ENCLOSURE 11

Attached is a copy of the transcript of the Enforcement Conference held on 8/2/94 with the Salem Senior Nuclear Shift Supervisor involved in the 4/7/94 event.

cc w/Transcript:
KSmith
GMeyer
JWhite
BLetts
JLieberman

DJH - 8/10/94

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BEFORE THE
UNITED STATES NUCLEAR REGULATORY COMMISSION

- - -

RE: MICHAEL D. GWIRTZ-ENFORCEMENT CONFERENCE

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The above referenced matter was held in the offices of the SALEM NUCLEAR TRAINING CENTER, 244 CHESTNUT STREET, ROOM 42C, SALEM, NEW JERSEY, on August 2, 1994, commencing at or about 1:15 P.M. before Carol L. Skipper, Court Reporter and Notary Public for the Commonwealth of Pennsylvania.

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BEFORE:

GLENN MEYER, CHIEF-PWR/BWR SYSTEM, NRC, CHAIRMAN

DAN HOLODY, ENFORCEMENT OFFICER, NRC, REGION I

JOSEPH J. HAGAN
VP NUCLEAR OPERATIONS/GM SALEM OPERATIONS

PHILIP PJ. O'DONNELL, SALEM OPERATIONS ENGINEER

MICHAEL D. GWIRTZ
SENIOR NUCLEAR SHIFT SUPERVISOR NRC-SALEM OPERATIONS

APPEARANCES:

WINSTON & STRAWN
BY: MARK J. WETTERHAHN, ESQUIRE
1400 L STREET, N.W.
WASHINGTON, D.C. 20005-3502
FOR MR. GWIRTZ

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ALL POINTS REPORTING
723 ERLEN ROAD
NORRISTOWN, PA 19401

ORIGINAL

MR. MEYER: Good afternoon, I am Glenn Meyer, I am the Chief of PWR/BWR Systems in Region 1, and I direct the actions regarding the licensing of operators and senior operators. Today we are here as part of an Enforcement Conference associated with the event that occurred at Salem Unit One on April 7. I had contacted you Mike, on Friday, the 29th with the interest to have the Enforcement Conference, and you had expressed the interest in having it fairly soon, so we have been able to make the arrangements to have it today, August 2nd.

As part of the arrangement I did ask whether you would want to get copies of some of the NRC documents that relate to the event, specifically the AIT report and also the letter that was sent to the public service regarding the potential violations, and you said that you had copies and didn't need them.

MR. GWIRTZ: Yes, that is correct.

MR. MEYER: At this point I would like to introduce the people that are here. As I said, I'm Glenn Meyer, and I'm from Region 1.

MR. HOLODY: I'm Dan Holody, I'm an

Enforcement Officer of Region 1, and I'm responsible for coordination of any enforcement actions in the Region.

MR. GWIRTZ: My name is Michael Gwirtz, I'm the Senior Reactor Operator, Senior Nuclear Shift Supervisor at Salem Generating System.

MR. WETTERHAHN: For the record my name is Mark Wetterhahn from the firm of Winston and Strawn, and I'm representing Mr. Gwirtz today. Also with us is Mr. Phil O'Donnell.

MR. O'DONNELL: Phil O'Donnell, I'm the Salem Operations Engineer and Mike reports to me.

MR. HAGAN: And my name is Joe Hagan, I'm the Vice-President of Operations and General Manager of Salem Operations.

MR. WETTERHAHN: I would note for the record these two individuals are appearing at Mr. Gwirtz' request here today. I just want to note for the record that we're in the Training Facility of Public Service Electric and Gas in Salem, New Jersey, and it is approximately 1:15 in the afternoon.

MR. MEYER: All right, thank you. I would like to clarify, Mike, that Mark has also

represented Public Service on a number of occasions. Are you aware of that?

MR. GWIRTZ: Yes, I am.

MR. MEYER: So you are agreeable to his representing you in this instance?

MR. GWIRTZ: Yes, that is correct.

MR. MEYER: I would like to re-emphasize the point Mark made, and that is this is an Enforcement Conference between the NRC and you Mike, and it is at your option that legal representation and corporate representation are here to support you.

Okay, that being said, Dan will you describe the enforcement and Enforcement Conference process.

MR. HOLODY: Sure. We have enforcement conferences with licensees, facility licensees like PSE & G and periodically with individuals like yourself, a licensed operator. The purpose of an Enforcement Conference are to discuss apparent violations. In this particular case our focus is on the issue of the defeating of the vacuum permissive when you had left the control room so that the circ water pump I believe was 12

8 could be started. That is why we're having this conference today. We would like to hear your focus on that particular violation, the apparent violation, what caused it, the significance of it from your perspective, any actions that were taken or planned yourself in conjunction with the company to preclude a recurrence of that type of violation.

As you know, or I am sure you are aware we had a conference on the 28th with PSE & G to discuss a number of apparent violations that were presented to them in the letter dated July 6. It was basically our review of the AIT report and the apparent violations we had identified as a result of that review. We went through the same type of format with them to discuss the violations, causes, significance, corrective action, et cetera.

What we do is we'll take into consideration what we hear from you today as well as what we heard from PSE & G on the 28th, July 28th, as well as what was in the AIT report, and we'll utilize that information to determine what, if any, enforcement action should be taken with

respect to your license.

Any mitigating factors that you feel should be presented during this meeting in terms of what transpired back on April 7th we would like to hear that from you today also.

At the end of this conference I'll go over some of the options that are available to the Commission if the Commission decided that they were to take any action with respect to your license. With that, I'll turn it back to Mr. Meyer.

MR. WETTERHAHN: One point, Mr. Gwirtz was not in attendance at the Enforcement Conference, and while people have probably informed him of what occurred I think you should take that into consideration in your questioning and also in your consideration of these events rather than take into consideration what happened there but it is not brought to his attention here it would be difficult to rely on that as far as any action against Mr. Gwirtz.

MR. MEYER: I agree. I would also like to note I was not there.

MR. GWIRTZ: I was not there.

MR. MEYER: So Joe, Mark and Dan were there. Anything that may have come out at that meeting we would need to specifically repeat because a number of us were not there. It is not our intent that this be an extension of that Enforcement Conference.

MR. HOLODY: Yes, that needs to be clear. This is not a conference with the PSE & G. The representatives of PSE& G management are not here at our request. This is a conference between the NRC and you. We are hear from you regarding these issues, and as Mr. Meyer said earlier they're here at your request as we understand.

MR. MEYER: I would like to repeat the mention that Dan made, that our primary focus is on areas where we think you may have violated regulations, specifically procedures that were not followed and not in accordance with our regulations. This is the interlock that was, you know, defeated. Being in charge during the event obviously you were involved in a number of things that occurred, but, although we may cover them that is not the primary interest that we have today.

One last thing before I turn it over to you, and that is we do expect to discuss what your, what the management's expectations were for you regarding the different circumstances that you faced, and you're perfectly free to speak of them in front of the management or you can choose to ask them to leave, it is at your option. At the end of the meeting I would expect to specifically at my request ask that they leave and see if there is anything that you would want to discuss.

So, now, I'll turn it over to you. If you want to describe what happened that day and the circumstances associated with it.

MR. GWIRTZ: I'm going to start out with background information. I already introduced myself, Mike Gwirtz, Senior Reactor Operator, also a Senior Shift Supervisor for that shift at Salem Generating Station. Some of my background is I graduated high school in 1972, I went directly into the Navy into the Nuclear Power Program. I was a mechanical operator, an ELT. I was in the Navy for nine years, came out an E-7, came directly to PSE & G in 1981 as a reactor operator, obtained my reactor operators license in 1982

after going through a training course through PSE & G, I was an operator in the control room from 1982 to 1986, and in 1986 I was promoted to Shift Supervisor and went through an SRO course through PSE & G, obtained my SRO license, and from '86 to '89 I was a Shift Supervisor on a shift with various shifts at Salem Generating Station, and in 1989 I was promoted to Senior Shift Supervisor and since that time I have been in the capacity of a Senior Shift Supervisor on shift. I had a brief period of time last year, towards the end of last year, as an Acting Operating Engineer during a Unit 1 outage. At the completion of that outage I went back on shift as a Senior Shift Supervisor.

My performance throughout my career I would just like to state that it has always been at the top of all of my peers. I have always been at the top of all classes, SRO classes, requal exams, NRC exams, several letters of commendation, merit levels, and our annual appraisals have always been at the very top. The last few years as a Senior Shift Supervisor have been Merit Level One, which is the very top classification as far as performance, and that is just a brief summary

of some of my background.

I'm going to very basically talk about the April 7th event in brief, leading up to the time that I assumed the duties as Emergency Coordinator. As you probably know we've had a history of grass problems prior to this event. We had several transients on both units that I was involved with. We had a rather severe transient on April 4th on Unit Two. The grass hits so to speak, the circ water, were becoming very predictable. They were occurring every hour to hour and a half after every tide change. We became very aware of when to expect it. It was also unit specific. On an incoming tide it would be to Unit Two, and on an outgoing tide it would hit Unit One, based on the way the circ water structure is arranged water, so basically we know not only when it would happen but what unit it was going to happen to.

Due to the problems that we had at circ water there were several efforts that were put into place to help us further better our performance with the circ water transients, and as a shift we were self critiquing all of our

problems that we had at circ water. Afterwards we would, the supervisors we would get together and talk about the communications, any problems anybody saw, anything they felt we could do better to better enhance our performance, so we had been doing this for about a week and also that week the department or the organization put a supplemental crew out at circ water. This was actually the first day we had an extra senior reactor operator on overtime at the circ water structure with a crew of maintenance people, extra operations people to help get through the circ water transients.

That day we came on shift at 7 o'clock in the morning, relieved the midnight shift, I had a brief meeting with both of the units shift supervisors. I'm in charge of both units, so I'm Shift Supervisor on each unit, so I had a discussion with each one of them, and I did discuss on Unit One with the Unit One Shift Supervisor that we expected something to happen. The magnitude was always different. We didn't know if it would be good, bad, or whatever, but we expected something to happen at circ water,

probably about 9 o'clock or 9:30-10 o'clock time frame.

After that I went to the morning plan of the day meeting, which is at 7:30 every morning, normal plan of the day meeting. One of the biggest items that was discussed during that morning meeting was the fact that rod control was still in manual on Unit One. We were trying to get emphasis placed on restoring that to total automatic operation.

