It was fine.

21 MR. JORDAN: It looked good in auto?

22 MR. GRAFF: Right.

23 MR. JORDAN: Do you have any idea about what time  
24 that was?

25 MR. GRAFF: No, I don't. I told the SSS. He might





1 have logged it. I don't know.

2 MR. JORDAN: So you got up to between 159.3 and  
3 202.3 and put it in auto and how did the rest of your day  
4 go?

5 MR. GRAFF: It was pretty slow really. We had a  
6 lot of coverage there because we had three shifts on, coming  
7 in on days.

8 MR. JORDAN: Did you feel restrained, like people  
9 were backing around you and you couldn't do your work?

10 MR. GRAFF: Actually I thought that everybody did  
11 good. They communicated, everybody worked together. They  
12 did fine.

13 At one point they made an announcement anybody not  
14 doing anything that's not responsible to please leave, so  
15 that cleared out and shortly after that, once we knew it was  
16 in auto, you know, I told the CSO everything and I left too,  
17 just to keep down the congestion.

18 MR. JORDAN: Are you on normal days? Are you a  
19 relief?

20 MR. GRAFF: I am a relief operator.

21 MR. JORDAN: You are a relief operator?

22 MR. GRAFF: Yes.

23 MR. JORDAN: As a relief operator, what does that  
24 -- are you assigned a normal rotating shift or you're on  
25 days --



1 MR. GRAFF: You cover for vacations when people  
2 go on vacation or are sick. You cover for the RO position.

3 MR. JORDAN: But normally you come in days and if  
4 everything is hunky-dory, peachy-keen you just come in and  
5 you are available?

6 MR. GRAFF: Right, you assist the shift that is  
7 on.

8 MR. JORDAN: So once you were no longer needed,  
9 you turn the responsibility for the feedwater to the --

10 MR. GRAFF: Right. It was in auto and the CSO  
11 knew it and his control room E knew it so they monitored it.

12 MR. JORDAN: And you left. Do you know what time  
13 you left the control room?

14 MR. GRAFF: No, I don't.

15 MR. JORDAN: During this time any piece of  
16 equipment not functioning the way you anticipated it to  
17 function?

18 MR. GRAFF: the 84 valves.

19 MR. JORDAN: But that you said--

20 MR. GRAFF: Now I know why but at the time we were  
21 wondering why aren't we getting any feed because we thought  
22 that valve was going open, you know?

23 MR. JORDAN: Okay, any other pieces of equipment  
24 not functioning well?

25 MR. GRAFF: I knew they were having trouble with



1 the turning gear but I wasn't involved in it in any way. I  
2 was taking care of the feed system but, you know, the person  
3 that was talking to them on the radio was a few feet from  
4 me.

5 MR. JORDAN: Okay. Do you know if they  
6 transferred power from the maintenance power on the UPS's  
7 back to normal power when you were in the control room?

8 MR. GRAFF: Yes. I remember them doing that.

9 MR. JORDAN: How did you get that information?

10 MR. GRAFF: I could hear the CSO and the SSS  
11 talking back and forth.

12 By then everything was pretty much -- I was just  
13 standing back monitoring so I could pick up what was going  
14 around the room.

15 MR. JORDAN: And that was via Gaitronics? What  
16 communications did they use did you overhear?

17 MR. GRAFF: I think that they were on the radio

18 MR. JORDAN: Radio. Any communications in the  
19 control room that let people know that that's what their  
20 intention of doing and what they were doing?

21 MR. GRAFF: Yes, there was. They did updates and  
22 stuff. The SSS would give an update and say this is what we  
23 are doing and what we are planning on doing.

24 MR. JORDAN: Did you have a feeling for when you  
25 knew when that was going to happen, the transfer?



1 MR. GRAFF: Actual time? No, I don't.

2 MR. JORDAN: I mean not the actual time -- that  
3 you knew that that was coming and that you were prepared for  
4 it?

5 MR. GRAFF: Yes.

6 MR. JORDAN: He let you know that?

7 MR. GRAFF: Yes.

8 MR. JORDAN: It wasn't just a monitoring of his  
9 radio that you found out about it?

10 MR. GRAFF: No, he did updates. This is what's  
11 going on and --

12 MR. JORDAN: Questions?

13 Okay, this is the good news, bad news kind of a  
14 question.

15 MR. GRAFF: Okay.

16 MR. JORDAN: It's the type of thing that says for  
17 the activities that you were involved with, what piece of  
18 equipment did you -- if there is a piece of equipment that  
19 you say, gee, I'm glad I had that, okay, because that really  
20 assisted me in accomplishing the work I was assigned to.

21 The other end of it it says, gee, I wish I would  
22 have had this piece of equipment, okay, because it really  
23 would have helped me accomplishing my missions and that can  
24 be a myriad of things.

25 MR. KAUFFMAN: Could be knowledge, procedures,





1 training --

2 MR. JORDAN: Training procedures --

3 MR. KAUFFMAN: -- flashlight for walking around in  
4 the dark.

5 MR. JORDAN: The classic example is the guy that  
6 goes out in the plant, says gee, I'm glad this wrench was  
7 hanging on this valve because when I went to operate the  
8 valve I needed the wrench and the other guy that goes out  
9 there in the plant and says, gee, I wish that wrench --  
10 that valve would have had a wrench hanging on it because  
11 when I operated I had to go in and get a wrench and it would  
12 have been of more benefit to me to have the wrench hanging  
13 there.

14 It can be training. It can be procedures -- and  
15 it can be nothing. You may say there was nothing really  
16 that was of more benefit than what was normal in the control  
17 room.

18 MR. GRAFF: Oh, I wish I could have been able to  
19 feed with the normal 55 or LV10.

20 MR. KAUFFMAN: How important was that to you?

21 MR. GRAFF: Well, at first I was like worried how  
22 to get water in.

23 MR. KAUFFMAN: Would you like to have known that  
24 that valve probably wouldn't stroke back open?

25 MR. GRAFF: Yes, I would have liked it. I would



1 have liked to have known that.

2 MR. KAUFFMAN: But you'd have still been stuck by  
3 a procedure telling you to shut it?

4 MR. GRAFF: I wouldn't have been -- right. If I  
5 knew I think I would have started it without shutting it, if  
6 I knew, because the worst part is I waited before I opened  
7 the 137 because I thought that valve was going open because  
8 I had green and red light.

9 It was -- level wasn't going down but it wasn't  
10 going back up so the 137 -- I didn't know if I'd have enough  
11 feed to start going up so we kept trying to get the 84 open.

12 Then the thing I guess I'm glad is that the 137  
13 was enough feed to recover level.

14 MR. KAUFFMAN: But if that 137 hadn't gone open,  
15 would that have been a big problem?

16 MR. GRAFF: If it hadn't?

17 MR. KAUFFMAN: If it had not.

18 MR. GRAFF: Well --

19 MR. KAUFFMAN: Were there other sources of water  
20 available or other pumps?

21 MR. GRAFF: Yes and there was also another path  
22 through the feed system. I think it is 120 which is in  
23 parallel with the 137, but it is a seal-in valve and once  
24 you go to open, that would have overfed the vessel, but if  
25 worse came to worse, that would have been another way to use



1 the feed system.

2 MR. JORDAN: Is there a procedure for using that  
3 valve?

4 MR. GRAFF: No.

5 MR. JORDAN: That's just strictly knowledge on how  
6 to operate the system?

7 MR. GRAFF: Well, the reason I know is during  
8 construction someone opened that before and overfed the  
9 vessel, so that's just because I know it happened before.

10 MR. JORDAN: Do you think that should be in a  
11 procedure someplace, to use that valve in a last-ditch  
12 effort?

13 MR. GRAFF: You have no control. You're just  
14 going to feed right up, so you have other ways --

15 MR. JORDAN: Did you train on that valve being  
16 there and how to operate it?

17 MR. GRAFF: Yes. I can say almost everybody knows  
18 that if you open that it is a seal-in and it's going full  
19 open. I think it is 120. I'm not positive. 120, maybe  
20 122.

21 MR. JORDAN: I was just curious. What I was  
22 wondering about is --

23 MR. GRAFF: That bypasses. The 137 bypasses the  
24 feed pumps and so does that and they are both in parallel  
25 with each other.



1 MR. JORDAN: And you get training on that?

2 MR. GRAFF: Yes. I know at the same time that  
3 when I was doing the level control we had a person on the  
4 RCIC system who was also putting in water and we  
5 communicated back and forth. It was Brian Hilliker and  
6 between the two of us, as I was feeding he was cutting back  
7 his feed, so that I could take control.

8 MR. JORDAN: Okay, any other good news/bad news  
9 things, things that you'd like, things you wish worked  
10 differently?

11 MR. GRAFF: Not really. I think everything went  
12 pretty good.

13 MR. KAUFFMAN: I have one followup question, just  
14 occurred to me.

15 There was a point early on, maybe you weren't on  
16 the panel, but there was a point early on and maybe you were  
17 on the panel when it happened, but there was a point early  
18 on where RCIC tripped on Level 8 and --

19 MR. GRAFF: That was before me.

20 MR. KAUFFMAN: Okay.

21 MR. GRAFF: I knew that they hit the high level  
22 because there is three lights for Level 8 on the panel, so  
23 those were in, but that was before I even came in.

24 MR. JORDAN: The final question that I have anyway  
25 is is there anything that you know of that you think it





1 would be of benefit for the team to know that we haven't  
2 covered?

3 MR. GRAFF: Not that I know of.

4 MR. JORDAN: I think you already said something  
5 on the turning gear but we already knew about that, so,  
6 okay, we can go off the record.

7 [Whereupon, at 3:58 p.m., the taking of the  
8 interview was concluded.]

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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 JIM GRAFF

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.

*Ian Rothrock*

---

IAN ROTHROCK

Official Reporter

Ann Riley & Associates, Ltd.



# ORIGINAL

## OFFICIAL TRANSCRIPT OF PROCEEDINGS

Agency: Nuclear Regulatory Commission  
 Incident Investigation Team

Title: Nine Mile Point Nuclear Power Plant  
 Interview of: JIM GRAFF

Docket No.

