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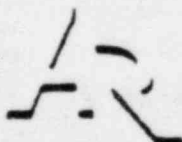
COMMISSION MEETING

In the Matter of: CLOSED MEETING - EXEMPTION 5

DISCUSSION OF FULL POWER OPERATING
LICENSE FOR LaSALLE-1

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DISCUSSION OF FULL POWER OPERATING LICENSE FOR LaSALLE-1

CLOSED MEETING - EXEMPTION NO. 5

Nuclear Regulatory Commission
Room 1130
1717 H Street, N. W.
Washington, D. C.

Tuesday, June 22, 1982

The Commission convened in closed session at
4:07 p.m.

BEFORE:

NUNZIO PALLADINO, Chairman of the Commission
JOHN AHEARNE, Commissioner
JAMES ASSELSTINE

STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:

S. CHILK
L. BICKWIT
F. REMICK
E. CHRISTENBURY
A. BOURMIA
D. EISENHUT

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H. DENTON
K. KEPPLER
C. MORELIUS

AUDIENCE SPEAKERS:
R. VOLLNER
R. WALKER
N. JACKIW

* * *

P R O C E E D I N G S

1
2 CHAIRMAN PALLADINO: I wonder if we could
3 start to reconvene, please.

4 I think among the items we will want to
5 discuss is a proposed meeting with the Attorney General
6 and the Governor before an investigation report is
7 completed.

8 MR. BICKWIT: Excuse me, has this meeting been
9 voted?

10 MR. CHILK: We need to vote to hold a closed
11 meeting.

12 CHAIRMAN PALLADINO: Well, in case we didn't,
13 suppose we vote now.

14 MR. BICKWIT: You didn't vote it before the
15 recess. I know that.

16 MR. CHILK: Then you need to vote to hold a
17 closed meeting.

18 CHAIRMAN PALLADINO: May I have a vote to
19 close the meeting. Aye.

20 COMMISSIONER AHEARNE: Aye.

21 COMMISSIONER ASSELSTINE: Aye.

22 (Chorus of unanimous "Ayes" by only

23 Commissioners present: Chairman Palladino, Commissioner
24 Ahearne and Commissioner Asselstine.)

25 CHAIRMAN PALLADINO: Is that all we need to do?

1 MR. CHILK: Yes.

2 CHAIRMAN PALLADINO: One of the principal
3 problems we have had with our investigations is the
4 accusations that we have been discussing the results of
5 investigations before we finish the report and there is
6 an implication that we may be getting outside
7 influence. So I think that is an item I don't want to
8 forget to address.

9 Well, why don't you proceed.

10 MR. NORELIUS: Okay fine. If we could have
11 the next slide, the one which has Category 1 items.

12 (Slide presentation.)

13 CHAIRMAN PALLADINO: Do we have any hard
14 copies?.

15 MR. NORELIUS: I don't think we gave hard
16 copies to you on these. We can get them.

17 (A hard copy of the slide was handed to the
18 Chairman.)

19 CHAIRMAN PALLADINO: Thank you.

20 MR. NORELIUS: What we have here are the
21 specific allegations. These are just an abbreviated
22 form and I can go through them with you to elaborate a
23 little bit on them.

24 The first one is the improper coring and
25 drilling activities and this includes, you know, the

1 total thing, both inside and outside containment and the
2 reactor pedestals, et cetera.

3 The second one relates to voids that were in
4 the reactor pedestal. The allegation was there were
5 large voids in there and large enough so an individual
6 could crawl inside.

7 The third one has to do with improper concrete
8 work in the screenhouse. Specifically they alleged that
9 chlorides were added to make the hardening proceed
10 faster and that that was improper.

11 The four one was that there was debris in the
12 concrete. In talking to one of the referenced
13 individuals he alleged that there was a 55 gallon drum
14 which had been left in the containment basemat on Unit 1.

15 CHAIRMAN PALLADINO: You mean in the concrete
16 or in the basemat on Unit 1.

17 MR. NORELIUS: In the basemat inside the
18 concrete, that instead of having removed it they just
19 poured the concrete over the top.

20 No. 5 was that they had a misaligned concrete
21 wall bulged out in one place and we thought that was
22 improper.

23 No. 6, it is alleged that there was inadequate
24 concrete vibration which caused honeycombing and in
25 general sloppy concrete work was the term used.

1 The 7th one was that there was improper
2 masonry wall construction and generally poor mortar
3 quality in all the masonry walls. They used excessive
4 sand and they did not put wire in the walls where they
5 have supposed to.

6 No. 8 we probably could have combined with
7 Item 1, but there was a general statement that there
8 were inadequate quality controls and specifically they
9 named some during the coring drilling activities.

10 No. 9 was an allegation that there was a
11 secondary containment test where the roof of the reactor
12 building was loosened and the allegation was that it
13 occurred in 1978.

14 No. 10 was that there was falsification of
15 torque wrench calibration records.

16 No. 11 was that there was improper
17 installation of hanger supports.

18 No. 12 was that there was inadequate security
19 at the plant.

20 No. 13 was that there were acts of sabotage in
21 1979 and they specifically they included the placement
22 of flammable materials in fire extinguishers.

23 CHAIRMAN PALLADINO: If it happened in '79 what
24 is that only coming out now according to the allegeders?

25 MR. NORELIUS: That is a good question. I

1 might say that many of these allegations relate back to
2 the '76, '78 and '79 time period. I don't know why it
3 is coming out now.