After the plan of the day meeting I went out to the circ water structure, after making a brief tour of both of the units secondary sides. I went out to circ water structure due to the fact we had this new guy out there at circ water, discussed with him what we had seen previously, what we expected communication wise, the problems we had seen before, the solutions to the problems, and basically what he could expect to see out there, and what we expected to hear from him. I spent probably about an hour out there talking with him and walking through circ water and arrived back in the control room area a little after 9 o'clock, about 9:20, checked in with both

control rooms, not much going on, did a further brief with both shift supervisors, updated them on what occurred at the plan of the day meeting, and basically I was completing turnover paperwork and what not until about 10:16 that day the first circulator emergency tripped, obviously on Unit One. I went into Unit One Control Room at that point, talked with the Shift Supervisor who was in the control room at that time, shortly thereafter another circulator emergency tripped. That was 13 A circulator. Other items on the unit, as I did mention rod control was in manual, 12 A circulator was previously out of service to clean the water box, and initial reactor power was approximately 75 percent, and we were operating at reduced load on both units due to the problems at circ water just to reduce our challenge as a proactive move.

After the circulators, we had a couple of circulators emergency trip we got people in place out in the turbine building. Several things have to happen out in the turbine building, drawing prime, cleaning valves, we had teams out doing that.

The decision was made, I made the order

at 10:32 to begin a unit load reduction at one percent a minute. The Shift Supervisor was already proceeding in that direction. I just confirmed that direction with him, and we started a load decrease, and at one point it increased to the point where we were decreasing the load at eight percent a minute. That was the maximum rate of decrease. It wasn't very long when we made, I made the decision that we were going to remove the turbine from service, that we were heading in that direction. Actually it was at 10:28 when we had a combination of circulators such that the procedure required the turbine to be removed from service within one hour, so that direction was given and the crew knew that we were heading towards removing the turbine from service.

The load decrease continued until we were approximately 35 percent power was the time that I started concentrating on the attempts at getting 12 A circulator into service. We had two circulators in service at the time. However one of those had not cycled fully in service and was not providing service to the hot wells. 12 A circulator at the time was the only circulator

that was ready to start.

We had gotten a report from the field that they were priming the water box. There is a water box vacuum switch that makes up at 15 inches. This is the switch we're talking about today that makes up at 15 inches. The previous report from the field was that that vacuum was at 13 inches, and they were still trying to draw prime on that. Shortly after that time the Shift Supervisors ordered a start on 12 A circulator. They attempted to start it, and it did not start. He had all of the permissives checked. There are several permissives that go into starting the circulator, valve positioning, bearing lube pressures, all of those were checked, and they were all found satisfactory, at that point in my mind the only thing holding out the circulator was the vacuum permissive, and it had been 5 minutes since we had to report that it was at 13 inches. At that time in my mind I felt that prime should have been greater than 15 inches. The reason for that is the last outage we did install a new vacuum priming system on the water boxes that can pull a prime from zero to full prime of greater

than 15 inches, 18 to 20 inches in less than 10 minutes. The system had worked extremely well since it had been installed, so I felt that at that time we should have been greater than 15 inches in that water box. My thoughts were that either the vacuum switch was malfunctioning or there was something causing possibly the prime not to go any higher than 13. I didn't know what it was at that time.

The status of the unit, we were continuing to decrease load, vacuum was not good. However, it was not getting worse. It was not approaching yet the turbine trip at that time on vacuum. My intentions were to attempt to increase our margin that we had to a required that we would have to manually trip the turbine so we could manually trip it before an automatic trip, and I wanted to increase that margin because during the circ water transient when we were losing vacuum and losing circulators, if we were to have a turbine trip greater than ten percent power, which is the limit of the capacity of the atmospheric dumps we would rely upon the condenser steam dumps to accept that additional heat load. Without the

circulators and without the condenser being available the condenser steam dumps would not function. Therefore there is a potential to challenge lifting of the steam generator safety valves. Now although that is within the design of the plant, and that is what the safety valves are there for, and I have no doubt that they would function correctly, it was a transient that if I could keep it from happening it would be a better situation to take the turbine off the line in a controlled fashion and not challenge lifting of the steam generator safeties.

So based on those all of those reasons I decided that I was going to lift the vacuum trip permissive on 12 A circulator. The option to go and do it myself at that point was based on the fact that the people in the field I felt were not familiar enough with the circuitry, that it would take me more time on the phone to explain to them how to do it than it would be to just go out and do it myself.

Lifting of this permissive, although it has happened in the past, I have done it at least on one other occasion, but that was several years

ago, I would say '86-'87 time frame, probably '87-'88 time frame, I don't know for sure, but I had done it on one other occasion as a Supervisor, as a Shift Supervisor, I didn't want any equipment operator performing this function thinking that it was something that is a normal evolution or a normal occurrence at the station. My feelings along those lines are that I had basis for doing it, I knew the basis for that permissive being there, and that basis is to mitigate pressure transients on a water box for a condenser circulator start.

I was involved with testing, we did some testing on Unit Two back in 1987 to allow a reduction in set point on this vacuum permissive. It used to be set at 20 inches, it is now set at 15 inches. To perform that reduction we did starts on circulators from 20 inches to zero inches, and those tests determined that the pressure transient at 0 inches was actually less than it was at 20 inches. The reason they went only from 20 to 15 inches is to maintain the water box full and pressure transient is not a concern.

So based on all of those I made the

decision that I was going to go and lift the vacuum permissive. I informed the Shift Supervisor of the fact that I was going to do that. The status of the plant at the time was such that we were continuing to load decrease in a fairly consistent manner. The Shift Supervisor still had good control of the plant in my mind and in his mind at that point. So, all of those circumstances weighed into the fact that I went out of the control room to lift the switch myself. I told him I was going to do it. I went out of the control room area, I passed the day shift Senior Shift Supervisor at the time and informed him of the plant status. He headed towards the control room. I told him I was going to lift the permissive on 12 A circulator and come right back in. I proceeded to the turbine building, which is just 100 feet or so away from the control room area door, went to the permissive switch location on 12 A circulator. On the way there I passed the work control center, Senior Reactor Operator that was out in the field assisting in drawing water box primes and headed a team of people out in the turbine building. I gave that team a brief update

of the unit status, told them I was going to lift the permissive, proceeded and I lifted the permissive. I did not, you can't really hear the circulator start.

MR. HOLODY: Who was it that you told that to?

MR. GWIRTZ: The Work Control Center, Senior Reactor Operator, who is also our SDA on that day. I did not really hear the circulator start, but I heard the vacuum breakers open almost immediately, which is indicative of an emergency trip on that circulator. I did not know why that occurred at that time, but I immediately turned and went back into the control room area. I got security reports. I was out of the control room area for one minute and 58 seconds from security door to security door. As I got back into the control room I talked to the Shift Supervisor, asked him if anything had changed while I was gone, he said no, they had just completed swapping over the auxiliary power transformer to the station power transformer in preparation to remove the turbine from service. The load decrease was continuing at that point, and the unit was

approximately 25 percent power when I re-entered the control room, so it had dropped 10 percent load during the 2 minutes I was gone, which is 5 percent a minute, which is our designed rate of power decrease.

I asked him what happened to 12 A circulator. He said as soon as they pushed the start button it tripped free and emergency tripped. Later we found out that was due to the fork heavy breaker not being racked in correctly, and that is the reason it had not started earlier after the cleaning they had tried to start it and it tripped free.

I continued to survey the control room at that point. Usually I stand towards the back of the control room, the Shift Supervisor is commanding Control in the control room, directing the abnormal operating procedures to the crew, looked at the overheads, looked at the back panels, stepped up into the horseshoe area. I don't know how familiar you are with our control room area, but I stepped into the horseshoe area. It is a rather small area. That is why I don't normally stand up there to look at the board a

little bit closer, picking out key parameters such as RCS temperature, pressure, reactor power. I saw at that point the AV was low, 535 degrees when I looked at it. I asked the Shift Supervisor if he was aware of that. He said that he was, he then directed the Reactor Operator to restore the D AV using rod control. I made them aware of the tech spec requirement being less than minimum temperature for criticality, and at that point they were working on recovering temperature. I continued to survey the console, and I believe that I was behind the console looking at some recorders when the reactor tripped. They announced that they received the reactor trip. I immediately tried to determine why the reactor tripped, looked at the first out, saw that it was power range high flux sub point, I continued to look at recorders on the console to determine why that happened, saw the power increase on the power range recorder, looked at rod control, and saw quite a few steps on rods. At that point I thought it had something to do with it, but I did not know that that was the only event that occurred. My concerns at that point were did we

have some kind of steam flow transient, an excessive steam draw, so I was checking out steam dumps, steam flows, steam generator pressures, those type of things as the crew was getting into EOPs. The EOP's proceeded to the point that we had to verify safeguard valves. We realized we did have an immediate safety ejection. I asked the Work Control Center Senior Shift Supervisor, same guy I passed in the hallway, he was in the control room. He got there about the same time I did, coming back from the trip permissive. I asked him to look at the P-250 typewriter to try and determine what the cause of safety ejection was, and at that point we reached the spot in the EOP to verify safeguard valves. I was standing on the side of the console, so I went to the status panel right off the valves that were not in the correct position as they were positioning them and they completed the EOP, came to the next step after the immediate action is to request that the Senior Shift Supervisor implement the emergency classification guide. I acknowledged that step, went into my office area, which is one door away to get out the ECG and to refer to the ECG and

implement the emergency plan. At that point I declared the unusual event at 1100 and implemented the emergency plan. And that is about as far as-- That covers the critical areas kind of gives you some kind of idea as to where we were up to that point. Just to summarize what I felt--

MR. WETTERHAHN: Questions? Is this a good time for questions?

MR. MEYER: We'll want to go back and discuss some of the specifics. We don't have quite the background that you do, so we'll want to understand the specifics. You prefer to give a summary at the end?

MR. WETTERHAHN: Yes, sure.

MR. MEYER: Let's go back. Okay, you know, I think that was a good summary of the events. We would like to understand-- Well, let's take, let's focus on your actions in the field to lift the permissive. And you said that there is a turbine trip for load condenser vacuum?

MR. GWIRTZ: Yes.

MR. MEYER: What is the setting?

MR. GWIRTZ: It is 18 to 22 inches.

MR. MEYER: So, it could happen as

early--

MR. GWIRTZ: It could happen as early as 22 inches.

MR. MEYER: Now, 22 inches of mercury?

MR. GWIRTZ: Yes, so the turbine had not tripped?

MR. GWIRTZ: no.