LOCATION: Scriba, New York

DATE: Wednesday, August 21, 1991

PAGES: 1 - 23

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
INCIDENT INVESTIGATION TEAM

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-----  
Interview of :  
JIM GRAFF :  
(Closed) :  
-----

Conference Room B  
Administration Building  
Nine Mile Point Nuclear  
Power Plant, Unit Two  
Lake Road  
Scriba, New York 13093  
Wednesday, August 21, 1991

The interview commenced, pursuant to notice,  
at 3:32 p.m.

PRESENT FOR THE IIT:  
Michael Jordan, NRC  
John Kauffman, NRC

22

1 1



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

[3:32 p.m.]

1  
2  
3 MR. JORDAN: Good afternoon. It's August 21st,  
4 1991. It's 3:30 in the afternoon.

5 We are at the Nine Mile Point, Unit Two, in the P  
6 building. We are conducting interviews concerning the  
7 transient that occurred on August 13th, 1991.

8 My name is Michael Jordan. I am with the NRC, out  
9 of Region III.

10 MR. KAUFFMAN: John Kauffman, out of NRC  
11 headquarters.

12 MR. GRAFF: I'm Jim Graff. I'm a reactor operator  
13 at Nine Mile Point, Two.

14 MR. JORDAN: Okay, Jim. Can you just give me an  
15 idea what your background is?

16 MR. GRAFF: Okay. I was a reactor operator for  
17 six years in the Navy and I got out in 1982.

18 I was hired for Unit Two but before that they sent  
19 us over to Unit One. I licensed there as a reactor  
20 operator and then I came over to Unit Two and I have been  
21 licensed here for five to six years -- I don't know exactly.

22 MR. JORDAN: Do you know when you licensed on Unit  
23 One?

24 MR. GRAFF: Like '83 or '84.

25 I got out of the Navy in '82, so I have been here



1 almost nine years.

2 MR. JORDAN: So you are an RO?

3 MR. GRAFF: Yes.

4 MR. JORDAN: Okay. Are you on midshifts or were  
5 you on day shifts?

6 MR. GRAFF: I just came in that morning for day  
7 shift.

8 MR. JORDAN: Okay. Why don't you give us an idea  
9 what time you showed up and just walk us through, as you  
10 came through the gate.

11 MR. GRAFF: Okay. I got there just after 6:00 and  
12 the Security guards wouldn't let me in so I called the  
13 control room, got the ASSS that was coming on shift to tell  
14 them to let me in, so they let me in and I got to the  
15 control room about 6:10 and the first thing the SSS told me  
16 to do was to send someone down to locally find out what  
17 condenser vacuum was, because --

18 MR. JORDAN: Can I ask you, as you traversed  
19 through the gates up to the control room, did you go  
20 directly to the control room to the locker room?

21 MR. GRAFF: Directly to the control room. I knew  
22 something was wrong.

23 MR. JORDAN: In your traversing to the control  
24 room, can you give us an idea of the way you went and what  
25 the lighting was like between --



1 MR. GRAFF: The emergency lighting was on in the  
2 staircase I went up by the elevator there in the control  
3 building. I went up the stairs there and I could tell all  
4 the emergency lighting was on and everything else was off.

5 MR. JORDAN: When you say emergency lighting,  
6 there's battery packs in the wall?

7 MR. GRAFF: Right.

8 MR. JORDAN: Those were on?

9 MR. GRAFF: Yes -- well, I don't even think those  
10 were on. I think the thing was pretty much dark.

11 MR. JORDAN: It was dark?

12 MR. GRAFF: Yes.

13 MR. JORDAN: The stairwell was dark?

14 MR. GRAFF: Right.

15 MR. JORDAN: Which stairwell did you go up?

16 MR. GRAFF: By the elevator there, control room  
17 elevator.

18 MR. JORDAN: What building is that called?

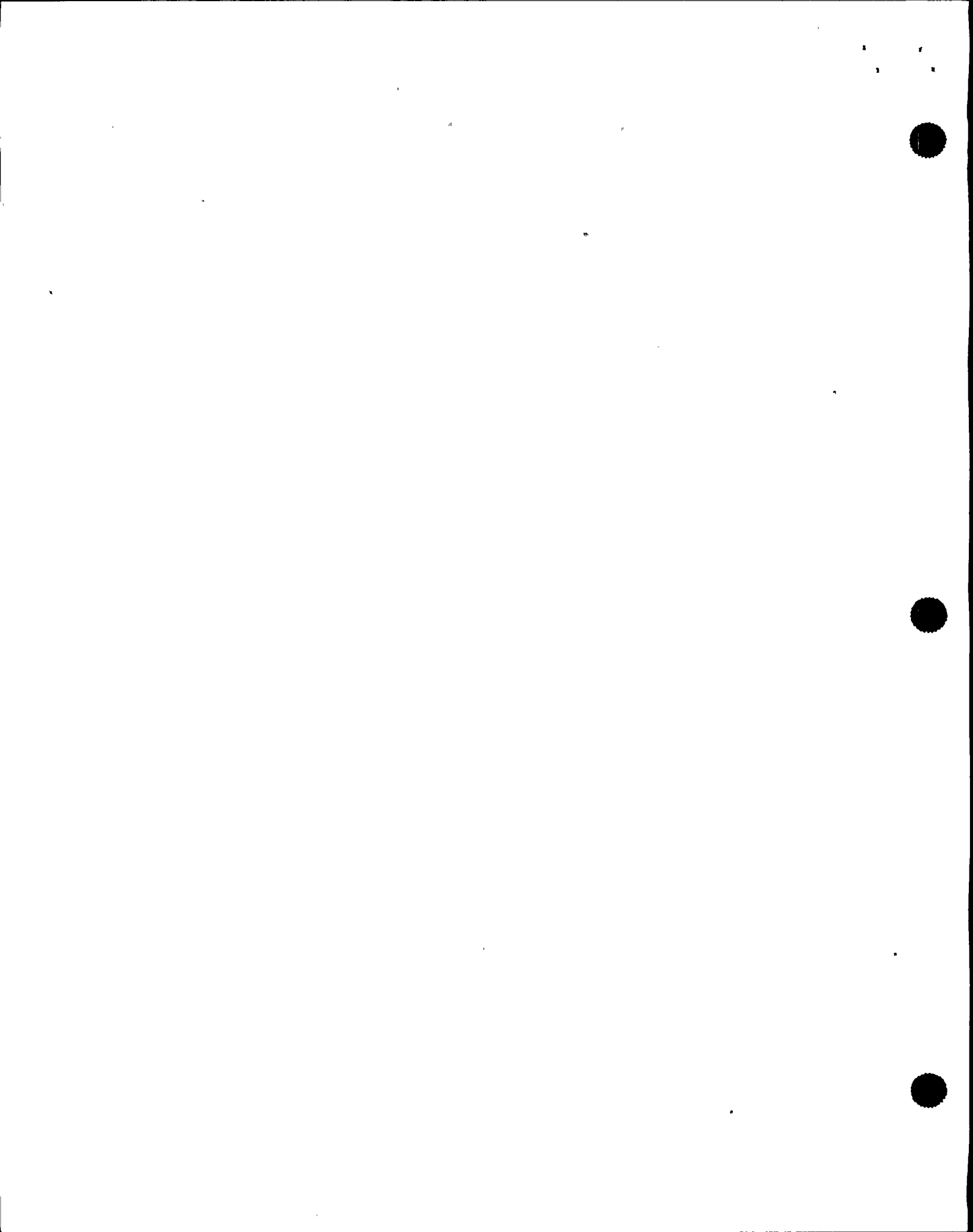
19 MR. GRAFF: It's really the aux service building,  
20 I guess you would call it.

21 MR. JORDAN: That's by the elevator?

22 MR. GRAFF: Right.

23 MR. JORDAN: You took the stairway or hallway to  
24 the --

25 MR. GRAFF: 306 elevation.





1 MR. JORDAN: 306? That's the control room  
2 elevation?

3 MR. GRAFF: Yes.

4 MR. JORDAN: From the stairwell to the control  
5 room, lighting no problem or a problem?

6 MR. GRAFF: You could see but it was darker than  
7 normal.

8 MR. JORDAN: Okay, you get to the control room.  
9 How was the control room?

10 MR. GRAFF: It was quiet. All the lights were on  
11 though. At that time I didn't know -- had no idea what had  
12 even happened.

13 MR. JORDAN: A lot of people in the control room?  
14 Did it look chaotic or did it look like they were -

15 MR. GRAFF: It was calm but I didn't know what was  
16 going on. There was the SSS, the ASSS, the CSO was there  
17 and I think at that time there was like four other ROs, four  
18 or five other ROs in the room.

19 MR. JORDAN: But it looked like everything was,  
20 communications were going well?

21 MR. GRAFF: Yes.

22 MR. JORDAN: Okay, I'm sorry, you say that you  
23 were assigned?

24 MR. GRAFF: The very first thing the SSS told me  
25 was -- I told him I'm available and the very first thing he



1 told me to find out what condenser vacuum was locally  
2 because the meters were failed downscale in the control  
3 room.

4 So I had come up with a non-licensed operator up  
5 the stairs so I sent -- I went out. Well, first I tried to  
6 call him on the here-here and found out the here-here's  
7 didn't work and that's when everybody told me what  
8 happened.

9 I went out. He was in the hallway. They were  
10 going over to our room where the operators hang out, the  
11 Beehive there.

12 MR. JORDAN: Beehive.

13 MR. GRAFF: I told him we needed condenser vacuum  
14 locally so he went to go get it. I had given him a radio  
15 and then I found out those didn't work either and he went  
16 down there and I went back in the control room.

17 Before he even called back to tell me what it was,  
18 they had restored the UPS's, powered the UPS's and I would  
19 guess 630, 640, something like that.

20 We got vacuum indication back then.

21 MR. JORDAN: Okay?

22 MR. GRAFF: Okay, and then the SSS told me to get  
23 a condensate booster pump running to restore level and me  
24 and another RO, Chuck Gerberich, who was --

25 MR. JORDAN: Was this before or after the power



1 had returned?