4 CHAIRMAN PALLADINO: But if they had evidence
5 of sabotage I would have expected they would have come
6 forth far before this.

7 Well, go ahead.

8 MR. NORELIUS: No. 14, it was alleged that
9 there was leakage in the auxiliary building, in the
10 walls.

11 No. 15, that the reactor building was settling
12 excessively.

13 No. 16, that there was inadequate training of
14 quality control personnel.

15 No. 17, that there were unqualified welders
16 and also that they were not properly certified.

17 No. 18, that there was some coverup of
18 deficiencies.

19 No. 19, that nonconforming material ---

20 COMMISSIONER AHEARNE: Deficiencies other than
21 the ones that were already ---

22 MR. NORELIUS: This was a very general
23 allegation that an individual had told the employee who
24 made the allegations that they knew of many deficiencies
25 which if anybody knew them they would really be a

1 problem kind of thing. It was a general statement.

2 No. 19, they alleged that there was

3 nonconforming material in a valve.

4 No. 20, that there was a conflict between the

5 specifications and our requirements.

6 The last five of these principally were made

7 against the architect/engineer rather than against the

8 licensee directly.

9 Now, I can either come back to these or I can

10 go to the category two and three and just summarize for

11 you the kinds of things.

12 CHAIRMAN PALLADINO: Are you going to give any

13 more detail on these?

14 MR. NORELIUS: Yes. I can do that either now

15 or come back to them after we look at the other

16 categories.

17 CHAIRMAN PALLADINO: Well, why don't we look

18 quickly at the other categories.

19 MR. NORELIUS: The next slide, please.

20 CHAIRMAN PALLADINO: Now Category 1 items were

21 what?

22 MR. NORELIUS: Category 1 items are what we

23 thought we should address now, that is, that they may

24 have an impact on the operation of Unit 1 and these are

25 the ones that we are resolving in our current

1 investigation.

2 CHAIRMAN PALLADINO: I still am curious. If
3 some of these relate to work in the past what was the
4 reason given by the allegeders that they should wait until
5 this point in time?

6 MR. NORELIUS: I don't think they gave any
7 particular reason and I don't know that we pursued that
8 point with them. We just took it on the face value of
9 what their statements were of what occurred and when and
10 tried to pursue that.

11 CHAIRMAN PALLADINO: Okay. I still view that
12 as a pertinent question to be asked of them.

13 MR. DENTON: Didn't I hear somewhere that
14 there ads requesting people who knew of problems to come
15 forward?

16 MR. NORELIUS: There have been ads run in a
17 number of the papers throughout the state that have been
18 placed by the Illinois Friends of the Earth which
19 requests construction workers who now work or who have
20 worked at the LaSalle plant to come forward with any
21 particular allegations that they are going to have.

22 CHAIRMAN PALLADINO: Did they feel they were
23 not required to come forward before?

24 MR. NORELIUS: Again, I don't believe we
25 pursued that particular thing with those who did come to

1 us.

2 MR. KEPPLER: We didn't try to put them on the
3 defensive at all about this. We wanted to get the
4 information they had and then to pursue it.

5 I might add, by the way, that this approach of
6 putting ads in the paper and bringing out concerns by
7 workers or other people who know something about the
8 plant seems to be a new approach being used by some of
9 the intervenor groups. I know, for example that they
10 are doing it up at Midland right now.

11 CHAIRMAN PALLADINO: Okay. Why don't you go
12 ahead.

13 MR. NORELIUS: Nick has just reminded me that
14 most of the people who signed the affidavits are now
15 unemployed and I don't know if that has any connection
16 or not. But there was a high correlation of those who
17 came forward that are now out of work.

18 CHAIRMAN PALLADINO: Well, I guess what I was
19 getting at is maybe we need to get some announcement or
20 pronouncement to workers indicating that if they see
21 evidence of wrong-doing they should let it be known at
22 the time that they see it and not wait until the
23 opportunity for confirming or clearing up the matter has
24 passed and it becomes more difficult.

25 MR. NORELIUS: I believe there is posted in

1 the facilities the notice that we are available and are
2 ready and willing at any time to discuss those.

3 CHAIRMAN PALLADINO: Well, I think it has to
4 be as firm as the ad that says come forth now. It is a
5 little bit of speak now or hold your peace.

6 COMMISSIONER AHEARNE: I don't think I would
7 want to give that message.

8 COMMISSIONER ASSELSTINE: I don't think I
9 would either.

10 CHAIRMAN PALLADINO: You mean not to come
11 forward?

12 COMMISSIONER ASSELSTINE: To come forward as
13 soon as possible, I agree with that, but not, you know,
14 come forward early or keep your peace.

15 CHAIRMAN PALLADINO: I said there is a little
16 bit of that. Oh, I think it is reprehensible for
17 somebody to know something and then wait four years. I
18 think there is maliciousness in the forethought if a
19 person actually did that. So I don't think it is wrong
20 to say, look, come when it is time to come and not wait
21 until later.

22 COMMISSIONER ASSELSTINE: Okay, yes.

23 COMMISSIONER AHEARNE: Joe, that is fine. The
24 point that I wouldn't want us to get into is that if you
25 didn't come when you first find that out then we are not

1 interested. That would be even more reprehensible.