MR. MEYER: But you are saying is this measured in a different place, because the circulators are saying 13 inches?

MR. GWIRTZ: This is water box side on the circulators.

MR. HAGAN: It is the circulating water pipes.

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(Mr. Gwirtz is drawing a diagram.)

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MR. WETTERHAHN: You cannot draw it, you have to explain it on the record.

MR. HAGAN: It is the circulating pipe.

MR. MEYER: Let's have a diagram. You're going to have to talk about the diagram, but a diagram would be helpful.

THE WITNESS: Steam side is in the

condenser. Our circulator pump is way--

MR. WETTERHAHN: Excuse me, slow down. As you draw, explain what it is, and then we'll make this a part of the record, okay. Mark with A's or B's what you are talking about, so that someone who is reading this record will be able to figure out what the 5 of us or 6 of us were talking about, okay. Thank you.

MR. GWIRTZ: Condensor is a fairly standard shell and tube condenser, turbine is on the top, direct condensing into the condenser across the tubes, so we have the steam side. And talking turbine trip, and the turbine trip set point it is the vacuum inside of the condenser, steam side of the condenser. To start a circulating water pump, we have vacuum prime valves that come off the top of the water side of the heat exchanger, circ water goes through the tubes. Our circ water works on a pump and siphon effect, but it not only forces flow throw the condenser, but by maintaining the water box side full of water by pulling this prime it creates a loop seal, so as the water flows through the condenser the siphoning effect of the water going

out the outlet side because there is an elevational difference here aids in the flow of the condenser water box. If you were to start a circulator without vacuum, the water level in this water box would be way down inside the piping even though there is a condenser. That was the concern about starting a circulator in this air space causing some sort of water--

MR. MEYER: You have a mixture of water and air?

MR. GWIRTZ: Of water and air, that is correct. So we pulled prime on these water boxes to increase this level in the water boxes, so that when the circulator started we don't create that water hammer effect.

MR. MEYER: Right, although there may be some water all the way through the system?

MR. GWIRTZ: Exactly. There will always be some air and the system normally stays in service as the circulators are operating also. The permissive is actually located on the outlet water box but inlet and outlet vacuum is the same by virtue of the tubes across the heat exchanger, so this is where the permissive is located,

pressure switch for the permissive.

MR. MEYER: So the vacuum in the circulating water system is not necessarily directly related to the vacuum you're measuring for the condenser?

MR. GWIRTZ: Correct. This is just for circulator start permissive. That is all that pressure switch is for.

MR. MEYER: Is there any reading in the control room of the circ water vacuum?

MR. GWIRTZ: No, there is not.

MR. MEYER: So when you said you didn't know what it was, you thought it should be 15 inches, there was no way in the control room to confirm that?

MR. GWIRTZ: That is correct. The only basis I had was the report several minutes ago of 13 inches. We had a confirmed report from an operator in the field. There is also a pressure gauge located out there, that it was 13 inches.

MR. MEYER: The place that you went to the interlock is that adjacent to the reading, the pressure switch reading?

MR. GWIRTZ: Yes, it is fairly close.

They're mounted on a column, and it is kind of like around the corner from the column.

MR. MEYER: Did you confirm what the reading was?

MR. GWIRTZ: No, I did not.

MR. MEYER: I would like to go through your technical explanation about the safety, the steam generator safeties.

You had indicated that the steam dumps a turbine trip greater than 10 percent reactor power would be beyond the capacity of the atmospheric dump valve?

MR. GWIRTZ: Correct.

MR. MEYER: And there was a likelihood that you would have had to, that the system would have used the steam generator safety valves?

MR. GWIRTZ: Correct.

MR. HOLODY: That is if you lost the condenser?

MR. GWIRTZ: If we completely lost all of the steam dumps on the condenser yes.

MR. MEYER: The steam dumps have a permissive on the condenser available?

MR. GWIRTZ: On condenser steam side

vacuum of 20 inches.

MR. MEYER: You said that turbine trip was 18 to 22. If it had tripped at something less than 20 inches, you would have had the turbine removed and you would not have been able to use the steam dumps?

THE WITNESS: Correct. There is also another permissive on steam dumps, and that is that the circulator in the associated, at least one circulator in associated water or associated condenser shell has to be in service. So, there is three different condenser shells, two circulators in each shell. One of those two circulators in each shell will have to be in service for those to operate.

MR. MEYER: All three water boxes?

MR. GWIRTZ: All three condenser shells.

MR. O'DONNELL: They're individually lined up.

MR. MEYER: When you talk 13 A and B, that is into one shell?

MR. GWIRTZ: Right.

MR. MEYER: How many -- At that point

how many of the shells were available?

MR. GWIRTZ: At that point we had only two circulators running, so there were two shells available. That would be the minimum at that point.

MR. MEYER: And you would have had to have had how many shells available for the steam dumps to work?

MR. GWIRTZ: Any shells available the steam dumps in that shell would be available.

MR. MEYER: So in effect you were limited, the steam dump capacity was already limited, you would not have had the three shells work?

MR. GWIRTZ: Correct, plus the availability of their continued use was in serious jeopardy due to the losing of the circulators.

MR. MEYER: Right. In other words, when the steam dumps operate you would have had steam going directly into the condenser, which would tend to further reduce the vacuum?

MR. GWIRTZ: Correct.

MR. MEYER: So, you said that this condition was a possible challenge to the steam

generator safeties; why would you have not wanted to challenge the steam generator safeties?

MR. GWIRTZ: I had no concern to challenge them. Like I said, I'm not afraid that they wouldn't work or anything like that, but the concern was that the preferred method would be to do a controlled shutdown of the turbine, which is the direction we were going. As long as we could maintain vacuum well enough to do a controlled shutdown of the turbine, then we would not be putting the plant through a more severe transient than it was already going through.

MR. MEYER: Okay. You said that there was one prior occasion you thought in '86 to '87 where you personally had --

MR. HOLODY: Before you ask that question, let me just follow up on this.

MR. MEYER: Sure.

MR. HOLODY: You may have said this already, was it clear to you that you were going to lose the turbine?

MR. GWIRTZ: It was not clear that the turbine was going to trip. It was clear to me that we were going to take the turbine out of

service. If vacuum continued to deteriorate or if we lost more circulators than we were losing at the time, we were managing to get some back into service, then we would have had to manually trip the turbine before the automatic turbine trip occurred. That was our cut-off point at that time.

MR. HOLODY: Did you ever feel that-- Go ahead.

MR. MEYER: You had said that the turbine was -- You, at one point, at 1028, you ordered the turbine taken out of service, and that was per procedures?

MR. GWIRTZ: That is correct.

MR. MEYER: Which procedures would they have been?

MR. GWIRTZ: Turbine Operating Procedure and Circ Water AV specifies which circulators have to be at abnormal operating procedures for circ water system. They specify which circulators have to be in service to support maintaining turbine operation. If you do not meet that set combination then the direction is to remove the turbine from service within one hour. That was

the direction we had to do.

MR. MEYER: You were less than the three shells and that would have directed an abnormal condition that you should not keep the turbine on line, you were going through a controlled turbine shutdown?

MR. GWIRTZ: Correct. The criteria is not less than three shells, it is the various combinations. I don't have the procedure here, I could go through and explain it all.

MR. MEYER: No, that is not important.

MR. GWIRTZ: But there are various circulator combinations that if you have two circulators out then one of the adjacent ones have to be in, and these two have to be in, and that type of set up. We did not meet that criteria, so the one hour to remove the turbine from service did apply.

MR. HOLODY: So your motivations correct from what I have heard is simply you did not want to challenge the safeties and that is why the lift was lifted?

MR. GWIRTZ: I did not want to put the plant through a more severe transient. If we

could do a controlled shutdown and maintain circulators in service to perform a controlled turbine shutdown that was the preferred transient other than a turbine trip with a reactor trip and a potential lifting of generator safety.

MR. HOLODY: At the time you made that decision that permissive existed for a reason?

MR. GWIRTZ: Yes.

MR. HOLODY: You went through some analysis in your own mind that the consequences of not lifting the lead would be more significant than challenging the safeties?

MR. GWIRTZ: Yes. Plus, you know, in my mind at that point I felt that the vacuum should have been greater than 15 inches or that the switch could have been malfunctioning. Now I did not know for a fact either one of those, but, those were the options in my mind also that went into that decision.

MR. HOLODY: But even if it were not a malfunctioning switch you thought it was?

MR. GWIRTZ: It could have been.

MR. HOLODY: It could have been?

MR. GWIRTZ: Yes.

MR. HOLODY: Did you consider if it was what would be the impact if it was not a malfunctioning switch?

MR. GWIRTZ: Yes, I did, and that was when I mentioned the testing that we did and the basis for the switch being installed, that I was confident that there were no effects of starting the circulator with less than 15 inches of vacuum in the water box.

MR. HOLODY: And the vacuum was at 13 you said?

MR. GWIRTZ: That was the last reported vacuum was 13.

MR. MEYER: So you knew the consequences of starting a pump at less than 15 permissive were acceptable, that they had been demonstrated in the past, you were aware of that data?

MR. GWIRTZ: Yes.

MR. HOLODY: Did you feel that you were at the time that you did that you were authorized to do that; were you precluded by procedure from doing that?

MR. GWIRTZ: At that time?

MR. HOLODY: At the time that you made this decision?

MR. GWIRTZ: At that time it was I felt that it was fully within my authority as a Senior Shift Supervisor to perform that function or to order that function performed, that I was not held back by any procedure to not perform that function.

MR. HOLODY: Since that time have you felt that you were precluded by a procedure?

MR. GWIRTZ: Since that time two things have become aware to me, I have become aware of, one, a directive was issued from Operations Management that that would not be performed and it is no longer acceptable to be performed. That was the expectation.

MR. MEYER: You are saying subsequent to the event the directive was issued, so today it would not be done?

MR. GWIRTZ: That is correct.

MR. HOLODY: You are familiar with this procedure?

MR. WETTERHAHN: Let him finish answering the question. He said there were two

things.

MR. GWIRTZ: There are two things, and that is the second thing. In preparation for this I did a lot of review of AP's, AD's, all of our procedures. Yesterday I did get a chance to review the normal circ water operating procedure, and there are two statements in that procedure, one is a prerequisite that water box vacuum or water box prime is drawn, and the next is a step in the procedure that is to insure that water box vacuum is greater than 15 inches. I'm aware of that as of yesterday. During that day I was not aware of those steps. They were not in my mind during April 7.