2 MR. GRAFF: I would say after. I can't say for  
3 sure but I am pretty sure it was after the power had been  
4 returned.

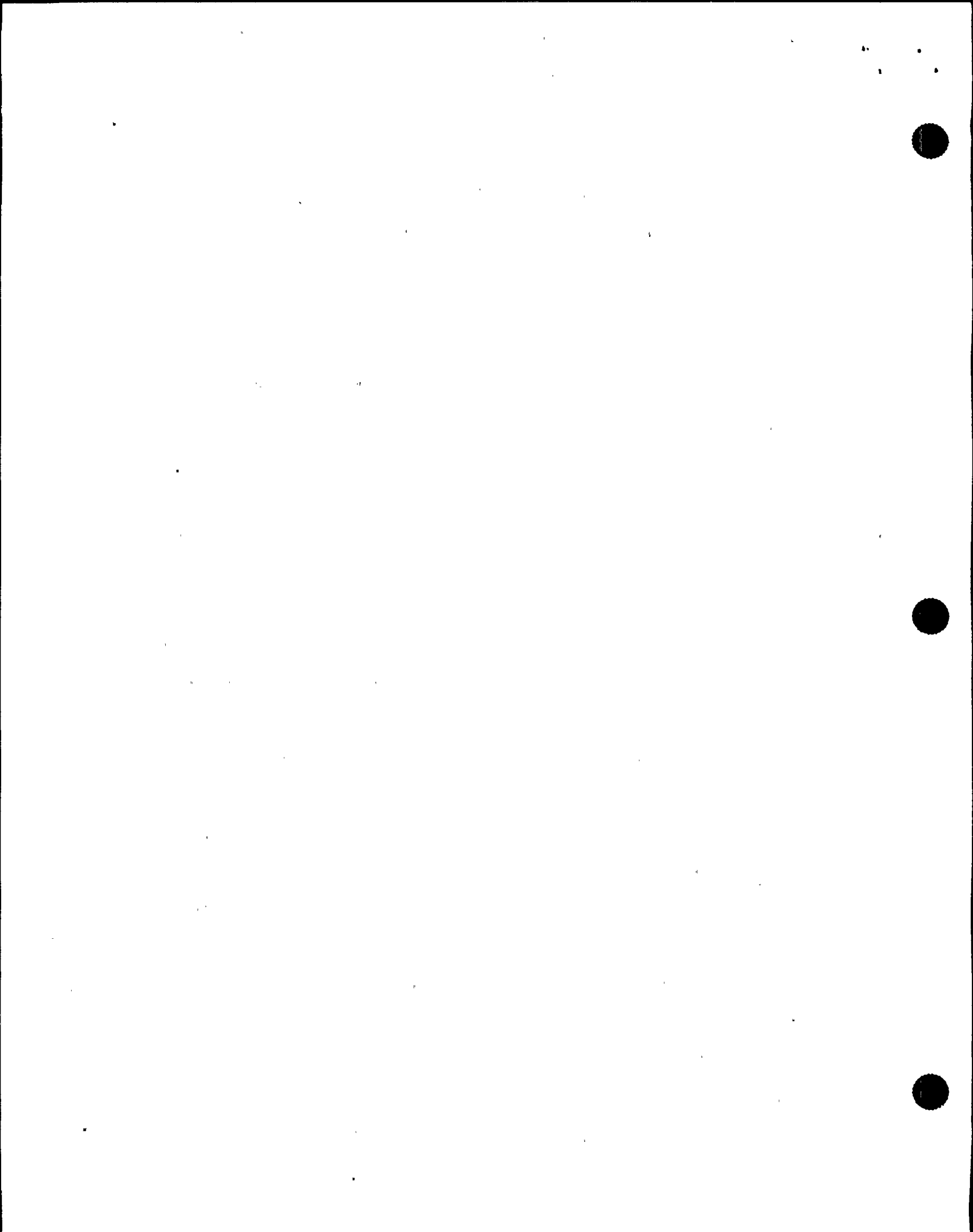
5 MR. JORDAN: Did he say get condensate-condensate  
6 booster --

7 MR. GRAFF: The condensate booster pump running,  
8 so by that time there was a lot more operators in the  
9 control room and there was a couple -- I'm told a couple of  
10 non-licensed operators to go down, make sure the AA booster  
11 pumps are ready to run and one of them to go to the con-  
12 demin panel to make sure everything looked all right there,  
13 so they took off to go do that and then maybe ten minutes,  
14 fifteen minutes later they called back and said everything  
15 looked good down there. We started the AA condensate  
16 booster pump up.

17 MR. JORDAN: Were no condensate booster pumps  
18 operating?

19 MR. GRAFF: Right. When I went in there the only  
20 thing running was the AA condensate pump. Everything else  
21 was green flagged. I didn't know it at the time but  
22 afterwards they told me they had shut them off. I knew they  
23 didn't trip because they weren't red flagged. They were  
24 green flagged.

25 MR. JORDAN: So no condensate pumps tripped. Did



1 they turn off all the condensate water booster pumps?

2 MR. GRAFF: I guess they got up to level two -- or  
3 202 inches in the vessel so they shut everything but the AA  
4 condensate pump off.

5 MR. KAUFFMAN: By "green flag" you mean the  
6 breaker position --

7 MR. GRAFF: Took it to stop. Right, if you go to  
8 stop you got a green flag.

9 MR. KAUFFMAN: You're not talking the light,  
10 you're talking the --

11 MR. GRAFF: Well, right. You have the green  
12 light.

13 MR. KAUFFMAN: Right.

14 MR. GRAFF: But you also have the green flag,  
15 right? If it tripped, if it was running and it tripped you  
16 would have the green light and a red flag.

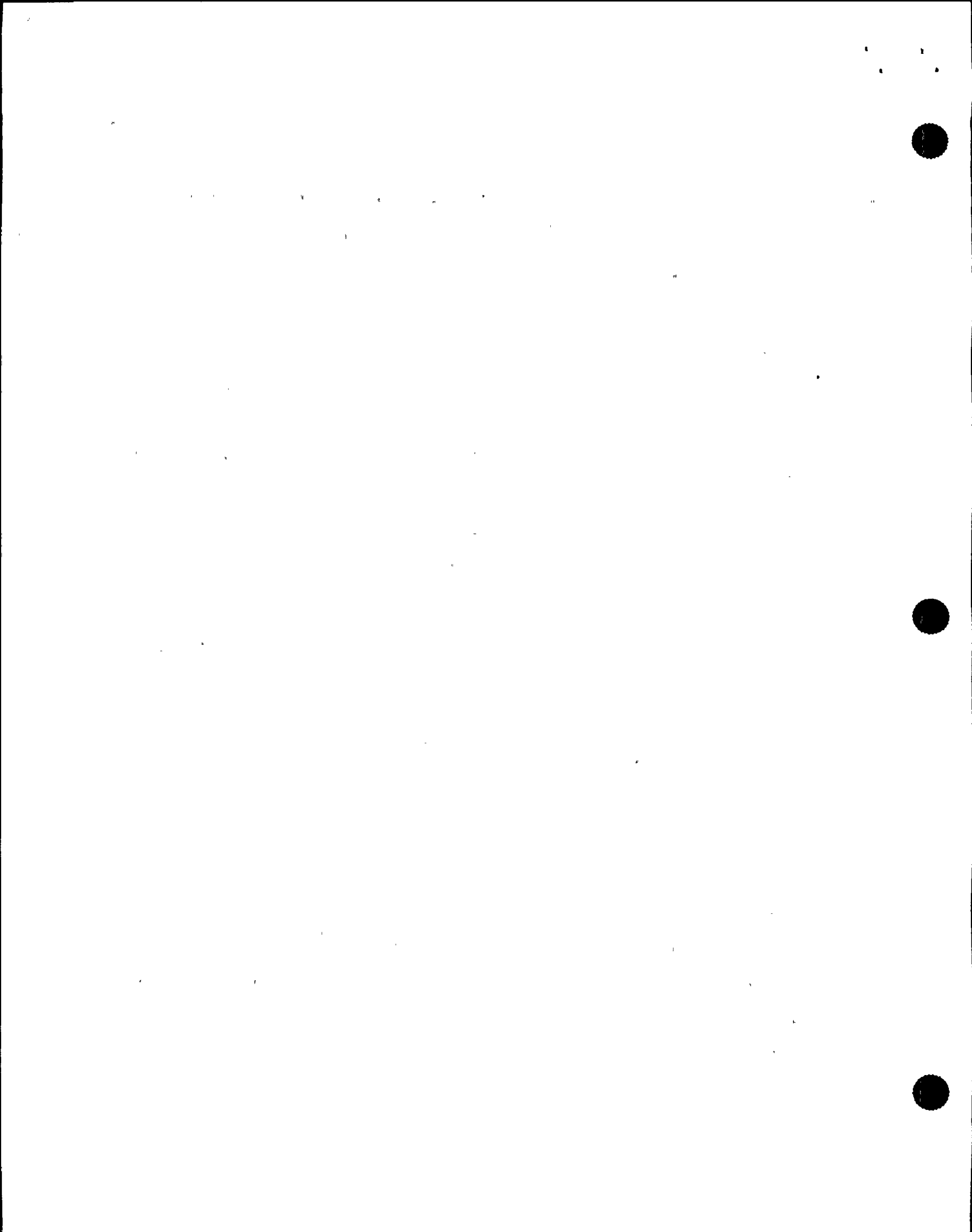
17 MR. JORDAN: Okay, so all the green flags were  
18 aligned with the green lights --

19 MR. GRAFF: Right.

20 MR. JORDAN: Which indicated that they were  
21 turned off?

22 MR. GRAFF: Someone turned them off.

23 MR. JORDAN: So that any condensate pump running  
24 and you're getting ready to start the A condensate booster,  
25 right? Okay.





1 MR. GRAFF: So we got the procedure out and we  
2 went per the startup procedure and later on that sort of  
3 messed us up a little, caused a problem later down the line  
4 after we got - well, we got the pump started and it started  
5 fine. Everything was good and reactor pressure at that time  
6 was like 640 or so and we had like 680 discharge pressure,  
7 the booster pump, and so we thought we were all ready to  
8 feed up and we tried feeding with an LB55 valve and we  
9 couldn't get any flow. I think level at this time was like  
10 133 inches.