2 CHAIRMAN PALLADINO: Yes, but I do think it is
3 reprehensible to follow this course of action. I said
4 there is a little bit of that in the thinking.

5 COMMISSIONER AHEARNE: I suspect some of it,
6 having read the affidavits that came in on that first
7 round, I suspect part of it is that as long as they were
8 working there they weren't going to come up and put
9 themselves in any kind of spotlight that might lead to
10 their no longer working there. Once they are no longer
11 working there, then they are not unwilling to do it.

12 CHAIRMAN PALLADINO: Well, I find that an
13 unacceptable way of working.

14 COMMISSIONER AHEARNE: It is not desirable.

15 CHAIRMAN PALLADINO: Well, let's go ahead.

16 MR. NORELIUS: The items which we placed in
17 Category 2 are ones that we thought we should look at
18 but we didn't need to address immediately.

19 The first one had to do that there were
20 inadequate NRC inspections and they talked both
21 generally about that we didn't come very often and when
22 we were coming they knew it ahead of time. We think we
23 will look back and see what our record is in terms of
24 announced or unannounced inspections and that sort of
25 thing, but I am not sure there is much else that we can

1 do with that.

2 COMMISSIONER AHEARNE: Did they also say that
3 the inspectors didn't really seem to know what to look
4 for?

5 MR. NORELIUS: I am sorry?

6 COMMISSIONER AHEARNE: I thought there was
7 another part of one of those affidavits saying that they
8 inspectors didn't really seem to know what to look for.

9 MR. NORELIUS: Maybe that was general. There
10 was one about NRC inspector conduct. There were two
11 that were closely related. We have that as our first
12 one in Category 3.

13 The second one was that architect/engineers
14 could not communicate and principally they focused in on
15 foreigners who did not speak plainly. The resolution to
16 that we think we know already in that things are passed
17 on by written procedures and that sort of thing, but we
18 put it in a secondary category.

19 The third one has to do with Unit 2. The
20 allegation was that they were forced to take pipe
21 hangers out of Unit 1 and they installed the same things
22 in Unit 2. We think that the issue of taking them out
23 of Unit 1 was because we said that they should because
24 of some design considerations. We think that there is
25 nothing wrong with the restraints themselves. So we

1 will look into that, but the allegation here is in Unit
2 2.

3 No. 4 has to do with the negative management
4 attitude toward workers. This is very general. We
5 think that in talking to a number of people we generally
6 can address that, but we didn't see it as a matter that
7 we should address directly in terms of the operation of
8 Unit 1.

9 No. 5 had to do with equipment being damaged
10 during installation. Again, I believe that was rather
11 general in nature.

12 Nos. 6 and 7 both are specifically having to
13 do with Unit 2 problems. So that is why we placed them
14 there.

15 COMMISSIONER AHEARNE: Is the character of No.
16 7 such that if it were on No. 1 it would go into your
17 category 1?

18 MR. NORELIUS: Yes.

19 The category 3 ones, there is quite a mixture
20 here. The first one has to do with our own inspector
21 conduct. I think we have training in how our inspectors
22 conduct themselves. We are not aware of any other
23 specific problems that have occurred with the resident
24 or others. So we put that in category 3.

25 The second one had to do with improper

1 installation of piping. We just didn't know how to
2 address this one. The first allegation was very
3 general. When we talked to the individual who made it,
4 he said, well, there was a 30-inch pipe that I remember
5 was being put up and when we looked at the drawings we
6 say that there was supposed to be another pipe in that
7 particular location. We asked him what system was it on
8 and he didn't know. We asked him what unit, what area,
9 who he worked for and who he worked with and he could
10 not answer any of those things. So we just did not know
11 how to handle it.

12 No. 4 is an item of general waste that has to
13 do with construction costs. We will communicate that to
14 the state who is interested in that sort of thing.

15 No. 5 has to do with defective circulating
16 water pipe. We just determined that is a nonsafety
17 related system and we don't intend to address that
18 further.

19 CHAIRMAN PALLADINO: When they say defective,
20 does they give any specifics?

21 MR. NORELIUS: No, it was very general.

22 No. 6 is the same sort of thing, a very
23 general sort of thing which we could not come to any
24 specific grips with.

25 No. 7 is an item which may be of interest to

1 the licensee. It is on a nonsafety-related building and
2 it, too, was very general. We couldn't pin it down
3 except that they said were loose bolts in the Unit 2
4 turbine building.

5 No. 8, a buldge in the condenser pit concrete
6 wall again, a nonsafety related system.

7 No. 9 was general in terms of alcohol and drug
8 use and there was an associated implication that this
9 also resulted in the theft of materials that was related
10 to this. Again, this was very general. We did not
11 think we could specifically address the issue.

12 COMMISSIONER AHEARNE: Was the allegation of
13 some use by construction workers?

14 MR. NORELIUS: It was again very general that
15 it was used on site by construction workers, that they
16 used drugs and drank on site. But when we talked to the
17 individual he had no specifics that he could provide to
18 us. So we just didn't know how to deal directly with it.

19 If there are no other questions on those
20 categories, I would like to go back to the Category 1
21 items and discuss those with you.

22 CHAIRMAN PALLADINO: Incidentally just to
23 clear up for the record my statement of speak now or
24 forever hold the peace, I said there is a little bit of
25 that. I by no means want the record to imply that I

1 don't ever want to hear of things that were wrong even
2 though we hear about them late. However, I do think
3 though the corollary is important that these things
4 should be called to our attention early enough so that
5 we can take timely action.