MR. HOLODY: This procedure, I'm looking at a copy that is revision four, dated April 23, 1994, which was after the event. It is a procedure entitled, "Circulating Water Pump Operation Procedure Number S2.0P-SO.CW-0001(Z)Rev 4.

MR. WETTERHAHN: One second.

MR. GWIRTZ: That is a Unit Two procedure. I looked at the Unit One procedure, and I don't believe there is any difference.

(Perusing a document before him.)

MR. WETTERHAHN: Why don't you examine it and make sure.

MR. HOLODY: My question was--

MR. WETTERHAHN: Wait one second, let him examine it.

MR. GWIRTZ: The two steps that I mentioned, the pre-req for water boxes are primed, and the step that water box vacuum is greater than 15 inches, they're the same as the one I looked at yesterday.

MR. HOLODY: Would those steps have been the same on the Unit One procedure that existed at the time of the event on April 7th?

MR. GWIRTZ: I don't know for a fact that they were. This rev, as you said, is dated after the event. However, the changes made in this rev did not deal with either of those steps. I don't know when the previous revs went into place, so I don't know it could have. It could have existed in that fashion April 7th.

MR. HOLODY: So you were unaware at the time you made the decision of this particular step existing and this particular procedure?

MR. GWIRTZ: Yes.

MR. HOLODY: Do you periodically review such procedures?

MR. GWIRTZ: We have reviews, we have required reviews as a licensed operator, yearly reviews. They include all of the abnormal operating procedures and the emergency operating procedures. They do not include a required review of all operating procedures. As a matter of habit I tried to review procedures as things come up in the plant. Being the Senior Shift Supervisor I'm not directly involved with all operations, so this is a category three procedure, which does not have to be in hand, does not have to be referred to when performing the function. However, I do try to periodically look through procedures and just become updated with what they say. As new procedure revs come out, we do receive cover sheets saying okay, basically new procedure is issued or a rev is out, but there is quite a few of those, and I'm trying to remember each one is not always possible, but I do attempt to review procedures on a regular basis.

MR. MEYER: I would like to pursue, you

established that A, in terms of a design of the permissive you were aware of the design, the equipment permissive, but you were not aware that the procedure basically said that that should be met before you proceed, and you talked about the basis and previous testing, and things like that. Let's stick with your understanding at that time, where you knew of the design and not the procedure. You temporarily lifted the interlock so that the pump could start; is that something that was permissible under the procedures if we ignore this procedure, specific circ water procedure that talked about the permissive, was that an acceptable thing to do?

MR. GWIRTZ: It was something that was not delineated in any procedure, how to do this. It was not in a procedure to do that, and it was not in any procedure that it was forbidden to do that.

MR. MEYER: Right, so, under what process would you have been able to do a thing like that of temporary lifting interlocks to start the pump? What process does the station provide to do that?

MR. GWIRTZ: The process that I felt that I had at that time was just my authority as a Senior Shift Supervisor taking into account the status of the plant and what needed to be done to put the plant in a safe condition.

MR. MEYER: Okay, so is that because the circulating water system is a secondary site; could you do the same thing on the reactor?

MR. GWIRTZ: There are specific prohibitions to bypassing any interlock on a safety release system. That is definite.

MR. MEYER: So this being a not safety related system you felt you had the authority to lift the interlock?

MR. GWIRTZ: Yes.

MR. MEYER: Okay.

MR. GWIRTZ: If it was a safety related system, there would be no question even if I had all kinds of basis or whatever, the only way that I could do that would be possibly 5054 X.

MR. MEYER: What about--

MR. HOLODY: Is there any prohibition on that in procedures for lifting leads on safety related systems?

MR. GWIRTZ: Yes, there is.

MR. HOLODY: But there is no similar prohibition on non safety related systems?

MR. GWIRTZ: No.

MR. MEYER: The process you would use on a safety related system, how would a temporary modification apply to, let's take the safety related system; wouldn't this in effect be a temporary modification where you have modified the system on a temporary basis for a specific reason?

MR. GWIRTZ: T mod could apply in this case. We do have procedures for T mod. We do have procedures for T mod.

MR. MEYER: Does T mod apply to non safety related systems?

MR. GWIRTZ: T mods apply to all systems in certain situations.

MR. MEYER: Why wouldn't a T mod apply to this system in this instance?

MR. GWIRTZ: In my mind the T mod didn't apply at that instance because I was not making a permanent type of -- It was -- The modification didn't stay. I lifted the switch, and as soon as I put the switch back down the system was normal.

I didn't jumper the switch or put a piece of wood or jimmy the switch or anything like that so that it was disabled for a period of time. What I did lead to immediate restoration of the system to a normal condition.

MR. MEYER: So the period of time that the interlock was lifted was how many seconds?

MR. GWIRTZ: Just a second. (Gesturing with his hand.) If that.

MR. MEYER: So you feel that a T mod would not apply because the duration was a second?

MR. GWIRTZ: Not only the duration, but the circumstances at the time, the unit in that condition there was no time. If we were sitting running at 100 percent and I had a malfunctioning switch similar to this and I knew that the switch was malfunctioning and all of the other circulators were in, there is no way I would even consider lifting the switch in that situation. We would have the switch fixed at that time.

MR. MEYER: But let's take the example that you have given where you're in the April 7th event, and let's say you had some way to confirm that it was a malfunctioning switch, I don't know

that there would have been, but you assumed that that was a possibility; wouldn't the lifting of the interlock be documented in some way, some process to address that?

MR. GWIRTZ: I imagine it probably should have been documented, but looking back--

MR. MEYER: Should have but not must be?

MR. GWIRTZ: Not that I can think of, no.

MR. MEYER: All right.

MR. HOLODY: When you indicated that you informed the Shift Supervisor of your decision to attempt to restart the circulator 12 A--

MR. GWIRTZ: Yes.

MR. HOLODY: --did you actually go into the details?

MR. GWIRTZ: I told him that I was going to lift the vacuum permissive on 12 A circulator.

MR. HOLODY: You also told the day shift supervisor?

MR. GWIRTZ: The Remote Control Center Senior Supervisor.

MR. HOLODY: Is that the STA?

MR. GWIRTZ: No.

MR. HOLODY: You told the STA when?

MR. GWIRTZ: The STA was out in the turbine building when I performed that.

MR. HOLODY: You told the STA of the decision to lift the lead?

MR. GWIRTZ: To lift the switch, yes.

MR. HOLODY: Would you tell anybody else besides those three individuals?

MR. GWIRTZ: No.

MR. HOLODY: Was there any, did anybody take issue with that decision?

MR. GWIRTZ: No.

MR. HOLODY: To do that?

MR. GWIRTZ: No.

MR. HOLODY: Anybody say that sounds fine or?

MR. GWIRTZ: No.

MR. HOLODY: Were they mute on it?

MR. GWIRTZ: Basically just acknowledged that I was going to do that.

MR. HOLODY: No opposition? Was there any opposition to doing that?

MR. GWIRTZ: No.

MR. MEYER: You had talked about the design and equipment aspects and that was the T mod discussion, now we'll get back to the procedures. You stated that you were not aware that there was a specific procedure step that said that that was to be in effect before starting the pump. Let's pursue the procedure aspect. Had you been aware of it, was there a process that would have permitted you to, because of the conditions, to take that step?

MR. GWIRTZ: If I was aware of that step and procedure the only way that I could continue and perform that function would be to change the procedure via an approved on the spot change process or a normal procedure change process, or invoke 5054 X, those are the only options.

MR. MEYER: Given that this was in a sense an emergency condition and you needed timely action an on the spot change could that have been done in that kind of time frame?

MR. GWIRTZ: It could have been possibly done. It would have taken 15, 20 minutes. It would not have functioned.

MR. MEYER: It would not have been

effective?

MR. GWIRTZ: Would not have been effective.

MR. HOLODY: When you did this in 1986 do you recall the circumstances?

MR. GWIRTZ: No, I don't. I just know that I -- I don't know that it was in 1986. I know it was when I was a shift supervisor and that it happened then, and it was something that again didn't routinely happen, but it was something that people did.

MR. MEYER: To?

MR. GWIRTZ: Restart, restore circulators. The history, as I mentioned there was a new modification on the priming lines to the water boxes on Unit One. The old system had float valves and, you know, I don't know if you know what our river looks like, but you take a carbon steel float valve and you put that kind of environment inside there they get stuck, they got plugged up, there were a lot of problems in our prime on water boxes. This system was changed. It was much improved on Unit One, and this type of thing became not as necessary as maybe it was in

the past.

MR. MEYER: Are you aware of anybody else with the current equipment that had to resort to lifting the switch to get a circulator to start?

MR. GWIRTZ: Not recently on Unit One, not definitely no.

MR. MEYER: Unit Two?

MR. GWIRTZ: I'm aware that other people have done it on Unit Two. I don't know how recent. I couldn't say when or who, but I am aware of that.

MR. HOLODY: How did you become aware of that? Did you see people do that?

MR. GWIRTZ: When I was a Nuclear Control Operator it occurred at that time.

MR. MEYER: We're talking about ten years ago?

MR. GWIRTZ: Right, in the early '80's.

MR. HOLODY: Have you seen it happen under your shift, anybody do that?

MR. GWIRTZ: No, nobody under me has done that.

MR. HOLODY: Are you aware of any other

shifts that were doing it while you were a shift supervisor?

MR. GWIRTZ: While I was a shift supervisor probably. I don't know the times or the dates or who, but I was aware that it happened.

MR. HOLODY: While you were a senior?

MR. GWIRTZ: While I was a senior.

MR. HOLODY: Senior Shift Supervisor?

MR. GWIRTZ: Not unless it was several years ago, nothing recent, nothing really recent.

MR. MEYER: I didn't make a note, you said that the system was modified and the flow switch was removed; when did that occur?

MR. GWIRTZ: The last Unit One outage, it was October of '93, this past year.

MR. MEYER: Let's go back to when you were aware that it was done. You did it, you were aware that other people did it, what was the-- Now that was a considerable amount of time in the early '80's, was there any station ops management response that said that it was okay or it was not okay?

MR. GWIRTZ: I don't recall any response

either way.

MR. MEYER: Okay, let's pursue your decision to do it yourself. You said that you were, you didn't think that field people would be familiar with the specific step, the specific action, and you felt it was quicker to do it yourself; is that correct?

MR. GWIRTZ: Correct.

MR. MEYER: Were you reluctant to go to the switch and do it and be out of the control room for some period of time? How did you weigh the process of your having to leave the control room to do that?