11 I wasn't getting flow so we tried the LV137 which  
12 has its own separate, that bypass -- well, we got the  
13 booster pump running and in the startup procedure for the  
14 booster pump one of the first things is to verify that the  
15 suction valves, the 84 valves, of the feed pump, shut those.

16 So those were shut --

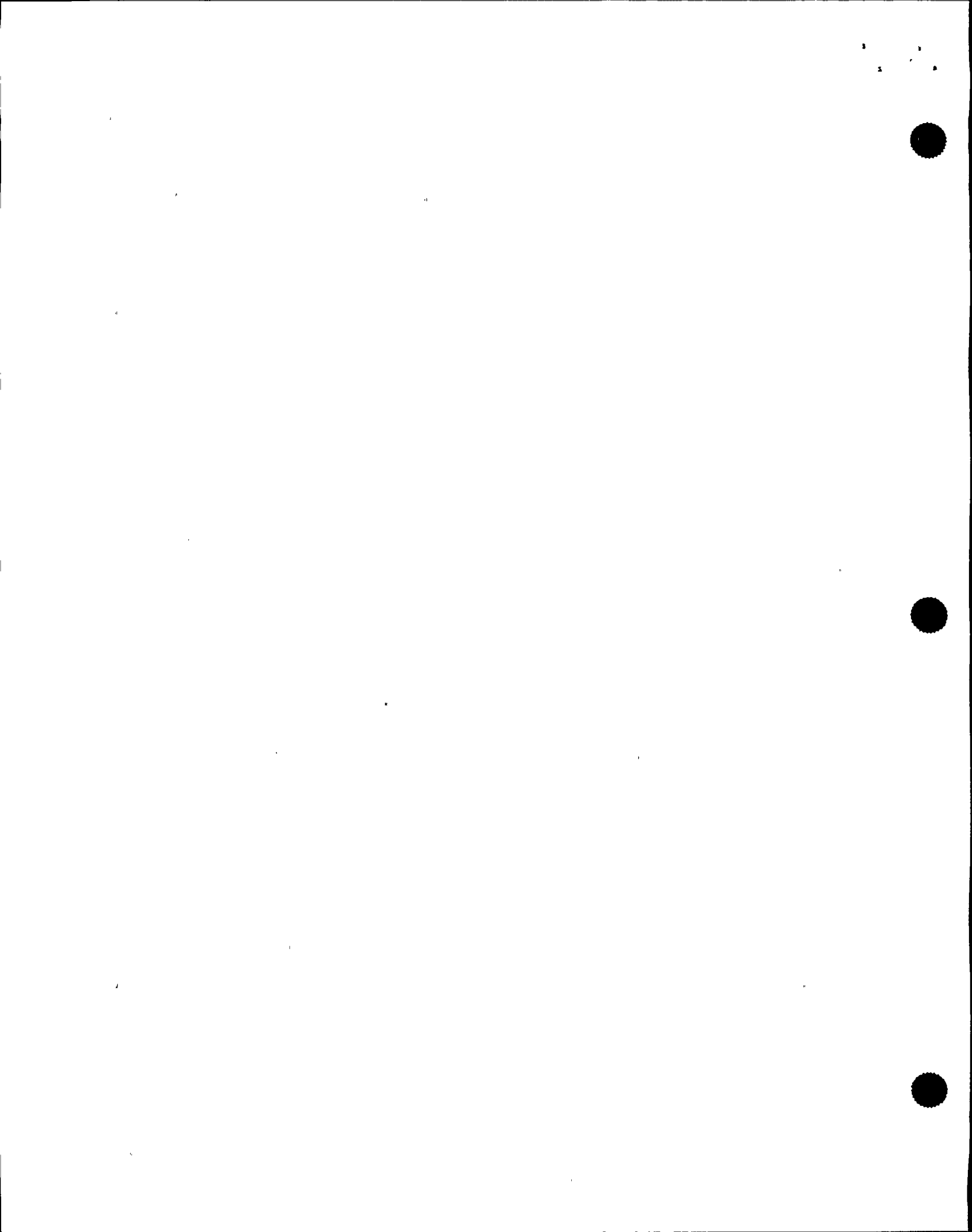
17 MR. JORDAN: What were those numbers?

18 MR. GRAFF: 84s.

19 MR. JORDAN: 84s to the suction to the --

20 MR. GRAFF: -- feed pump. I went to open on it  
21 and I had the green and the red light which I thought the  
22 valve was stroking open, so that's when I tried to feed  
23 while it was going open but I didn't get an indication that  
24 I was feeding.

25 MR. JORDAN: Which valves did you try to open?



1 MR. GRAFF: 84A.

2 MR. JORDAN: So originally you had closed them--

3 MR. GRAFF: Per procedure.

4 MR. JORDAN: To start the A condensate booster  
5 pump?

6 MR. GRAFF: Right. We closed all three of them  
7 per procedure.

8 MR. JORDAN: Then after you got the pump  
9 operating --

10 MR. GRAFF: I attempted to open it.

11 MR. JORDAN: You tried to open the 84s?

12 MR. GRAFF: Right.

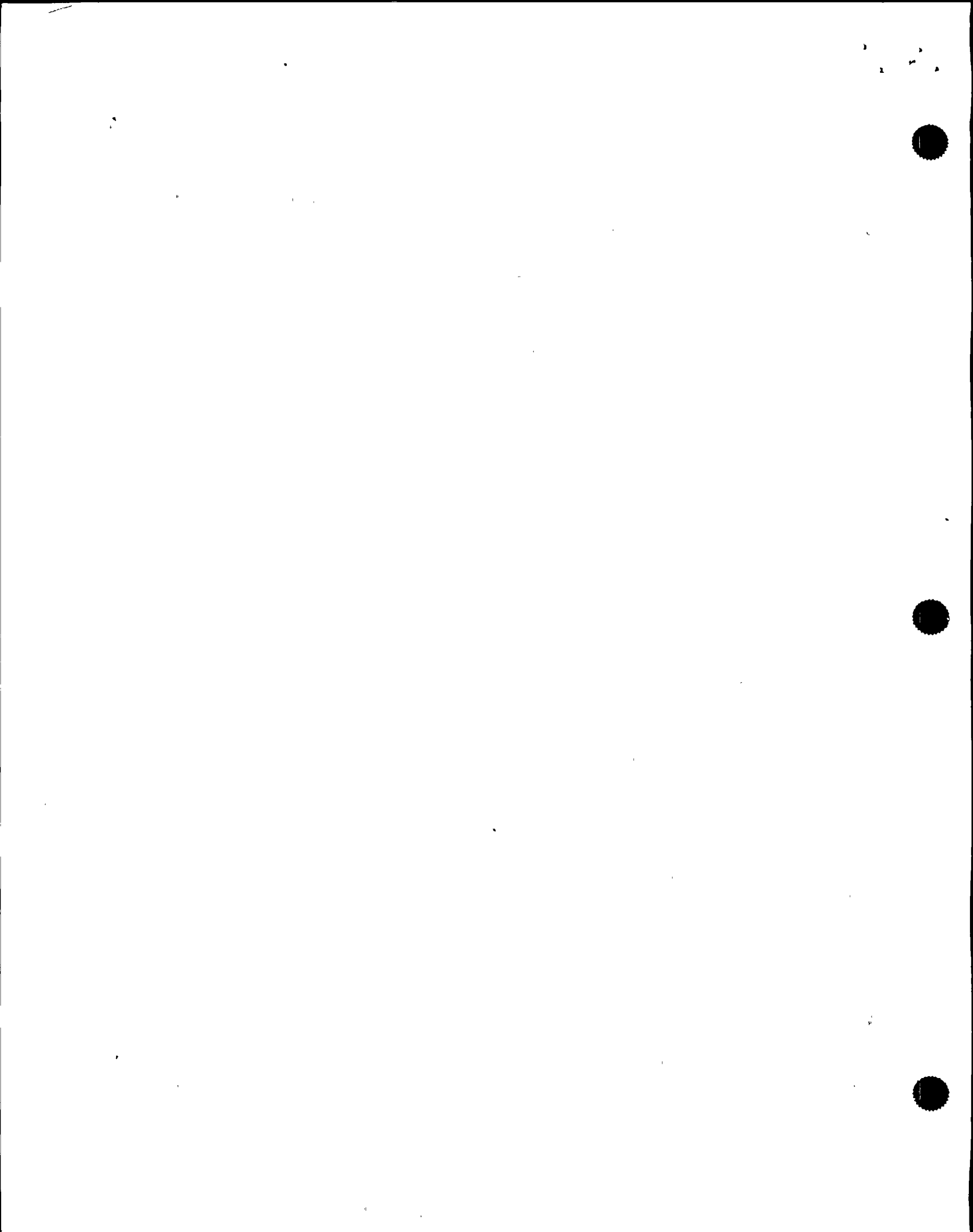
13 MR. JORDAN: And A84 and --

14 MR. GRAFF: -- and then I had a red and a green  
15 light, indicating to me that the valve's gone open, so I'm  
16 figuring while it's partially open I am going to try to  
17 feed, but I couldn't with the LV55. I couldn't get any  
18 flow in.

19 MR. JORDAN: The LV55s were closed?

20 MR. GRAFF: They were closed originally so -- and  
21 we also tried to feed with an LV10A which you have meters  
22 for flow indication and I wasn't getting anything so we  
23 decided to go try the 137, because that bypasses the feed  
24 pumps.

25 Then after a while we said, well, let's see what



1 happens when we go closed with the 84 valve and the close  
2 light immediately came on, indicating to us that it never  
3 stroked at all.

4           Once I opened the LV137, that has a separate  
5 meter. I was putting in about 600 gallons per minute and  
6 level was -- Mark Bodoh, he was monitoring reactor water  
7 level, and --

8           MR. JORDAN: How many gallons? What did you say?

9           MR. GRAFF: 600 -- and he told me we were  
10 increasing about one inch every five to ten minutes, level  
11 was going up. The SSS was happy with that because earlier he  
12 had told me not -- once I get feed established, not to feed  
13 to fast because he didn't want to cool down too fast, so we  
14 had a good feed rate and we were in control of it.