6 COMMISSIONER ASSELSTINE: Better late than
7 never, but far better early.

8 CHAIRMAN PALLADINO: Yes.

9 MR. NORELIUS: Let me say that of the 20 items
10 that are identified in Category 1 we believe that we
11 have done essentially all of the field work for those.
12 There may be a few loose ends that we need to pick up as
13 we do the formal documentation, but essentially we feel
14 we have done all the field work.

15 We also feel that we have resolved to our
16 satisfaction 19 of them at this point. So let me start
17 with the one that we feel has not been fully resolved.

18 CHAIRMAN PALLADINO: When you say resolved,
19 what do you mean, that you have found that it wasn't
20 true or that it was inconsequential?

21 MR. NORELIUS: I guess it is a combination of
22 those. I could give you a very quick run-down of the
23 first few.

24 CHAIRMAN PALLADINO: All right, just give us a
25 clew.

1 MR. NORELIUS: The first one as to improper
2 coring and drilling, we have gone back and looked at the
3 licensee's procedures and program which covered that
4 which started in 1976. We have looked at the
5 implementing procedures for all of the major contractors
6 who did coring and drilling. We have looked at the
7 system by which they documented their coring program
8 which was essentially a predetermined system to locate
9 the cores and the rebar damage was analyzed beforehand.

10 They have maintained records of all hits of
11 rebar that they have had through the years. We looked
12 at their record system and their calculations and we are
13 satisfied that the system which they had in place was
14 sufficient to document it and analyze the rebar that was
15 either cut out or hit.

16 COMMISSIONER AHEARNE: So you are saying it is
17 the region's conclusion, first, that, yes, there was
18 drilling into areas of rebar and, yes, rebar was hit and
19 knocked out, but, second, that all of those cases are
20 cases in which it was done deliberately following an
21 analysis and a conclusion that it was acceptable, and,
22 finally, the Region's position is that that analysis was
23 satisfactory?

24 MR. NORELIUS: Yes, that is correct.

25 CHAIRMAN PALLADINO: Were there any that were

1 inadvertently drilled and then analyzed.

2 MR. NORELIUS: You have to break it up into
3 two parts. For samples which they cored, first of all,
4 for anything that was cored entirely through a wall,
5 those were predetermined by the engineering group
6 in-house or they came back to the engineers by way of a
7 field change request to locate the hole.

8 For those the engineering group did the
9 analysis before the core was drilled. They looked at
10 their records, they did an analysis and located the core.

11 I might say that some of those cores maybe
12 could not be used afterwards. One in the specific
13 allegation talked about them drilling extensively into a
14 wall. We found the hole by taking another worker up and
15 he showed us exactly where it was. We went to the
16 records and it was located precisely where they wanted
17 it to be located. The rebar damage had been assessed
18 before the hole was drilled.

19 It turned out that there was a temporary
20 concrete slab in the room next to it and so when they go
21 through the wall it was in a position where they
22 couldn't even use it for what they had intended to. But
23 the fact remains that it was analyzed beforehand and
24 then they have a procedure for filling abandoned holes
25 and that was carried out and the hole was relocated

1 again through a field change request and with the
2 engineering input and evaluation.

3 CHAIRMAN PALLADINO: But still were there any
4 that were drilled and hit rebar inadvertently and then
5 had to be analyzed?

6 MR. NORELIUS: Yes. There were others which
7 were not precisely located and the instruction was not
8 to hit rebar. They were advised to use metal detectors
9 or to chip concrete or something to try to prevent it.
10 But some of those did in fact hit rebar. In that case
11 they were required to document the hits and they came
12 back in with a system for that.

13 CHAIRMAN PALLADINO: And you were satisfied
14 with the analyses of those also?

15 MR. NORELIUS: That is right.

16 MR. DENTON: My observation on that one is
17 that it was lack of communication between the people who
18 did perhaps the coring and drilling and the engineering
19 staff who was monitoring and planning the activity. It
20 appears that perhaps some of the concern about this,
21 about the construction workers was because they didn't
22 know that this engineering effort was also ongoing.

23 MR. NORELIUS: Yes. Some of them had no
24 reason to know beforehand where they should drill a
25 hole. Somebody else had probably come out and marked it

1 out for them and said drill here. The drillers
2 themselves may not have known what led up to that.

3 MR. WALKER: I might just indicate we did help
4 the Region in an analysis of what the A/E did in
5 checking where rebars were hit. It is my understanding
6 that if a hit was made on a rebar the analysis was done
7 assuming it was no longer there even though in many
8 cases they were just, you know, partially clipped during
9 the coring operation.

10 So we would characterize the evaluations from
11 a structural stress point of view as being very
12 conservative in nature for each case.

13 CHAIRMAN PALLADINO: How about the voids that
14 were big enough for people to crawl into?

15 MR. NORELIUS: That turns out to be true. Let
16 me say that in its initial construction the pedestal was
17 designed with some large 10-foot diameter circles near
18 the bottom I guess for flow of water was the initial
19 consideration. Based on their reassessment of design
20 modes that would be encountered there and some stresses,
21 they concluded that they needed to fill the center of
22 the reactor pedestal up partly to stiffen it.

23 CHAIRMAN PALLADINO: I am sorry, I lost you.
24 I am picturing you put up a wall that has got a 10-foot
25 diameter hole through it.