MR. GWIRTZ: I did weigh that into the decision. What was happening in the control room at the time, as I mentioned earlier, I felt that the plant was under, doing the power decrease. However, it was a controlled power decrease, that the shift supervisor was fully in control of the situation at the time, and that was probably the best time to go and do that. If I had waited too much longer either we would be tripping the turbine and I would not leave under those circumstances, or we would be close to getting

less than ten percent power, and then tripping the turbine in a controlled manner, and I would not want to leave during that time either.

MR. MEYER: Had there been some auxiliary operator or electrician familiar with that and you knew that he was able to do that would you have directed him to do it?

MR. GWIRTZ: It is hard to answer that. I don't know if I would have or not in that situation. It depends I guess on who the person was and how much confidence I had in that person.

MR. MEYER: Why is the confidence in the person a factor? Is this a tricky thing to do?

MR. GWIRTZ: No.

MR. MEYER: What would the consequences of doing it wrong have been?

MR. GWIRTZ: Just the confidence that the person knew exactly where to go and how to do it. It wouldn't get into a real time consuming evolution and distract from what was going on.

MR. MEYER: So you're saying it was the aspect of timeliness, you needed it done sooner. It was not if it was done wrong, if he held it for

5 seconds instead of one second that that was going to be a problem?

MR. GWIRTZ: No, as long as he was on the right switch. That is the only switch in that cabinet. Wrong type of aspects are not really a concern, just the timeliness.

MR. HOLODY: If the individual had pulled, if you sent someone else and someone had pulled the relief and didn't reattach it, all you would do is lose that interlock? I mean the circulator would still function?

MR. GWIRTZ: This interlock is a vacuum switch. It is mounted on a hinge. There is a bellows under the vacuum switch, and as the vacuum is pulled the bellows pulls down and the button on the switch pops out. The switch is mounted on a hinge with an adjustment screw on the other side of the hinge, so as the bellows pulls down and the switch button pops out, that starts the circulator, allows the circulator to start. By lifting up the switch on the hinge, the button comes down and allows the circulator to start, so there is really no physical change in the switch. There is no lifting of a lead. It is the same as

pushing a button, a spring return button. It is lifted and put back down, and that is it.

(Gesturing.)

MR. HOLODY: Simply to allow the circulator to start?

MR. GWIRTZ: Yes.

MR. HOLODY: And if it tripped and your vacuum was at 14, so you're still one below and you thought you were still going up, you would have to go and perform the same function again?

MR. GWIRTZ: If an emergency, if a circulator emergency trips, the noise I referred to as I was leaving I heard the vacuum breakers open up. When an emergency trip occurred on a circulator on the water box side there are vacuum breaker valves that open up, and this water goes all the way down to river level, and this whole area fills with air. It breaks all of the vacuum in the water box side, so basically after an emergency trip you have to start over again, reset the emergency trip, get the vacuum valves closed, which is what you do by resetting the emergency trip, and then start drawing prime on the water box again.

MR. MEYER: You described interacting with this interlock. In effect, you did not have to disconnect anything, you didn't have to use a screw driver to do it; is that correct?

MR. GWIRTZ: That is correct.

MR. MEYER: Had you, let's assume that the switch did involve lifting a lead; would you still have done it?

MR. GWIRTZ: Probably not.

MR. MEYER: Why?

MR. GWIRTZ: I believe that one of the reasons that it became something that was done in some instances was the ease of doing it, the fact that when you lift a lead, now we're concerned we're not really qualified lifting lead, relanding the lead, inspecting the connection, you get into lifting leads situation. There are definite procedures for lifting leads to insure that they do get relanded, to insure that they get relanded correctly. Those procedures would be in effect, and that is not really something that an operator would be qualified to do, and I wouldn't feel it would be something that we should do in any situation.

MR. MEYER: So you are saying had it been a lead, an electrical wire connection or something that you would have had to physically disconnect would procedures have prohibited you from doing that?

MR. GWIRTZ: In my mind, yes.

MR. MEYER: Despite the fact that it was a non safety related system?

MR. GWIRTZ: Yes.

MR. MEYER: Okay, so, you considered that in this instance it was permissible for you to interact with this instrument because it was not lifting of a lead, placing some jumper in place, anything like that, you temporarily interacted with the switch and got it, you know, to work, and that that was not really covered by your procedures, it wasn't prohibited by your procedures?

MR. GWIRTZ: I agree with the not being prohibited by the procedures.

MR. MEYER: There was nothing in the procedures that specifically allowed you to do that, is that true?

MR. GWIRTZ: That is correct.

MR. MEYER: Can you think of any other switches similar to this that you or anyone else has ever interacted with?

MR. GWIRTZ: No, I cannot.

MR. MEYER: This is to a large extent a special situation?

MR. GWIRTZ: Yes.

MR. MEYER: So, that you can interact for a second or two, take it out, off the circuit so to speak, you can get it to do what it should do but it doesn't involve changing the control, lifting the lead, placing a jumper in any kind of physical modification or action?

MR. GWIRTZ: Correct. I think the part you mentioned about changing a control is important in my mind also because if you actually had to turn the set point adjustment or something like that to make this happen now you risk changing a set point of a component which would again be something that we would not be allowed to do.

MR. MEYER: And your concern would be if it was an action you took you would have to reverse it, but in this case you put your finger

on the lever and it returns to its normal situation, it is not something you need to verify that it has been done right. It inherently once your finger is removed returns to an acceptable position?

MR. GWIRTZ: Correct.

MR. MEYER: Okay.

MR. HOLODY: Help me here, I'm not an engineer. When you push a button, it returns, this is done instantaneously. If you don't get the start in the control room at the same time how does it-- Then the permissive is still in, is that true?

MR. GWIRTZ: Yes.

MR. HOLODY: And then the pump would never stop?

MR. GWIRTZ: If the circulator -- I don't understand your question.

MR. HOLODY: You go down and you make this adjustment, not an adjustment I should say you just push a button?

MR. GWIRTZ: Basically yes.

MR. HOLODY: To get rid of this permissive?

MR. GWIRTZ: Yes.

MR. HOLODY: And that would allow the pump to start?

MR. GWIRTZ: Yes.

MR. HOLODY: When you go out, when you went down to do this okay, as soon as you pushed the button, you said that it just goes back to where it was before?

MR. GWIRTZ: (Nods head up and down.)

MR. HOLODY: The operator then after you've done this tries to start the pump. Why would it start since the permissive is still in, I mean the interlock is still in? It has not been defeated?

MR. GWIRTZ: It would not start in that situation.

MR. HOLODY: So you have to hold the button down while someone is trying to start the pump?

MR. GWIRTZ: Yes. What actually occurs is they initiate a start signal by pushing a start button. That start signal latches in. It is a latching relay, so that start signal is there. As soon as all of the interlocks are made up, the

circulator is going to start.

MR. HOLODY: So that signal is in when you push the button?

MR. GWIRTZ: That signal is locked in, yes.

MR. MEYER: What happens when the circulator starts? Does the start signal return to some neutral position?

MR. GWIRTZ: Yes, that is in the circuitry design.

MR. MEYER: So you knew that they had pushed the start button and a start signal was somewhere in process, and if the permissives were met it would start?

MR. GWIRTZ: That is correct.

MR. HOLODY: You would surmise this is the permissive that was precluding it from starting?

MR. GWIRTZ: Yes.

MR. MEYERS: All right.

MR. WETTERHAHN: Mike, do you need a break?

MR. MEYER: I think a break might be a good idea, because I would like to check my notes

in terms of what we intended to cover to make sure that there isn't something that we have neglected, so I would like to interrupt the transcription, take a break, and we'll come back.

MR. WETTERHAHN: Off the record.

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(A brief recess was held.)

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MR. MEYER: Back on the record. We're back, we've reconvened the Enforcement Conference. It is 2:34, and we're going to begin with some further questioning of the different specifics.

I was wondering Mike, are you aware of what the safety analysis report talks about regarding the circulating water system; do you ever, do you routinely consult what you called the Updated Final Safety Analysis Report; do you ever?

MR. GWIRTZ: UFSAR?

MR. MEYER: Yes.

MR. GWIRTZ: I do not routinely refer to it for dynamic decisions.

MR. MEYER: Certainly not for dynamic, and there might be some instances where you would refer to it?

MR. GWIRTZ: Yes, that is correct.

MR. HOLODY: How often would you refer to the UFSAR in the course of a day, a week, a month, a year?

MR. GWIRTZ: I would probably say I look at it more as a reference document. If I have a question or a concern I may look at it, and that may be a couple of times a month maybe. It is used as a training document to some extent, not to a great extent, but there is references made to it in training, and that would be about it.

MR. HOLODY: Were you aware that this particular system, the vacuum priming system, circulating vacuum primer, is described in the UFSAR?

MR. GWIRTZ: No, I'm not.

MR. MEYER: Are you aware that any change to the facility as described in the UFSAR requires a safety evaluation?

MR. GWIRTZ: Yes.

MR. MEYER: Would you or did you consider the action to lift the interlock to be a change in the facility design?

MR. GWIRTZ: No.

MR. MEYER: Have you read the AIT report? In the report there are different sections that talk about actions that you were involved in; have you read the report?

MR. GWIRTZ: Yes, I just read it yesterday.

MR. MEYER: Are there any parts of the report that deal with activities that you were involved in that you feel may not be completely accurate or that you would want to address?

MR. GWIRTZ: Yes, there were some things in there that were not correct that I noted.

MR. MEYER: Let's start with the things that we talked about today; is there anything that relates to what we have discussed today?

MR. WETTERHAHN: Give us a second to get the document please.

MR. MEYER: I'm most interested in the section of the report that is 4.0 Plant Operator Performance and Procedure Issues that begins on page 21 and runs through page 25.

MR. WETTERHAHN: Okay.

MR. GWIRTZ: This has to do with the entire event. At the bottom of page 24, where it

talks "A time of reactor trip the only licensed personnel in the control room were the shift supervisor and two assigned control room operators."

MR. MEYER: Which paragraph is that?

MR. GWIRTZ: Last paragraph, last sentence of the last paragraph, and continuing on to the next page. It says,"And the Senior Shift Supervisor was in the turbine hall attending the water box priming." That is not correct. At the time of the trip I was, as I stated earlier, in the control room, and in addition to that a Senior Shift Supervisor of the Work Control Center was also in the control room at the time of the trip".

MR. MEYER: Frankly I'm a little confused. You referred to informing two people. I thought it was two people, one was the Work Control SRO?