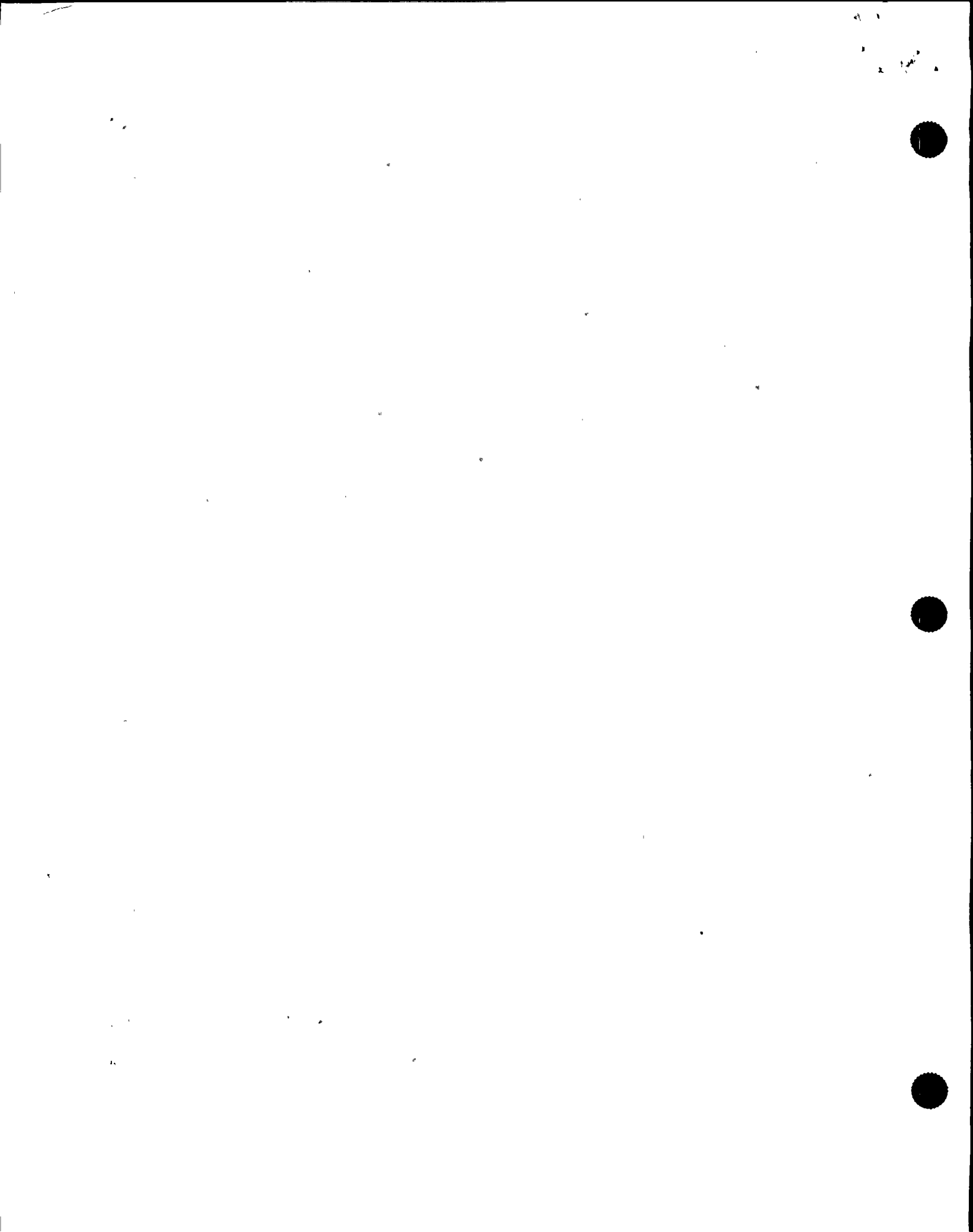
15           MR. JORDAN: About one inch per minute?

16           MR. GRAFF: About one inch every five minutes I  
17 would say it was going up.

18           MR. JORDAN: Sorry, go ahead.

19           MR. KAUFFMAN: Do you have any explanation for why  
20 the 84 valve didn't open?

21           MR. GRAFF: I think there's just too much of a  
22 differential pressure across the valve and the procedure  
23 that we were using was assuming the system shut down and  
24 there is a manual bypass valve around the 84 and we asked  
25 the SSS can we send someone out there but at the time they



1 didn't know what the radiation levels in the turbine  
2 building were because all the radiation monitoring wad down  
3 because of the problem, so he said no, as long as we are  
4 feeding with the 137 we are not going to send anybody in to  
5 open that bypass.

6 Normally you would open the bypass and then open  
7 that valve and close the bypass but the procedure we were  
8 using was for starting up cold.

9 MR. KAUFFMAN: Do you happen to know the number of  
10 that procedure?

11 MR. GRAFF: I think it is OPE-3.

12 MR. JORDAN: Is that your normal startup  
13 procedure?

14 MR. GRAFF: Yes, for condensate system.

15 MR. JORDAN: Okay, so now you got the AA  
16 condensate pump on. You've got the AA condensate booster  
17 pump on.

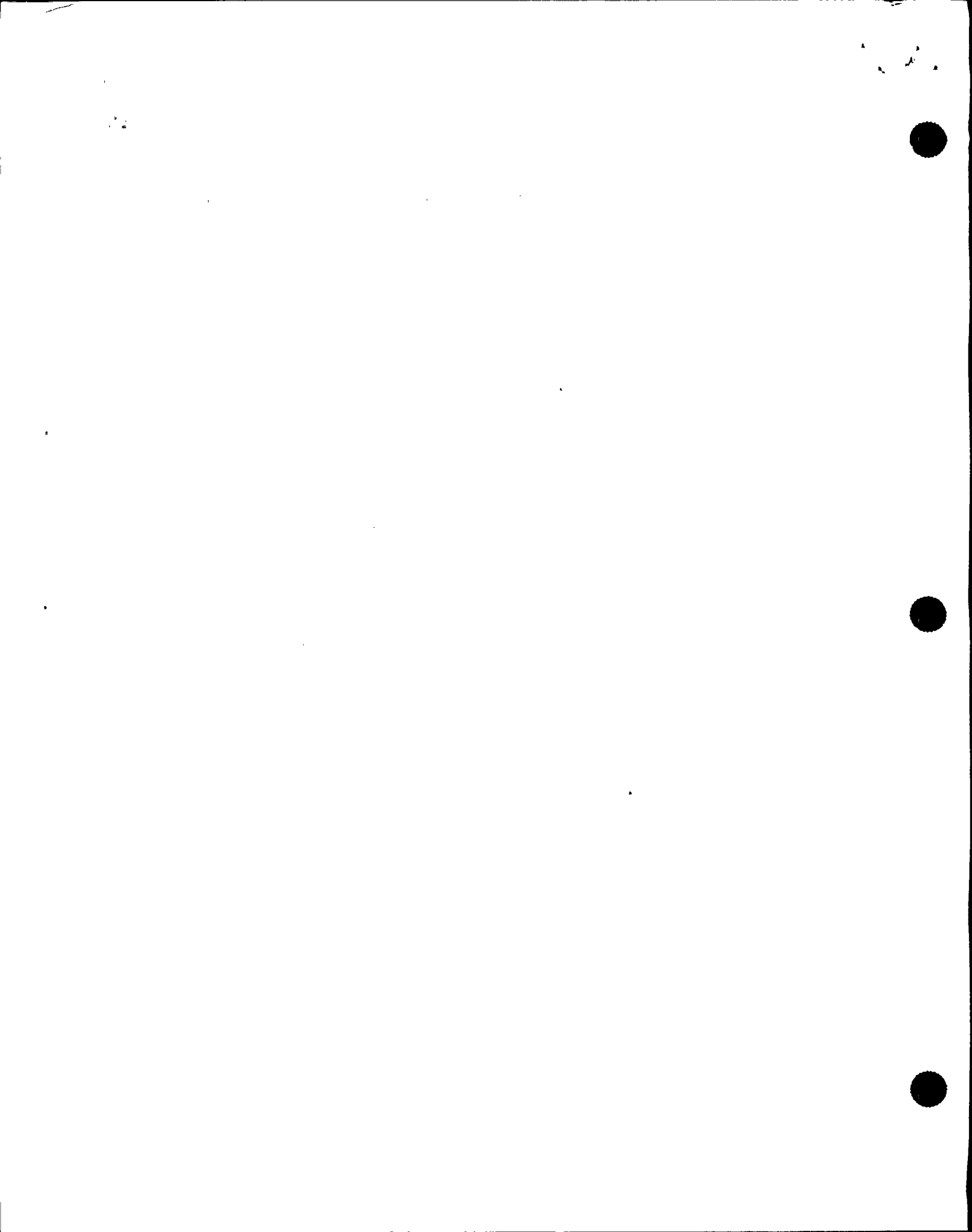
18 MR. GRAFF: Okay -- then some time in there --

19 MR. JORDAN: You are feeding through the LV137--

20 MR. GRAFF: Right.

21 MR. JORDAN: -- water is going to come up about an  
22 inch per five minutes.

23 MR. GRAFF: The we got an annunciator for high  
24 starter temperature on the AA condensate pump, so we told  
25 the SSS that and we all decided -- well, he told us just get





1 another condensate pump running, so we started the B  
2 condensate pump and within five minutes that starter water  
3 high temperature alarm had cleared and when we started that  
4 our discharge pressure out the booster pump went up to like  
5 740, 760, so that increased our feed a little bit more.

6 MR. KAUFFMAN: Do you have an explanation for why  
7 starting that pump would have caused the pump starter water  
8 temperature to come down?