1 MR. NORELIUS: The pedestal was cylindrical
2 and it as hollow in the middle with walls in excess of
3 4-foot widths. After that at a later date which I
4 believe was in 1977 because of an engineering analysis
5 of loads that might be encountered, they decided that
6 they needed to stiffen that pedestal and they decided to
7 pour it full up to some level. There were also holes
8 above it. There were some 4-foot holes above it and
9 they didn't fill it beyond that.

10 What apparently happened is as they were
11 filling in the pedestal on the inside the concrete,
12 because of the 4-foot thick walls that existed, the
13 concrete came down and it flow out toward the outer
14 edge, but the top of the void that had existed, the
15 cylinder at the outside edge did not fill in properly
16 with the concrete.

17 CHAIRMAN PALLADINO: This is where the hole is?

18 MR. NORELIUS: Where the hole had been but was
19 now being filled in, a 10-foot diameter hole in the side.

20 CHAIRMAN PALLADINO: So you did intend to fill
21 that hole?

22 MR. NORELIUS: It was intended to fill the
23 inside of ---

24 CHAIRMAN PALLADINO: I picture here is the
25 pedestal and you are pouring down into here.

1 MR. NORELIUS: That is correct.

2 CHAIRMAN PALLADINO: And I have got a hole
3 here.

4 MR. NORELIUS: That is correct. There were
5 four of them, 10-foot diameter holes.

6 CHAIRMAN PALLADINO: All right.

7 MR. NORELIUS: And as the concrete was poured
8 down in the center because of the thickness of the wall
9 it apparently did not come all the way out to the outer
10 edge and especially at the top of that void. When they
11 began to do work to put in the snubbers and restraints
12 for the downcomers and safety relief valve mine work
13 that was being done, they had to drill holes into this
14 pedestal. This has a metal plate on the outside of it
15 and when they removed that plate to start to drill the
16 holes, when they removed one over this area where it had
17 been poured, they found a void in that location.

18 CHAIRMAN PALLADINO: Was it important to have
19 filled that hole? Were they trying to fill it?

20 MR. NORELIUS: They were trying to fill it
21 entirely, that is right.

22 CHAIRMAN PALLADINO: All from the inside?

23 MR. NORELIUS: Yes. Now it turns out that
24 when they cut into that particular plate one of our
25 inspectors was there. They immediately wrote the

1 nonconformance report. We had done specific inspections
2 in the past and we know that the hole existed. We knew
3 it was there before and we looked at the repair
4 process. So it was confirmed that there was a large
5 void and this void went all the way around the top.

6 So while it is true that there was a void
7 there, the resolution is that we knew it was there and
8 we are satisfied with the corrective action that was
9 taken.

10 A second part of the allegation was how do you
11 know that there weren't more. This looked like a
12 defined cause and the licensee took action on all four
13 of the ports that had been intended to be poured full.
14 They repaired all four of them.

15 COMMISSIONER AHEARNE: All four of them had a
16 similar type void?

17 MR. NORELIUS: Yes, right, and it looked to be
18 a common problem of getting the concrete ---

19 CHAIRMAN PALLADINO: I am surprised the didn't
20 go and check it from the other side. You would almost
21 expect that to be a problem.

22 MR. NORELIUS: You mea. en it was being
23 poured?

24 CHAIRMAN PALLADINO: Yes. So if it was
25 important for that to fill it would be just like going

1 back of the wall.

2 MR. NORELIUS: I think in answer to the
3 question of how do know that there weren't voids in
4 other places because of their placement of the base
5 plates with their large snubbers in the pedestal, I
6 believe they drilled over a hundred holes, and I have
7 forgotten the exact number, in that pedestal at various
8 locations. We took a sampling review of some 30 of
9 those and looked at them and they did not find other
10 evidence of voids in the pedestal.

11 CHAIRMAN PALLADINO: What about that 55-gallon
12 drum?

13 MR. NORELIUS: This was one we spent
14 considerably time with because the individual who
15 alleged it seemed very convincing. I would say that
16 would be first. What we did was to try to get from his
17 as many specifics as we could. He told us very
18 specifically that he remembered that he was in Unit 1
19 and he remembered that it was the basemat. He also said
20 very specifically he remembered when he worked in June
21 or July of 1975, he remembered very specifically who he
22 worked for.

23 When we went back to the site we looked at
24 core records, we talked to the individual whom he had
25 worked for and we looked at records which documented

1 what his supervisor did, what his responsibilities were.

2 It turns out that the core records did not
3 match that time, that the Unit 1 basemat was not being
4 poured at this specific time that he said. The
5 individual whom he worked for stated categorically that
6 he never remembered any 55-gallon drum anywhere. In
7 fact he said he was responsible for the clean-up crew
8 and he always assured that whatever was supposed to come
9 out did come out. We looked at his records and found
10 that the supervisor only worked on Unit 2

11 CHAIRMAN PALLADINO: The supervisor that said
12 that they had cleaned it up only worked on Unit 2.

13 MR. NORELIUS: Yes, he only worked on Unit 2.

14 COMMISSIONER AHEARNE: Now this alleger, was
15 he saying it was on Unit 1 or wasn't he sure?

16 MR. NORELIUS: He said at first, and he said
17 all the way through, even when we went back to him, that
18 he was certain he worked on Unit 1. But we just could
19 not make that story fit together. So we just think it
20 isn't a credible story I guess.