MR. GWIRTZ: Yes, right.

MR. MEYER: Who is also the STA?

MR. GWIRTZ: Yes, correct.

MR. MEYER: You also talked about the day shift SRO, I'm sorry the day shift senior nuclear shift supervisor, so there was another

shift doing things not in the control room and did he report to the control room?

MR. GWIRTZ: When I talk about the work control center day shift senior shift supervisor we have two positions that are staff positions these are both senior shift supervisors, qualified senior shift supervisors who are assigned to a staff day shift position. They are the operations work control interface. That is their position.

MR. MEYER: Both of them do that?

MR. GWIRTZ: Both of them do that. The person that I passed in the hallway was one of these people. He does fill in for vacation relief as a Senior Shift Supervisor. That is why I kind of call him an extra Senior Shift Supervisor but that is a staff position.

MR. MEYER: So were there two people that were similar? I was confused, or was it really one?

MR. GWIRTZ: I saw the one person who is the Senior Shift Supervisor on day shift, and then I also saw the Work Control Center Shift Supervisor who is a member of our shift.

MR. MEYER: Is he SRO licensed?

MR. GWIRTZ: It was a she in this case, and she is SRO licensed, and she was also the STA for that day.

MR. MEYER: So she's the STA and there is also the day shift senior?

MR. GWIRTZ: Yes.

MR. MEYER: Did both of them come to the control room?

MR. GWIRTZ: The day shift senior immediately came into the control room. The STA came into the control room just after the reactor tripped.

MR. MEYER: So the record that you are clarifying is that at the time of the trip you were in the control room?

MR. GWIRTZ: Yes.

MR. MEYER: In addition to the shift supervisor?

MR. GWIRTZ: Yes, which that did state that, the shift supervisor.

MR. MEYER: And also the work control supervisor, who is licensed?

MR. GWIRTZ: Work Control Senior Shift Supervisor. The best way to word it would be an

extra Senior Shift Supervisor.

MR. MEYER: Right, okay. All right I appreciate that.

MR. GWIRTZ: On page 24 in the second paragraph second full sentence it starts, "Senior Shift Supervisor left the control room during the transient to override the circulator pump interlock." Do you follow that one?

MR. MEYER: Yes.

MR. GWIRTZ: " --And restart the 12 A circulator pump in an attempt to maintain condenser vac and prevent turbine trip." As we discussed today I had a lot of reasons for doing this. The main reason was not to prevent a turbine trip, it was to increase our margin and allow us to do a controlled turbine shutdown.

MR. MEYER: It was whenever the turbine is tripped that you have a condenser available to handle the trip?

MR. GWIRTZ: Yes.

MR. MEYER: All right.

MR. GWIRTZ: And in the next sentence, these are minor, but I mean if you're going to use these for judgment for my actions I would like to

clarify how I feel about the statements.

MR. MEYER: Okay.

MR. GWIRTZ: The next sentence right after that says, "The Senior Shift Supervisor would normally provide direction to the Shift Supervisor on when a reactor or turbine trip should be initiated." That would, normally I'm not the only one that gives that input. I don't know if that statement means to say that, but it is like without me there that input is not there at all. Anybody can make that input to when to trip the turbine. It could be either one of the Reactor Operators or the Shift Supervisors.

MR. MEYER: All of the licensed people have the right and responsibility to trip the reactor?

MR. GWIRTZ: Right, so I could provide that direction to Shift Supervisors if necessary.

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(Mr. Gwirtz and Mr. Wetterhahn peruse several documents.)

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THE WITNESS: The statement, same paragraph, I guess this is a key paragraph, it

says, "Senior Nuclear Shift Supervisor in combination with the extensive effort undertaken by station personnel to maintain turbine operation both the circ water intake and turbine hull reflected perceived management expectations that extraordinary effort would be used to overcome grass intrusions." My feelings on that statement is yes, we did take efforts, and they were strong efforts, they were thought out efforts to try to overcome these grass intrusions, and the reason for those, and it wasn't a perceived management pressure to maintain the turbine on line but it was to reduce the risk of placing the plant through an unnecessary transient, an extreme transient such as a trip, otherwise we wouldn't have been operating if we thought it was going to trip every time.

MR. MEYER: You had already directed that the turbine be taken out of service?

MR. GWIRTZ: Yes.

MR. MEYER: I understand. I was not at the Enforcement Conference on July 28th, the people that were, was it brought out that Mike was not, contrary to the AIT, that he was in the

control room at the time of the trip?

MR. HAGAN: I don't recollect whether it was ever discussed, Glenn. I don't specifically remember it being discussed one way or the other.

MR. MEYER: All right, I appreciate that.

MR. GWIRTZ: The other things are back after the trip, the safety injection. You just want to keep it to the --

MR. MEYER: I would prefer, I don't want to exclude anything you want to say, but I don't think they apply.

MR. GWIRTZ: I don't feel it is necessary.

MR. MEYER: All right. We've talked about --

MR. WETTERHAHN: Have you now reviewed that section, satisfied that you got the major items?

MR. GWIRTZ: Yes, I think that one paragraph is the one that deals with my going out into the field, and I think we clarified that.

MR. MEYER: You talked extensively about the interlock, and that was for the 12 A

circulator; were there any other circulators for which the permissives were lifted, or I'm sorry the interlocks were lifted?

MR. GWIRTZ: No.

MR. MEYER: I would like to talk about management expectations; is this a good time for you?

MR. WETTTERHAHN: I have one question by way of clarification. Mike, you noted that it was your practice to attempt to read as many procedures as you could, beyond those which are required to be read; can you tell me how many procedures there are in total regarding the operation of the Salem units?

MR. GWIRTZ: I don't know that I could put a number on total number of procedures, but we did recently undergo a procedure upgrade project and in the past several years there have been thousands of procedure changes and upgraded procedures in the past couple of years, and the upgrade just finished, and there are several procedures, all of the procedures basically have been upgraded.

MR. WETTERHAHN: Okay, just to clarify;

do you recall reading the procedure that we discussed earlier in the last year say?

MR. GWIRTZ: No, I do not.

MR. WETTERHAHN: Thank you, that is all of the questions that I had. Mr. O'Donnell is here at the request of Mr. Gwirtz, and I would like to ask him to review Mr. Gwirtz' performance, both before and after the event if he could. Could you identify yourself and state your position and your relationship to Mr. Gwirtz, and then briefly describe those issues.

MR. O'DONNELL: My name is Phillip O'Donnell, I'm the Salem Operations Engineer. I have been the Operations Engineer for the past three years. Mike reports to me, as do all of the other Senior Shift Supervisors. As part of that process we do periodic reviews on all of the Senior Shift Supervisors. Mike's performance specifically has been outstanding. He has significantly exceeded the expectations on a regular basis. His file is full of commendations as he indicated before. There are some specific examples I guess I would like to bring up to you people. Specifically as the Operations Engineer

we're required to monitor start up and plant shut downs of a particular unit. On several occasions meeting on shift with Mike and his shift, Mike has taken the opportunity transitioning up through power the senior level control sometimes does not control as well as we would expect. On those occasions where we start seeing deviations, significant deviations in the steam water level control Mike has taken on himself and said I don't feel comfortable with this, back the unit back down, I want to get it fixed. On several occasions he has done that, so that he is not driven by just getting the unit on line, he wants to do it safely and without incident.

One of the other instances Mike was the test engineer for the this past December for the Unit One Hot Mid Loop, we ended up with a problem following the refueling outage where we had a problem with one of the RCP seals. During that time Mike was designated as one of the test engineers. I was the test manager. In preparation for that, because of the significant consequences even when it was shutdown in the hot mid loop Mike took the approach that we were going

to do it right, it doesn't matter how long it is going to take, we are going to do it right and do it by the numbers. On several occasions he wanted to make sure all of the equipment was available. He stopped the evolution at several points to make sure that the instrumentation was correct, to make sure that it was working as we described in the procedure, took the time to change the procedure if it was necessary, and then go through, and we had a very uneventful RHR mid loop operation. It was done safely due to a large part with Mike's assertive decision making process and his adherance to the standards that we have.

Even after the April 7th event one recent event occurred where we lost our circulators during a lightening strike. Mike has translated that safety consciousness to his shift, so that as soon as they recognize they lost one of the circulators they went for a manual reactor trip and this happened a couple of weeks ago, they went for the manual reactor trip before they got the automatic, so I think that Mike reflects assertive decision making and tries to instill that in his shift, and I think he's one of the

best Senior Shift Supervisors that we have, and he adheres to the standards, and he has got the safety consciousness. That is all I have.

MR. WETTERHAHN: Thank you. Do you want the summary first?

MR. MEYER: No. Why don't we ask the plant management to step out, and we'll have an opportunity to talk about management expectations. Joe and Phil.

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(Mr. Hagan and Mr. O'Donnell have left the room.)

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MR. MEYER: Let it be noted at this point that Phil O'Donnell and Joe Hagan have left the conference room, and we'll proceed.

MR. WETTERHAHN: So that the record is perfectly clear, and I discussed this with Mr. Gwirtz before he agreed to have me represent him, that he knows that I represent the company and have represented the company, and there might be an instance where there would be shared confidences. We have not seen any, at least I have not seen any conflicts between the company position and Mr. Gwirtz' position, and I assume to

this point you have not either?

MR. GWIRTZ: That is correct.

MR. WETTERHAHN: I just want to place that on the record. The second thing, while I'm still talking, is a procedural request. I would like to make a request that Mr. Gwirtz be given an opportunity to review the transcript after it has been delivered to you at a convenient time. There have been a lot of acronyms and a lot of initialisms used, and I want the record to be the best that it can be, to allow you to make your decision, so I would request that you give us the opportunity to review the transcript at King of Prussia or any other place that is convenient for you. As I mentioned off the record in OI Interviews they would grant that opportunity after their field investigation is complete, and again I ask for that opportunity. Thank you.

MR. MEYER: The review that you propose will be done by Mike or you and Mike?

MR. WETTERHAHN: The two of us would review it, and we would make our corrections right on the transcript, and that is the opportunity that we would ask for.

MR. HOLODY: You're not asking for a copy of it, you're asking for an opportunity to review it and correct it?

MR. WETTERHAHN: That is correct.

MR. HOLODY: We note that, we'll take it up with our management, and we'll get back to you.

MR. WETTERHAHN: Okay.

MR. MEYER: Specifically I would like to speak first about management expectations regarding your actions on the switch. You had indicated that there were a number of times previously, well years prior, that people, including you, had interacted with the switch; what did you believe the management's expectations were regarding interacting with the circulator permissive switch? Was this an acceptable action?