9 MR. GRAFF: Yeah, it was working too hard. It was  
10 supplying all the suction for the booster pump.

11 MR. JORDAN: How do you normally operate? Do you  
12 normally operate -- 12 on 1, 3 on 1?

13 MR. GRAFF: Normally we, up at power, 100 percent  
14 power, we have three condensate pumps and two booster pumps.

15 MR. JORDAN: And how many feed?

16 MR. GRAFF: Two.

17 MR. JORDAN: Two feedwater pumps.

18 MR. GRAFF: Right.

19 MR. JORDAN: Okay -- discharge from the  
20 condensate, from the booster pump increased after starter --  
21 how did the flow increase? The flow go up also?

22 MR. GRAFF: A little bit, yes, 50, maybe 50  
23 gallons per MOR. It's basically the same flow rate -- or  
24 basically the same feed rate, a little better.

25 MR. JORDAN: Okay.

1 2 3



1 MR. GRAFF: The rest of the time I monitored water  
2 level increasing, and kept the SSS informed and meanwhile he  
3 told another RO, R.J. Reynolds, to commence a cooldown, so  
4 he was doing that and the two of us were sort of working  
5 together because as he cooled down I was feeding more.

6 MR. JORDAN: Does this got an automatic level  
7 controller?

8 MR. GRAFF: Yes, it does.

9 MR. JORDAN: That you can put it on? Did you put  
10 it on level or did you maintain manual?

11 MR. GRAFF: I maintained manual. It was full open  
12 the whole time until we started to get up close to the band.  
13 Then he gave me a band of 159.3 to 202.3 and we ended up  
14 getting in a normal band and stabilizing and putting it in  
15 auto.

16 MR. JORDAN: But you did put it in auto?

17 MR. GRAFF: Yes.

18 MR. JORDAN: And it looked okay in auto, it  
19 fluctuated --

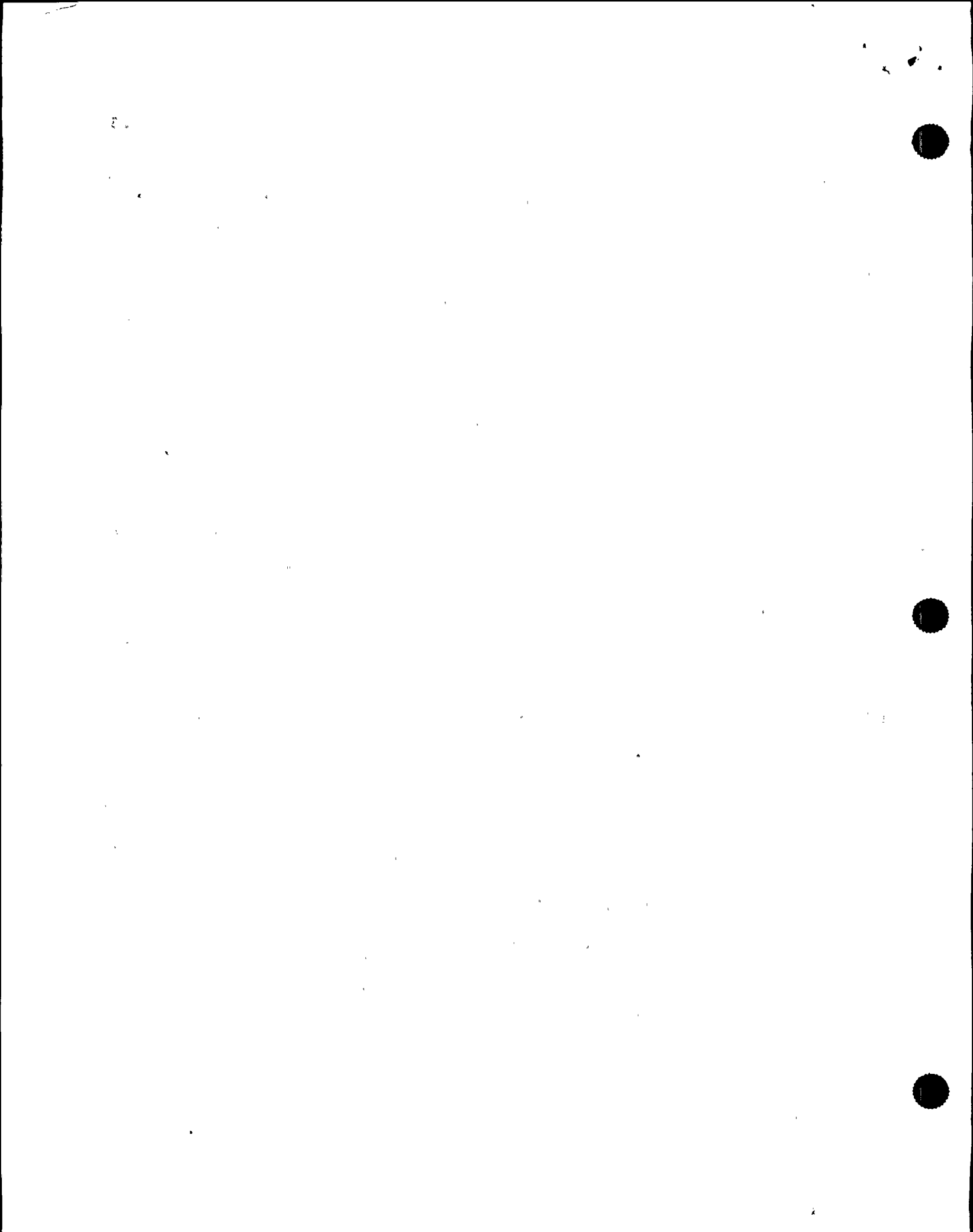
20 MR. GRAFF: It was fine.

21 MR. JORDAN: It looked good in auto?

22 MR. GRAFF: Right.

23 MR. JORDAN: Do you have any idea about what time  
24 that was?

25 MR. GRAFF: No, I don't. I told the SSS. He might



1 have logged it. I don't know.

2 MR. JORDAN: So you got up to between 159.3 and  
3 202.3 and put it in auto and how did the rest of your day  
4 go?

5 MR. GRAFF: It was pretty slow really. We had a  
6 lot of coverage there because we had three shifts on, coming  
7 in on days.

8 MR. JORDAN: Did you feel restrained, like people  
9 were backing around you and you couldn't do your work?

10 MR. GRAFF: Actually I thought that everybody did  
11 good. They communicated, everybody worked together. They  
12 did fine.

13 At one point they made an announcement anybody not  
14 doing anything that's not responsible to please leave, so  
15 that cleared out and shortly after that, once we knew it was  
16 in auto, you know, I told the CSO everything and I left too,  
17 just to keep down the congestion.

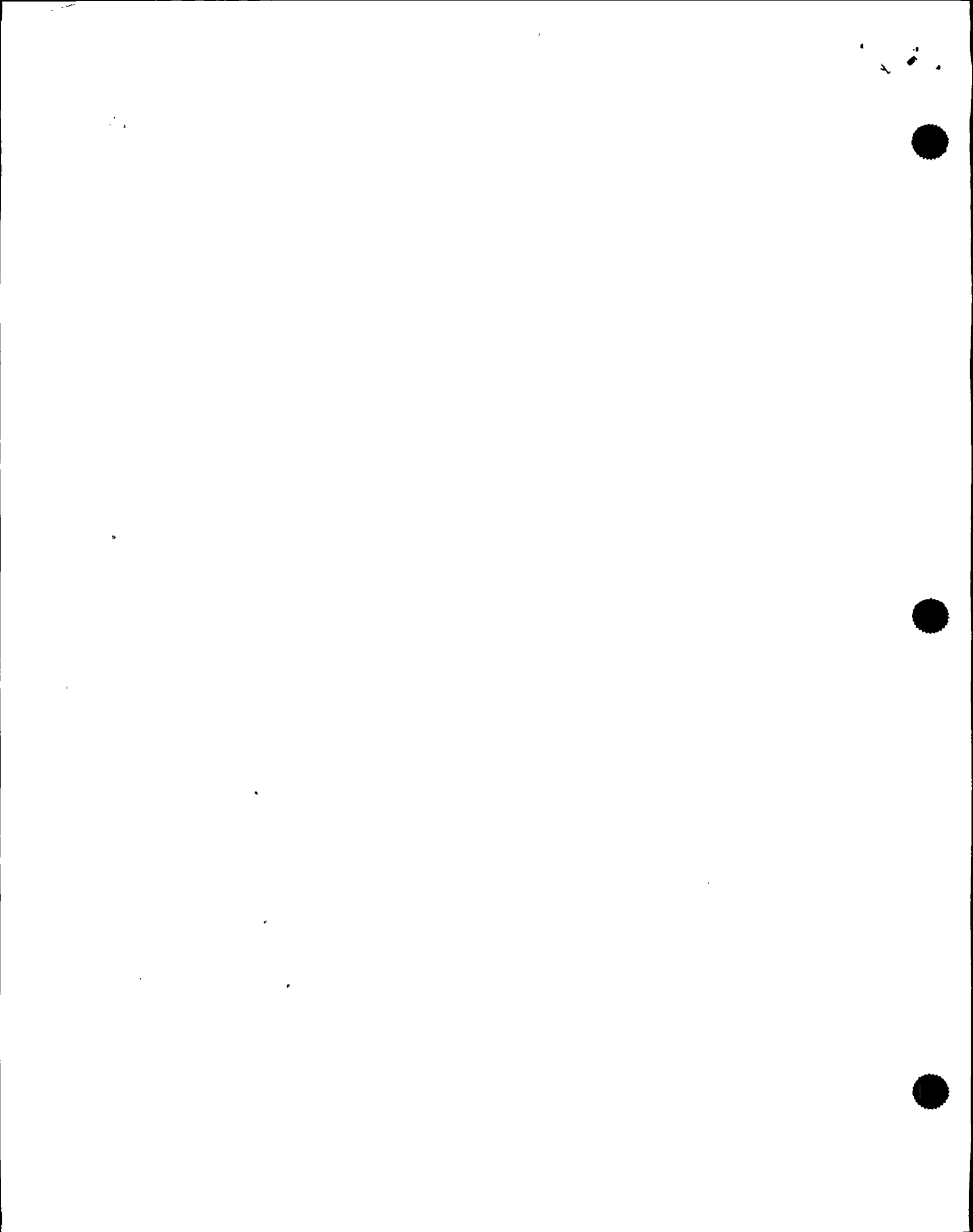
18 MR. JORDAN: Are you on normal days? Are you a  
19 relief?