21 CHAIRMAN PALLADINO: There was one part of
22 that story I didn't understand. You said the supervisor
23 said he had personally seen to it that they cleaned out
24 that place and then you said he was the supervisor for
25 Unit 2.

1 MR. NORELIUS: Yes.

2 CHAIRMAN PALLADINO: So didn't he work on Unit
3 1?

4 MR. NORELIUS: No.

5 CHAIRMAN PALLADINO: Was he inaccurate also?

6 MR. NORELIUS: No. The supervisor's statement
7 was nowhere where he worked did he leave debris in the
8 concrete and especially not a 55-gallon drum.

9 CHAIRMAN PALLADINO: But he had never worked
10 on Unit 1.

11 MR. NORELIUS: He said he worked on Unit 2 and
12 we confirmed by records that that was the case.

13 CHAIRMAN PALLADINO: Oh, I see.

14 COMMISSIONER AHEARNE: The records don't
15 enable you to figure out where the alleged worked?

16 MR. NORELIUS: No. He was a worker within the
17 crew. So on that one all we can say is that I think we
18 pursued every avenue that we think is reasonable.

19 CHAIRMAN PALLADINO: Was this supposed to have
20 been a empty drum? In other words, does it represent a
21 void in the concrete?

22 MR. NORELIUS: That was the concern. He
23 claimed that it was an empty drum or possibly filled
24 partially with something and that it was laying on its
25 side. The concern was that it may be a void in the

1 concrete.

2 CHAIRMAN PALLADINO: And a void that big you
3 couldn't test to find out?

4 MR. NORELIUS: Well, not in the existing
5 basemat. It is covered with liner. We asked to see if
6 there was some way to test it and we couldn't come up
7 with a way. Of course, he was not specific either. The
8 basemat is a very large area and I don't know that you
9 could test for it.

10 Another thing where it seems somewhat
11 unreasonable is that the rebar spacing was extremely
12 close down there. We have photographs ---

13 COMMISSIONER AHEARNE: Oh, I wasn't asking
14 where there is no rebar down there.

15 MR. NORELIUS: Where there is less rebar there
16 is less concern about the structural forces.

17 COMMISSIONER AHEARNE: What would be the
18 significance were there actually to be such a drum?

19 MR. NORELIUS: I guess I don't know the direct
20 answer to that, but certainly if there was a large void
21 in the concrete, and I guess it would depend on where it
22 was and what the stresses were at that point and what
23 the loads were.

24 COMMISSIONER AHEARNE: I was whether you had
25 some estimate, given that there are only some regions

1 that it can be. Obviously, as you point out, it can't
2 be a region which is heavily laced with rebar. There
3 has to be a big enough space for a 55-gallon drum. But
4 you don't have any estimate?

5 MR. NORELIUS: I don't have an estimate on
6 that?

7 CHAIRMAN PALLADINO: Are there a series of
8 construction photographs?

9 MR. NORELIUS: Yes. We found photographs that
10 were taken and our inspectors had witnessed half of the
11 pouring of that basemat. So we have that input also.
12 Of course, there are records. There are quality control
13 records of the clean-up crews and certifying that the
14 material was cleared of any debris that was not supposed
15 to be there. So that is another input that you have to
16 factor in.

17 So where I guess we come out with this is that
18 the preponderance of evidence is that they had a program
19 which worked, you know, in part at the actual pouring of
20 half the basemat and this alleged's story does not fit
21 the records that he gave.

22 COMMISSIONER AHEARNE: Well, is that the one
23 item that that fellow alleged?

24 MR. NORELIUS: That is one specific item.

25 COMMISSIONER AHEARNE: Is that the only one?

1 COMMISSIONER ASSELSTINE: Did he have any
2 others?

3 MR. NORELIUS: Yes, I believe he had other
4 ones of general shoddiness in concrete work, and let me
5 ask, Nick, is that the only one that he alleged?

6 MR. JACKIW: He had the alcohol and the drug
7 use.

8 COMMISSIONER AHEARNE: Well, I guess the more
9 specific question is was there anything else that he
10 alleged that you checked and found to be true?

11 MR. NORELIUS: Did he allege the calibration
12 of torque wrenches?

13 MR. JACKIW: Yes, he did.

14 MR. NORELIUS: Okay, I guess the answer is he
15 did make another allegation which we believe to be true,
16 that is on the falsification of torque wrench
17 calibration.

18 COMMISSIONER AHEARNE: I guess then that that
19 goes back to my question of is there any way to figure
20 out the signifigance if there is a drum in there? I
21 grant that there doesn't seem to be anything else that
22 you could do to find out whether it was true or not, but
23 that doesn't unfortunatly resolve is it significant if
24 it is true.

25 MR. NORELIUS: I suspect it is possible to do

1 detailed analyses, computer analyses to determine what
2 if you had such a void in various locations in the
3 basemat.

4 COMMISSIONER AHEARNE: Can someone just do a
5 bounding calculation and make an estimate? And if you
6 can conclude that it is insignificant then you are
7 relatively -- (Inaudible).

8 MR. DENTON: I think we certainly could, but
9 the fact that I think you are going to hear that 19 of
10 the 20 were resolved, it leads to how much effort you
11 should expend on one particular one.