MR. GWIRTZ: At the time of the event in my mind management's expectations were that it was as I stated before, their expectations were this is something that is not a normal occurrence, it is not an expected occurrence, it is not something that we would be expected to do in normal day to day operations. However, that it was fully within my authority as a Senior Shift Supervisor to

perform that function, if I felt it was necessary for the safe uneventful operation of the unit.

MR. MEYER: Is that based on your interpretation of their general guidance or had they provided specific guidance regarding the circulator?

MR. GWIRTZ: There had been no specific guidance regarding this vacuum permissive switch, and to my knowledge in either positive or the negative that basically I felt that it was known that this occurred on occasion, and that by absence of any further direction that it was accepted.

MR. MEYER: Okay, had you ever specifically discussed with any managers the issue of the circulator and lifting the permissive to allow the start?

MR. GWIRTZ: No, I did not.

MR. MEYER: Okay, were you aware of any instances where management had taken actions, including disciplinary actions, following one of the instances where someone had interacted with the interlock?

MR. GWIRTZ: No, that has not occurred.

MR. HOLODY: If management were there in the control room at the time of this event would you have made the same decision?

MR. GWIRTZ: Yes.

MR. HOLODY: If an NRC inspector was there inspecting at the time would you have made the same decision?

MR. GWIRTZ: Yes. At that time, during that day, yes.

MR. HOLODY: Going back in time to April 7?

MR. GWIRTZ: Yes, that would not have precluded me, I would not have been afraid to do that or concerned about doing that in front of anyone. I did not think I was doing something wrong or against any rule.

MR. HOLODY: Are you aware of the procedure that we referred to earlier, the circulating water pump operation? I believe you indicated earlier that you were not aware of that step that stated that insure the following start permissives are satisfied: Water box vacuum is greater than or equal to 15 inches. If you were aware of that procedure, would you have done that

procedure?

MR. GWIRTZ: No, our procedures state that we have to follow the procedure as written. Otherwise it must be changed. The only other option is 5054 X. I would not consider this an emergency situation where 5054 X would apply.

MR. HOLODY: What was management's response to what you did do after the event?

MR. GWIRTZ: The first discussion I had concerning this individual action was with a one-on-one with my manager. We discussed the event, I asked him --

MR. MEYER: Could you be specific, who is your manager?

MR. GWIRTZ: Lee Catalfomo, the Operations Manager.

THE COURT REPORTER: Can you spell that?

MR. GWIRTZ: Lee Catalfomo, C-A-T-A-L-F-O-M-O. We had a one-on-one discussion, after which I asked him what he felt were my shortcomings during the event. He specifically mentioned that he wished and was concerned with my leaving the control room and

manipulating the switch, and I told him I understand that, I did give him the same basis, the same reasons that I have given you earlier, and he made it clear that is something he did not want to continue at that point.

MR. HOLODY: When was that session?

MR. GWIRTZ: It was probably within a week to two weeks after the event. That is probably as good as I can pin it down.

MR. HOLODY: Was his concern with the fact you left the control room or with the fact that you had manipulated the switch, or both?

MR. GWIRTZ: His concern was basically both, the fact that I left the control room for that reason was the concern.

MR. MEYER: Did you have the sense that if you had looked back to a knowledgeable auxiliary operator that knew how to do it, if you had directed someone else to do it, do you think it still would have been a concern?

MR. GWIRTZ: At this point I believe it still would have been a concern, yes.

MR. HOLODY: Can you give us some insights into what his specific concerns were with

the switch manipulation?

MR. GWIRTZ: I don't really recall anything specific, just the fact that it occurred, that I did it. He did not cite any violation of a procedure, he did not cite anything concrete, he just cited i., to my recollection, as poor judgment.

MR. HOLODY: Did he refer in any detail to what he meant by that, why it was poor judgment? Not the leaving of the control room but the manipulation of the switch?

MR. GWIRTZ: No, not that I recall.

MR. HOLODY: Do you believe it was poor judgment?

MR. GWIRTZ: Looking back on it at this time I do believe that it was.

MR. HOLODY: Because?

MR. GWIRTZ: I made some assumptions that the control room crew was going to perform up to what I expected them to perform as far as the control of temperature in the reactor coil system. Those were incorrect assumptions on my part and possibly by my continued looking for those two minutes in the control room situation I might have

been able to pick up on that earlier and prevented that instance from occurring. I can't say it definitely would have, because it was only two minutes, but there would have been more of a chance.

MR. HOLODY: That is the leaving of the control room?

MR. GWIRTZ: Yes.

MR. HOLODY: That is what you are referring to?

MR. GWIRTZ: Yes.

MR. HOLODY: That was poor judgment in leaving the control room?

MR. GWIRTZ: Yes.

MR. HOLODY: Do you believe it was poor judgment to manipulate that switch?

MR. GWIRTZ: Now I do believe, yes, it was poor judgment. Yes, I believe that now. I realize there is a procedure in place. I realize that there are probably several precautions and steps in places that I may not be fully aware of, and I'm going to have to really analyze anything that is done not correctly, everything that is done not correctly in accordance with a procedure,

anything that is, any type of work around bypassing I have to be more sensitive to.

It has to be analyzed further, and I cannot accept the fact that it has been done in the past as being okay for it to be continued to be done.

MR. HOLODY: Should you have known that procedure?

MR. GWIRTZ: Yes, I should have.

MR. HOLODY: Should you have known that step?

MR. GWIRTZ: Probably should have. I can't say that I know every precaution and every step and every procedure, but as a licensed operator I feel that I should be familiar with everything. I don't think I ever can, but I should try to be able to.

MR. HOLODY: Was management aware of any-- You indicated that you had done this once before, I think you said 1986 but you were not sure, it was somewhere in that time frame?

MR. GWIRTZ: Right.

MR. HOLODY: And that others had done this also? Was management aware of that to your

knowledge?

MR. GWIRTZ: I don't know for a fact that they were, I'm assuming that they knew it occurred, because to me at that time it wasn't anything that -- it was something that was done infrequently but it was not something that was being hidden or anything like that from management. I thought it was common knowledge through the operations department that it occurred.

MR. HOLODY: Had you ever discussed doing this type of an action, had it ever been discussed with management by you or had it ever been discussed with any peers prior to that April 7th event?

MR. GWIRTZ: I know it had been discussed with peers because that is how I learned about doing it. I've seen other people, not seen other people doing it, but I'm aware of other people doing it, and that is through discussion with peers, other control room operators, shift supervisors. That is about all I'm aware of.

MR. HOLODY: But I think you eluded earlier, this was not something that was recent?

This goes back in time?

MR. GWIRTZ: This is back in time, nothing recent.

MR. HOLODY: After you had the session with your management was there any disciplinary action that resulted from this?

MR. GWIRTZ: There was no formal disciplinary action. However, the discussions that we had, we had like I said individual discussions, we had team discussions with the shift in Operation Management team and all of these items were discussed, all of the deficiencies plus the positive things that occurred were all discussed, and it was a coaching counseling that occurred throughout those sessions, but there was no formal discipline, no written formal disciplinary process.

MR. HOLODY: Did you have any discussions, formal or informal, with peers after this event regarding performance? Lessons learned?

MR. GWIRTZ: Nothing, no formal discussions, normal shift turnover discussions. Well, what happened, what do you think, that type

of, those types of discussions. Nothing formal. Each shirt went through a scenario at the training center. They simulated the event on the Salem simulator, each shift came out and witnessed, they did a walk through of the event, everything was discussed, high points, low points, exactly what happened. There were several shift training sessions that occurred, nothing shift to shift type of discussions.

MR. HOLODY: You are aware that we had what we call augmented inspection teams out here at Salem in the past I guess two and a half years since November of '91 when PSE & G had the turbine event?

MR. GWIRTZ: Yes.

MR. HOLODY: Were you on shift for any of those occurrences, the turbine, when the turbine was destroyed, the annunciator problem they had; are you familiar with what I'm referring to?

MR. GWIRTZ: Yes, I am familiar. We had the turbine event, the overhead annunciator problem, the rod control problem, this AIT, I'm familiar with all three. I was not present during

the turbine event. I relieved the watch on the day shift following the day it occurred, didn't get to see everything, the condition of the turbine first hand. As far as the overhead annunciator, I was not involved with that either, however, did get briefed on exactly what happened in training. The rod control event was something that occurred over several shifts. There was a portion of that that I was involved in. We were actually on watch the time that we were doing the rod testing when we went to insert the rods in and the two rods withdrew. We were on shift during that portion of that.

MR. HOLODY: On the turbine overspeed event, prior to that event there was a test of the overspeed control system that was done in October of '91, prior to the November event. One of the concerns that we had, the NRC had at that time, was that particular test; were you involved at all in that particular test of the overspeed?

MR. GWIRTZ: No, I was not, not the one that was done in October. However, I had been involved in other overspeed tests on the turbine and, in fact, there was one that we failed, and we

stopped and wrote the work orders and made the repair take place.

MR. HOLODY: But you were not involved in the when there was an actual test failure, there were some operators involved, and they were not sufficiently inquisitive regarding that failure. You referred, in fact, in this enforcement action, we noted "There were 5 licensed operations staff, including two RO's, shift supervisor including a senior shift supervisor, a senior ops engineers, who did not demonstrate a sufficiently questioning and inquisitive attitude regarding the test results. In addition, the Senior Shift Supervisor and the Senior Operating Engineer apparently did not understand that an actual test failure had occurred".

You were not one of those individuals referred to?

MR. GWIRTZ: No, I was not.

MR. HOLODY: I don't have any more questions.

MR. MEYER: I would like to discuss management's expectations regarding grass attacks

in general. You had described special efforts that was made to put a team of people in the technical structure to deal with the circulators and screens and things like that. Was there any effort by management to describe what was expected during these effects on the primer system in terms of turbine reductions, power reductions, things like that?

MR. GWIRTZ: I think we had discussions on what to do. It was clear to everyone that there were no management concerns or pressures about not doing, about a load reduction. Nobody felt any pressures not to start a load reduction. As I said, we were operating at a reduced load for quite sometime. There were a lot of discussions, and I don't recall anything specific about so and so does this, does that in a control room. Most of the actions that were in place were at the circ water structure, additional actions.

MR. MEYER: So, in terms of actions to deal with this condition in the control room in the turbine building there were no, there was no specific guidance or procedure that was described, any special effort to coordinate a power

reduction, rapid power reduction, changes in responsibility in the control room, anything of that nature?