20 MR. GRAFF: I am a relief operator.

21 MR. JORDAN: You are a relief operator?

22 MR. GRAFF: Yes.

23 MR. JORDAN: As a relief operator, what does that  
24 -- are you assigned a normal rotating shift or you're on  
25 days --



1 MR. GRAFF: You cover for vacations when people  
2 go on vacation or are sick. You cover for the RO position.

3 MR. JORDAN: But normally you come in days and if  
4 everything is hunky-dory, peachy-keen you just come in and  
5 you are available?

6 MR. GRAFF: Right, you assist the shift that is  
7 on.

8 MR. JORDAN: So once you were no longer needed,  
9 you turn the responsibility for the feedwater to the --

10 MR. GRAFF: Right. It was in auto and the CSO  
11 knew it and his control room E knew it so they monitored it.

12 MR. JORDAN: And you left. Do you know what time  
13 you left the control room?

14 MR. GRAFF: No, I don't.

15 MR. JORDAN: During this time any piece of  
16 equipment not functioning the way you anticipated it to  
17 function?

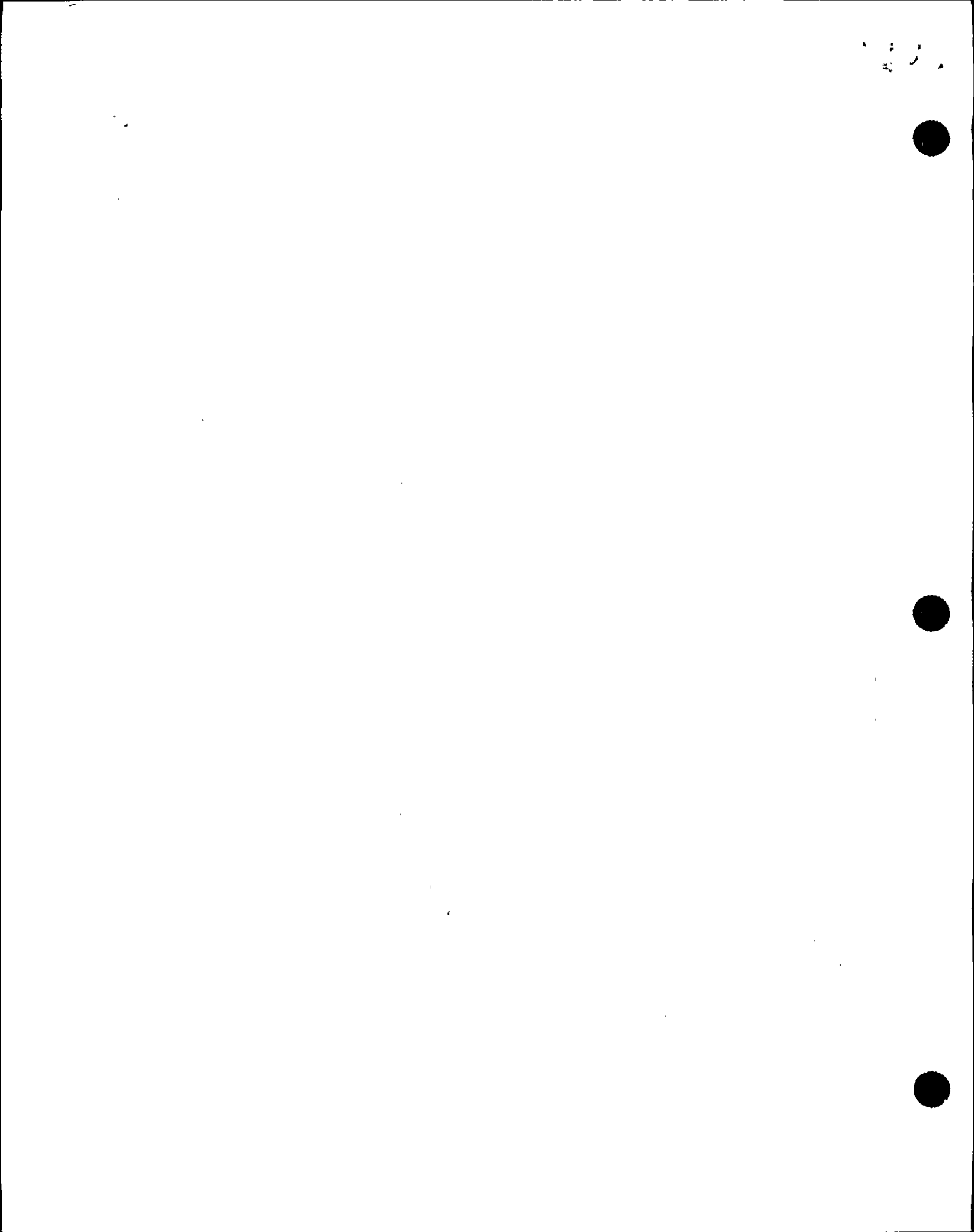
18 MR. GRAFF: the 84 valves.

19 MR. JORDAN: But that you said--

20 MR. GRAFF: Now I know why but at the time we were  
21 wondering why aren't we getting any feed because we thought  
22 that valve was going open, you know?

23 MR. JORDAN: Okay, any other pieces of equipment  
24 not functioning well?

25 MR. GRAFF: I knew they were having trouble with





1 the turning gear but I wasn't involved in it in any way. I  
2 was taking care of the feed system but, you know, the person  
3 that was talking to them on the radio was a few feet from  
4 me.

5 MR. JORDAN: Okay. Do you know if they  
6 transferred power from the maintenance power on the UPS's  
7 back to normal power when you were in the control room?

8 MR. GRAFF: Yes. I remember them doing that.

9 MR. JORDAN: How did you get that information?

10 MR. GRAFF: I could hear the CSO and the SSS  
11 talking back and forth.

12 By then everything was pretty much -- I was just  
13 standing back monitoring so I could pick up what was going  
14 around the room.

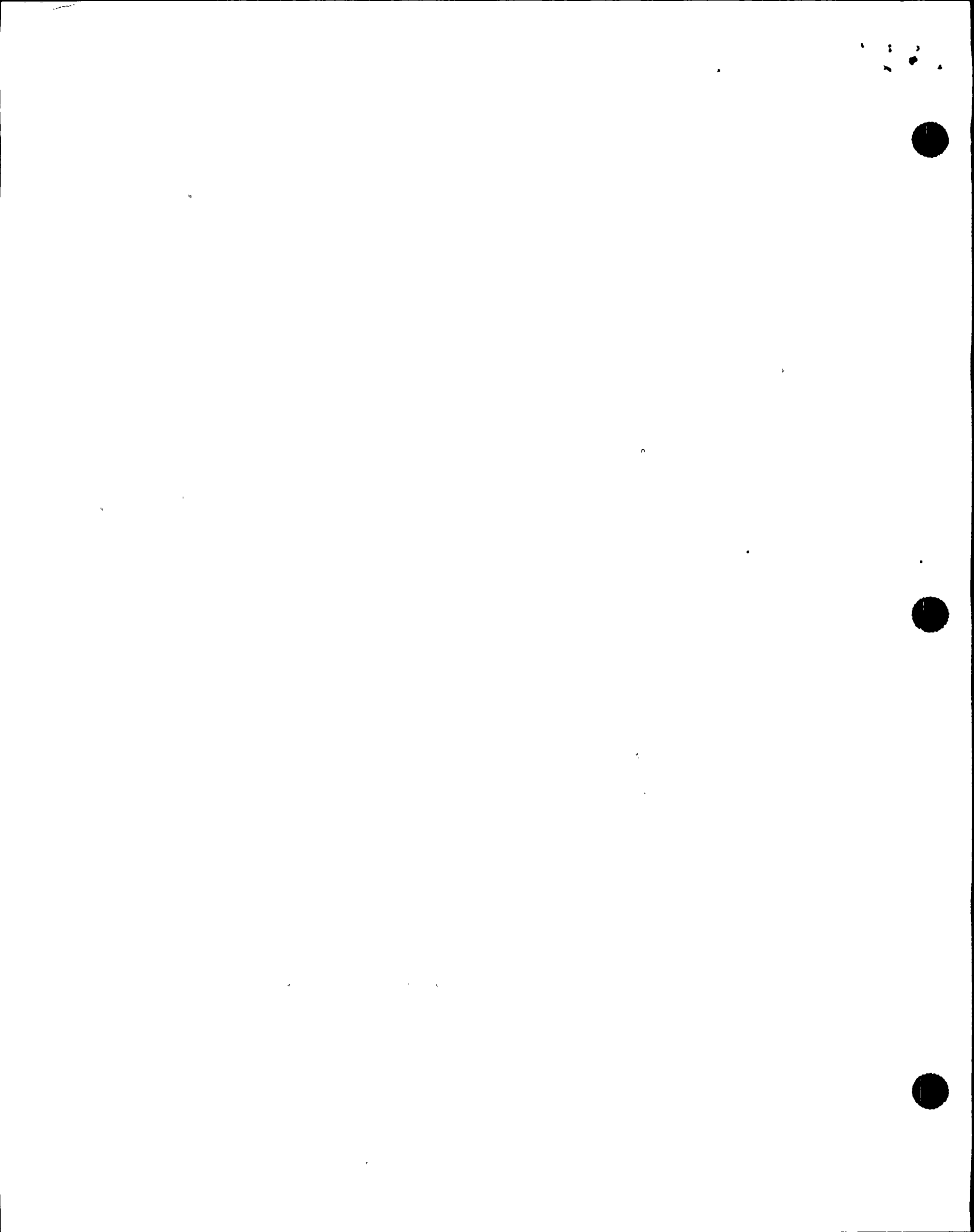
15 MR. JORDAN: And that was via Gaitronics? What  
16 communications did they use did you overhear?

17 MR. GRAFF: I think that they were on the radio

18 MR. JORDAN: Radio. Any communications in the  
19 control room that let people know that that's what their  
20 intention of doing and what they were doing?