12 COMMISSIONER AHEARNE: Harold, my point was
13 that in this particular case he had just pointed out
14 that this guy also alleged something else which turned
15 out to be true. So although maybe 15 or 16 were alleged
16 that didn't turn out to be, in this particular case the
17 guy alleges two things and one turns out to be true and
18 the other doesn't jibe and you can't verify it.

19 MR. DENTON: You know, once you ask an analyst
20 to do the calculation and he says the drum could be
21 anywhere and put it in the worst spot and you could do
22 that kind of thing with some effort.

23 CHAIRMAN PALLADINO: What fraction of the
24 thickness of the base mat is not filled with rebar?

25 MR. NORELIUS: I think it is all filled with

1 rebar but at varying depths of concentrations.

2 CHAIRMAN PALLADINO: Is the spacing such that
3 one could have left a 55-gallon drum?

4 MR. NORELIUS: I believe that they said there
5 may be areas in there where physically it could fit.

6 COMMISSIONER AHEARNE: Well, was his
7 description that it was sitting on top of rebar or
8 wedged in between rebar?

9 MR. NORELIUS: His description was that it was
10 wedged in between rebar.

11 MR. JACKIW: His description was that he left
12 the drum, or that he saw the drum one day in the basemat
13 and the following day when he came back the iron crew
14 had been there and done all the rebar around the drum
15 and there was no way of getting it up.

16 (Laughter.)

17 CHAIRMAN PALLADINO: He may have seen
18 something?

19 (Laughter.)

20 MR. JACKIW: And unless you torch or cut I
21 guess he mentioned, there was no way of getting it out.

22 COMMISSIONER AHEARNE: Did you ask any of the
23 iron crew?

24 MR. NORELIUS: No, we did not. Again, this is
25 something which occurred back a long time ago and those

1 members are not there now.

2 MR. JACKIW: You know, we did talk to a lot of
3 quality control individuals that had the responsibility
4 to check out the pre-pour cleanliness, and there are
5 three or four people we have talked to and nobody could
6 provide any more information.

7 MR. NORELIUS: Let me just say that we went
8 back to this individual three times and told him that
9 the time frame he gave us did not was not consistent
10 with when the basemat was poured. He stuck to his story
11 that the time frame was right and then he said, well,
12 maybe it could have been in another area. He waived a
13 little there.

14 CHAIRMAN PALLADINO: You mean instead of the
15 basemat?

16 MR. NORELIUS: Yes. He waived a little on
17 the second time, but he consistently stayed with the
18 story that the timing that he had was right. We have
19 looked at the pour records and we know that at that time
20 they were not pouring the basemat in Unit 1.

21 MR. KEPPLER: Did you look to see where they
22 were pouring?

23 MR. NORELIUS: Well, I don't know if we have
24 found that.

25 Did we look to see where they were pouring?

1 MR. JACKIW: Yes, we did. In fact we got up
2 to the drywell floor. It was only a three-foot slab
3 with a lot of rebar. When we told them it was a
4 three-foot slab and the drum was a two-foot by
5 three-foot piece, it wasn't possible for it to be up
6 there. We kind of went through the whole print trying
7 to see if he could give us any more specific information.

8 MR. DENTON: I would suspect based on an
9 engineering judgment that a drum in the basemat would
10 not be a significant degradation of the capability of
11 the structure in view of how massive basemats are.

12 CHAIRMAN PALLADINO: How thick is a basemat?

13 MR. DENTON: Oh, it must be 10 feet or so.
14 But, on the other hand, if you try to establish by
15 analysis, and you put it in the worse spot and you have
16 got to meet all the proper code and stress levels in
17 every rebar, you can come up with some pretty far-out
18 schemes that would probably cost you a lot of computing
19 time to try to prove. One drum doesn't rise to the
20 level to me to exert massive efforts to try to determine
21 its presence or not.

22 CHAIRMAN PALLADINO: Did we talk to any of our
23 nondestructive testing people whether or not they could
24 find a void of that size?

25 MR. NORELIUS: We talked to other inspectors

1 in our office who said they did not think you could.

2 CHAIRMAN PALLADINO: These are people that are
3 familiar with the ultrasonic testing?

4 MR. NORELIUS: Yes, our ultrasonic testing
5 inspectors.

6 CHAIRMAN PALLADINO: Is that the one that is
7 unresolved?

8 MR. NORELIUS: No, that one we felt was
9 resolved.

10 Mr. VOLLMER: Probably the only way that there
11 could be a problem in the basemat is if you took a piece
12 of reinforcing steel, and that is checked by other QA
13 requirements. In other words, if the reinforcing is
14 there and you have the drum in there, it probably
15 wouldn't make much difference. The strength is really
16 in the reinforcing and not the concrete anyway. So the
17 drum would be just displacing the concrete.

18 CHAIRMAN PALLADINO: Well, if it is up near
19 the surface maybe you might have a thin section, but I
20 think that would have shown failure already.

21 COMMISSIONER AHEARNE: I will pass on
22 questions.

23 MR. KEPPLER: Is that the most uncomfortable
24 one we have got in this list of the ones we have
25 accepted?

1 MR. NORELIUS: I believe so.

2 CHAIRMAN PALLADINO: Do you want to hear more
3 examples of the 19?

4 COMMISSIONER AHEARNE: No.

5 COMMISSIONER ASSELSTINE: How about the
6 unresolved one?

7 CHAIRMAN PALLADINO: Let's go to the
8 unresolved one.

9 MR. NORELIUS: This is No. 10 on the list.
10 The allegation was that one of the contractors,
11 Morrison, had falsified torque wrench calibration
12 records. Initially let me lead you through a little
13 sequentially how we approached this.