MR. GWIRTZ: We had procedures in place at the time, the abnormal circ water operating procedure which gave direction for reducing load. As I mentioned previously, the turbine procedure, the portion for one hour to remove the turbine from service integrated operating procedure for directing the load decrease. There were procedures in place to accomplish the load decrease for circ water.

MR. MEYER: Does that procedure describe power reductions up to eight percent per minute?

MR. GWIRTZ: It does not specify a rate. It is not specifically a rapid load reduction procedure. It was recognized that a procedure of that nature could be of benefit, and since that we've implemented an AV load procedure. It is called AV Load. It is an abnormal operating procedure for rapid load decrease. It basically streamlines and coordinates the load decrease.

MR. MEYER: But the efforts regarding grass were focused on the intake structure and how

to handle it there?

MR. GWIRTZ: For the extra people, yes.

MR. MEYER: It was considered additional procedures, guidance addressed what you need to do with in the control room?

MR. GWIRTZ: Yes, and I agreed with that. I felt that operations transients would be one that would be able to be handled.

MR. WETTERHAHN: Let me follow that up. You had discussed earlier the April 4th event in your shift crews handling of that event; did that also give you real confidence that you could handle a similar event?

MR. GWIRTZ: I wouldn't say it gave us confidence that we could handle anything, I think it made us realize that these events were very challenging and anything we could due to improve our performance would be very beneficial. During the April 4th event what we found were most of the extreme challenges were out at the circ water structure and at the turbine building, and that is where we could gain the most benefit from increasing our manpower and our focus.

MR. MEYER: Was manpower increased in

the turbine building?

MR. GWIRTZ: Not on watch people, but we had extra people available. We had set places where people were to go during a circ water grass problem.

MR. MEYER: What type of people, mechanics, electricians, operators?

MR. GWIRTZ: Operators.

MR. MEYER: So these would be licensed people or operators?

MR. GWIRTZ: Operators.

MR. MEYER: That is all that I have. Any other management issues that we want to discuss?

MR. WETTERHAHN: I have a couple of questions.

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BY MR. WETTERHAHN:

Q. When Mr. Catalfomo spoke to you, counseled you, do you recall that?

A. Yes.

Q. Had the procedure with regard to bypassing interlocks been changed at that point in time?

A. There really was no specific procedure dealing

with the bypassing of these interlocks. What did occur is that there was management direction that circ water interlock was not to be bypassed anymore. I don't recall right now how that came about. I don't think-- I kind of looked for it a little bit yesterday. I don't think it was an-- I had an information directive which is a formal op department directive. I believe it was a night order book entry, but I did not locate it, but I do know the word went out to all operations department personnel that it was to no longer occur.

Q. Do you recall whether that would have been before or after Mr. Catalfomo spoke to you?

A. No, I don't recall.

Q. Did you do an assessment with your shift afterwards with regard to this event, as to their performance during this event?

A. Yes.

Q. We talked about other shift and peer discussions; did you have a discussion with your crew?

A. Yes.

Q. And just generally tell us about that

discussion.

A. We had individual discussions with our crew and they paralleled most of the other findings and, in addition to that I think the biggest one that we did was a leadership seminar that we did with our crew and management. Most of that was done separately where we each evaluated our crew. We evaluated the positives and the negatives, and then management did the same thing separately. We got together afterwards and compared notes, and the alignment was just about 100 percent. We discussed individuals performances, and I felt everybody on the crew realized where the shortcomings were.

MR. WETTERHAHN: Thank you, I have nothing further.

MR. MEYER: At this point I would like to break and to bring the managers back in.

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(A brief recess was held at 3:15 P.M. and Mr. O'Donnell and Mr. Hagan entered the conference room.)

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MR. MEYER: Welcome back. At this

point Mike would you provide the summary that you have indicated that you have?

MR. GWIRTZ: I would just like to state that as we talked before, I spent my entire career trying to do the right thing and what I felt was the right thing to do, and what I felt was expected of me by whoever my superiors were at the time, and that includes the NRC, the people that have issued me my license. I have always been basically a top performer, and I have had a hard time dealing with this incident because I don't feel it is indicative of my performance or my crews performance. We've learned a lot from the event, the biggest one, the biggest thing I think I have learned is that the oversight, how important the continued oversight is into the control room operations, that just because I feel that as an NCO I would have been able to do something or should have been able to do something or any NCO should be able to perform a certain evolution I should not assume that all can do that, and that is why supervision is there, to maintain that oversight. As far as the lifting of the interlock, it is something that I feel at the

time I did for the right reason. There is a basis for doing it in my mind. It wasn't just go out there and do it type of thing. It was thought out. However, in hindsight I feel it was not the correct thing to do at the time, and as I indicated, anything that is done not correctly whether just because it is not in the procedure doesn't necessarily mean it is okay to do, and I have to evaluate all of those types of actions. I feel that the actions that we've put in place and what I have learned from the event will make me a better operator, and I really don't feel that anymore action is necessary. I think I have been my worst critic through this whole event as well as with the rest of the crew.

MR. MEYER: Anything further?

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(No responses.)

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MR. MEYER: Anyone else have any summary or remarks?

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(No responses.)

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MR. MEYER: I'm reluctant to ask a specific question at this point, but the one thing that came to mind, you have stated you were not aware of any procedure steps that prohibited what you were doing and that at the same time you were aware that the 15 inch permissive was something that could potentially a malfunctioning switch prevent the circulator start; did the control room, any of the people have the procedure out?

MR. GWIRTZ: No.

MR. MEYER: Okay. So you were aware of the 15 inch interlock because of previous, just knowledge, previous experience?

MR. GWIRTZ: Yes, system design training, I knew the system. I knew the functions of the system.

MR. MEYER: All right. Thank you.

At this point Dan is going to describe some of the outcomes that can happen as a result of enforcement conferences.

MR. HOLODY: As I alluded to in the beginning, we have these enforcement conferences to understand from the licensee, in this case yourself as the Senior Reactor Operator, you know,

get your side of the story, hear any mitigating features, understand your perspective on causes and significance of violations, et cetera. Then we take into consideration what you've told us, as well as what we found during the AIT, and also we have the Enforcement Conference with PSE & G. We'll make a decision on what, if any, enforcement is warranted with respect to your license. The options are, if there were to be any action, we could issue a letter of reprimand, we could issue a notice of violation, because you're required to insure that the facility adheres to, you are required to do everything under your license that would insure that the facility was in compliance with their license. We can issue notice of violation with civil penalty. We can modify, suspend, or revoke a license. We'll make a decision on any of those actions, if we decide action is warranted, and then we'll inform you in writing, also give you a call what that action is. Normally we would like to take these actions within 30 days. Actions involving individual licenses generally take longer. Whatever action we do take, if we do take an action, we give you

an opportunity to respond in writing, and we'll address what all of your rights are within that letter. If we don't take an action, you will not have to respond to that. Do you have any questions?

MR. GWIRTZ: No.

MR. MEYER: Okay, thank you for your participation today, and we appreciate your efforts.

MR. HOLODY: Thanks for coming in.

MR. MEYER: The end.

MR. HOLODY: The conference is concluded.

(Proceedings concluded at 3:25 P.M.)

C-E-R-T-I-F-I-C-A-T-I-O-N

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I, Carol L. Skipper, hereby certify that the testimony and proceedings in the foregoing matter taken on August 2, 1994, are contained fully and accurately in the stenographic notes taken by me, and that the foregoing is a true and correct transcript of the same.

- - -

CAROL L. SKIPPER
Court Reporter and Notary Public
Commonwealth of Pennsylvania

- - -

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CHASE NYC /ORG=PUBLIC SERVICE ELEC & GAS CO
RECEIVER
TREAS NYC /BTR/BNF=/AC-31000001 OBI=U S NUCLEAR REGULATORY COMMISSION
RELATED
RE PART 55 SERVICES OPERATOR EXAMS F EES FOR SALEM & HOPE CREEK GENERATING
STATIONS CHASE NY REF 4308020049600000

771029

Civil Penalty EA 94-112

IMAD URC OMAD
1104 B1Q8703C 002868 11041206 FT1B G06006 1104 B1QFDO1A 000164 11041206 FT1B

PF2 RETURN TO SELECTION SCREEN PF3 RETURN TO MENU PF7 PgUp PF8 PgDn
U002 INQUIRY COMPLETED

S0 IN SESSION READY COMM OK ▪↔▌ A0 DCD RAP

~~201 430-6000~~
201 430-6195 S. Turrell

D/E

EA NUMBER REQUEST FORM

TO: OEMAIL OR FAX TO OE			
FROM:	M. SATORIUS	REGIONAL CONTACT	DAN H
DATE OF REQUEST	11/18/94	REGION	I
LICENSEE	SALEM PSE&G		
FACILITY/LOCATION	SALEM	UNITS	1 & 2
LICENSE/DOCKET NO(S).	50-272, 50-311		
LAST DAY OF INSPECTION		DT OF OI REFERRAL	6/29/93
OI REPORT NO.	9/30/94	DATE OF OI REPORT	1-93-021R

SUMMARY OF FACTS OF CASE (ANNUAL REPORT FORMAT FOR EATS ENTRY) (MAXIMUM OF 300 CHARACTERS)

OI report substantiated that H&I by two staff engineers by licensee management occurred.

BRIEF SUMMARY OF INSPECTION FINDINGS (IF NOT SUFFICIENTLY DESCRIBED ABOVE)

REASON FOR POTENTIAL ESCALATED ACTION

H&I by licensee management

DELEGATED CASE		YES	✓	NO					
	MED INST		PHYSICIAN		NUC PHARM		RADIOG		IRRAD
	WELL LOGGERS		ACADEMIC		GAUGE		MOISTURE DENSITY		
	OTHER TYPE:								
CITE SIMILAR CASE: EA NO.									
SHOULD OE ATTEND ENF CONF			L	YES		NO			
NONDELEGATED CASE		✓	YES		NO				
	NONDELEGABLE TYPE		OI REPORT/WILLFULL		COMPLEX/NOVEL				
	DISCRETION		COMM APPROVAL	L	OI INTEREST		SL 1 OR 2		
	OTHER REASON:								

IS THERE A BASIS TO CLOSE ENFORCEMENT CONFERENCE? Y/N IF YES, EXPLAIN: NO

EA # ASSIGNED BY OE	94-239	DATE:	11/18/94	ES ASSIGNED	

VII