21 MR. GRAFF: Yes, there was. They did updates and  
22 stuff. The SSS would give an update and say this is what we  
23 are doing and what we are planning on doing.

24 MR. JORDAN: Did you have a feeling for when you  
25 knew when that was going to happen, the transfer?



1 MR. GRAFF: Actual time? No, I don't.

2 MR. JORDAN: I mean not the actual time -- that  
3 you knew that that was coming and that you were prepared for  
4 it?

5 MR. GRAFF: Yes.

6 MR. JORDAN: He let you know that?

7 MR. GRAFF: Yes.

8 MR. JORDAN: It wasn't just a monitoring of his  
9 radio that you found out about it?

10 MR. GRAFF: No, he did updates. This is what's  
11 going on and --

12 MR. JORDAN: Questions?

13 Okay, this is the good news, bad news kind of a  
14 question.

15 MR. GRAFF: Okay.

16 MR. JORDAN: It's the type of thing that says for  
17 the activities that you were involved with, what piece of  
18 equipment did you -- if there is a piece of equipment that  
19 you say, gee, I'm glad I had that, okay, because that really  
20 assisted me in accomplishing the work I was assigned to.

21 The other end of it it says, gee, I wish I would  
22 have had this piece of equipment, okay, because it really  
23 would have helped me accomplishing my missions and that can  
24 be a myriad of things.

25 MR. KAUFFMAN: Could be knowledge, procedures,

113



1 training --

2 MR. JORDAN: Training procedures --

3 MR. KAUFFMAN: -- flashlight for walking around in  
4 the dark.

5 MR. JORDAN: The classic example is the guy that  
6 goes out in the plant, says gee, I'm glad this wrench was  
7 hanging on this valve because when I went to operate the  
8 valve I needed the wrench and the other guy that goes out  
9 there in the plant and says, gee, I wish that wrench --  
10 that valve would have had a wrench hanging on it because  
11 when I operated I had to go in and get a wrench and it would  
12 have been of more benefit to me to have the wrench hanging  
13 there.

14 It can be training. It can be procedures -- and  
15 it can be nothing. You may say there was nothing really  
16 that was of more benefit than what was normal in the control  
17 room.

18 MR. GRAFF: Oh, I wish I could have been able to  
19 feed with the normal 55 or LV10.

20 MR. KAUFFMAN: How important was that to you?

21 MR. GRAFF: Well, at first I was like worried how  
22 to get water in.

23 MR. KAUFFMAN: Would you like to have known that  
24 that valve probably wouldn't stroke back open?

25 MR. GRAFF: Yes, I would have liked it. I would

11



1 have liked to have known that.

2 MR. KAUFFMAN: But you'd have still been stuck by  
3 a procedure telling you to shut it?

4 MR. GRAFF: I wouldn't have been -- right. If I  
5 knew I think I would have started it without shutting it, if  
6 I knew, because the worst part is I waited before I opened  
7 the 137 because I thought that valve was going open because  
8 I had green and red light.

9 It was -- level wasn't going down but it wasn't  
10 going back up so the 137 -- I didn't know if I'd have enough  
11 feed to start going up so we kept trying to get the 84 open.

12 Then the thing I guess I'm glad is that the 137  
13 was enough feed to recover level.

14 MR. KAUFFMAN: But if that 137 hadn't gone open,  
15 would that have been a big problem?

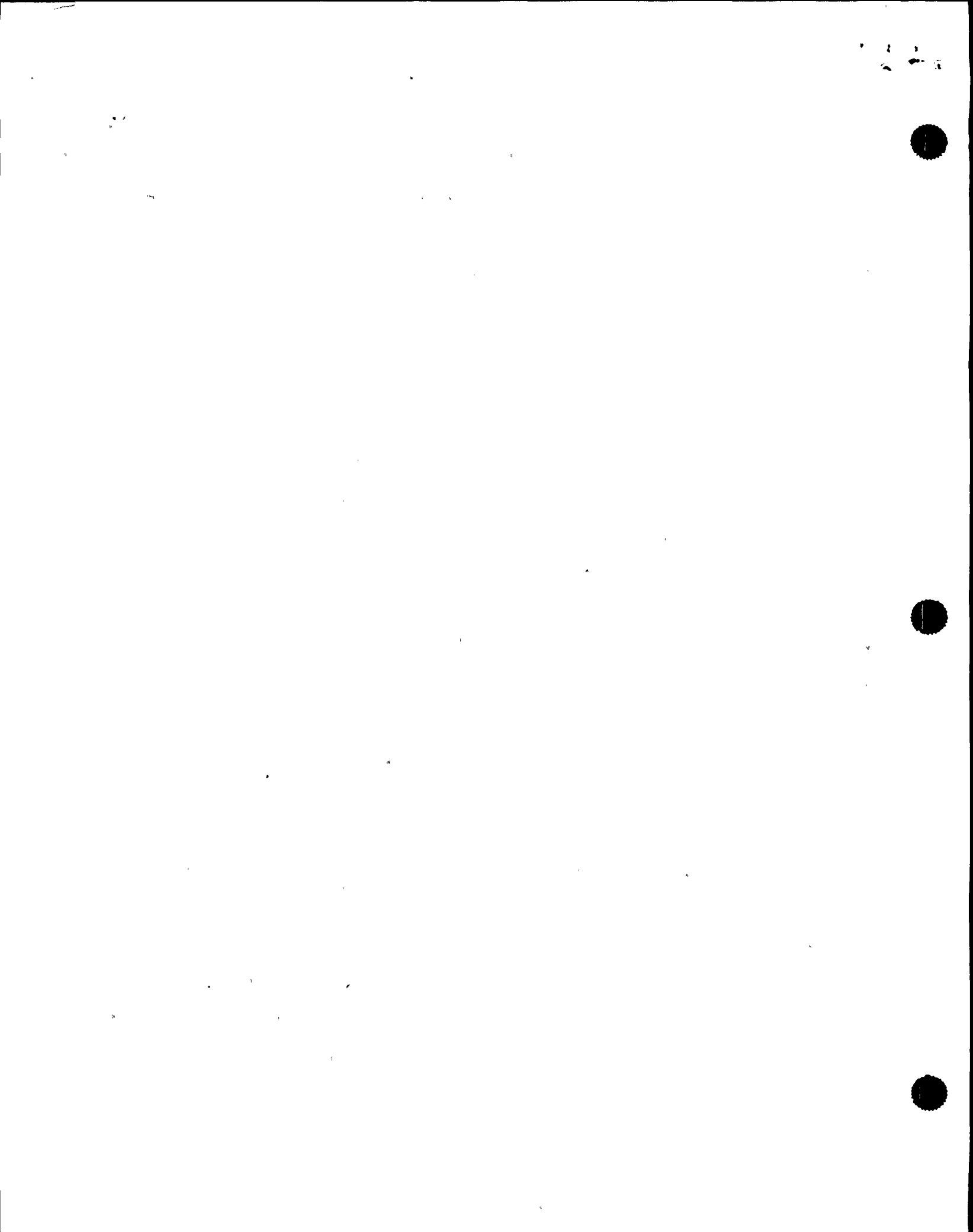
16 MR. GRAFF: If it hadn't?

17 MR. KAUFFMAN: If it had not.

18 MR. GRAFF: Well --

19 MR. KAUFFMAN: Were there other sources of water  
20 available or other pumps?

21 MR. GRAFF: Yes and there was also another path  
22 through the feed system. I think it is 120 which is in  
23 parallel with the 137, but it is a seal-in valve and once  
24 you go to open, that would have overfed the vessel, but if  
25 worse came to worse, that would have been another way to use





1 the feed system.

2 MR. JORDAN: Is there a procedure for using that  
3 valve?

4 MR. GRAFF: No.

5 MR. JORDAN: That's just strictly knowledge on how  
6 to operate the system?

7 MR. GRAFF: Well, the reason I know is during  
8 construction someone opened that before and overfed the  
9 vessel, so that's just because I know it happened before.

10 MR. JORDAN: Do you think that should be in a  
11 procedure someplace, to use that valve in a last-ditch  
12 effort?

13 MR. GRAFF: You have no control. You're just  
14 going to feed right up, so you have other ways --

15 MR. JORDAN: Did you train on that valve being  
16 there and how to operate it?

17 MR. GRAFF: Yes. I can say almost everybody knows  
18 that if you open that it is a seal-in and it's going full  
19 open. I think it is 120. I'm not positive. 120, maybe  
20 122.

21 MR. JORDAN: I was just curious. What I was  
22 wondering about is --

23 MR. GRAFF: That bypasses. The 137 bypasses the  
24 feed pumps and so does that and they are both in parallel  
25 with each other.



1 MR. JORDAN: And you get training on that?

2 MR. GRAFF: Yes. I know at the same time that  
3 when I was doing the level control we had a person on the  
4 RCIC system who was also putting in water and we  
5 communicated back and forth. It was Brian Hilliker and  
6 between the two of us, as I was feeding he was cutting back  
7 his feed, so that I could take control.

8 MR. JORDAN: Okay, any other good news/bad news  
9 things, things that you'd like, things you wish worked  
10 differently?

11 MR. GRAFF: Not really. I think everything went  
12 pretty good.

13 MR. KAUFFMAN: I have one followup question, just  
14 occurred to me.

15 There was a point early on, maybe you weren't on  
16 the panel, but there was a point early on and maybe you were  
17 on the panel when it happened, but there was a point early  
18 on where RCIC tripped on Level 8 and --

19 MR. GRAFF: That was before me.

20 MR. KAUFFMAN: Okay.

21 MR. GRAFF: I knew that they hit the high level  
22 because there is three lights for Level 8 on the panel, so  
23 those were in, but that was before I even came in.

24 MR. JORDAN: The final question that I have anyway  
25 is is there anything that you know of that you think it

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1 would be of benefit for the team to know that we haven't  
2 covered?

3 MR. GRAFF: Not that I know of.

4 MR. JORDAN: I think you already said something  
5 on the turning gear but we already knew about that, so,  
6 okay, we can go off the record.

7 [Whereupon, at 3:58 p.m., the taking of the  
8 interview was concluded.]

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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 JIM GRAFF

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.



---

IAN ROTHROCK

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