14 COMMISSIONER ASSELSTINE: This is the other
15 one that that particular individual ---

16 MR. NORELIUS: One of the other ones. He made
17 several.

18 CHAIRMAN PALLADINO: This is one of the other
19 ones he made?

20 MR. NORELIUS: That is correct.

21 CHAIRMAN PALLADINO: I thought he only made
22 two allegations, the 55-gallon drum and the torque
23 wrench.

24 MR. NORELIUS: No, he made others, too, and I
25 would have to ask.

1 MR. JACKIW: There was a scaffolding fire in
2 Unit 2.

3 CHAIRMAN PALLADINO: Was he right on all the
4 others?

5 MR. JACKIW: Well, there was a scaffolding
6 fire ---

7 MR. NORELIUS: We know there was a scaffolding
8 fire we are aware of. So I guess you could say as far
9 as we looked into he was probably right on that.

10 MR. JACKIW: The alcohol use and the drug use
11 and a couple of others.

12 CHAIRMAN PALLADINO: Why don't we go on. I
13 had misunderstood at first that there were only two.

14 MR. NORELIUS: We can get the full statement
15 to answer that.

16 On the torque wrench calibration problem we
17 initially started by looking at the program which they
18 had and we looked at some of their records. Then we
19 said, well, maybe one of the things that we can do is to
20 do some kind of an independent verification of whether
21 certain of the bolts are actually tight.

22 So we had an inspector go and request that one
23 of the workers get a calibrated torque wrench to go and
24 check just an arbitrary number of bolts. It turned out
25 that while he was going to get the wrench our inspector

1 reached up and there was a valve there and on the motor
2 operator to valve bonnet interface and the inspector
3 turned off out of four nuts by hand.

4 (Laughter.)

5 MR. NORELIUS: Now it turns out that those are
6 the only two we have found since that were hand turned,
7 but that is what happened. So we said, well, we think
8 that just on the basis of that that you ought to go
9 through and check 50 valves and then we will see what yo
10 find there and come back. So they went through the
11 plant with a calibrated torque wrench and selected 50
12 valves and checked the nuts on those for tightness,
13 whether they met the minimum torquing requirements.

14 It turns out that some percentage, and I will
15 guess 30 percent, and Roger has the accurate numbers,
16 that there were valves in which the nuts were not
17 tightened to the minimum torquing requirement.

18 Now in further analyzing what that meant we
19 found that maybe our selection was not so good to answer
20 our initial question, but it may have raised another
21 problem because many of these nuts that they checked
22 were never touched by the contractor at the site. They
23 were valves received from the vendor.

24 (Laughter.)

25 MR. NORELIUS: So that presented a problem

1 when we began talking to the staff about it. The
2 proposal to address that particular question is to
3 include a license condition which would require that
4 they check at least the bolts on the operator to valve
5 connection inside containment before they go beyond five
6 percent power and all of them outside in six months.

7 The reason they came to that conclusion is
8 they have done hydro testing on the valves themselves
9 and between that and leakage systems it was felt there
10 was some degree of confidence that you gain in the
11 system. That is where we were Monday. But in reviewing
12 the findings that we have Mr. Jackiw decided that we had
13 not looked sufficiently into the records system which
14 was the initial allegation. So he sent an inspector
15 back out on Monday to specifically look into the
16 records. At that time, and this was yesterday now, he
17 found certain records that appear to be duplicates,
18 Xerox copies with only the date changed on the records.

19 So this brings into question, and we think we
20 actually are finding that certainly of the calibration
21 records were falsified. We are still pursuing that
22 today. We have sent an additional inspector out there
23 and we are attempting to locate an investigator to go
24 with them to try to get a handle to what extent this
25 problem exists and how many of the torque wrenches did

1 it apply to and over what period of time, questions like
2 that. Then, depending on what we find, we may have to
3 broaden our look.

4 COMMISSIONER AHEARNE: So what you are saying
5 is that you have at least three separate problems. You
6 have got some of the bolts which weren't tightened by
7 the vendor?

8 MR. NORELIUS: Yes, and I am not sure whether
9 that is the conclusion. We just know that bolts which
10 the licensee or its contractor did not do anything
11 with. They did not meet the minimum torquing
12 requirements.

13 CHAIRMAN PALLADINO: Are you also aware of the
14 fact that you can tighten the bolt with a torque wrench
15 and be right on, and then come back several days later
16 and it won't read the same because there has been
17 relaxation, especially there are asperities that yield.
18 That is a common problem. I would suggest that you get
19 a bolt expert and I mean the people that work in this
20 area.

21 It is a common problem. I know the Japanese
22 had trouble when they shipped engines over here. In
23 transit the things that were tight when they left were
24 almost hand loose when they got here for a variety of
25 reasons. So I would say if there is one area where

1 there is an uncertainty on being able to tell whether
2 you torqued it right the first time, that if there is
3 any area of uncertainty, this is one of the greatest
4 areas.

5 MR. DENTON: I would think there are probably
6 time periods of years between the manufacture and
7 assembly of some of these components and that is a
8 reason to look at them.

9 CHAIRMAN PALLADINO: I remember reading
10 specifically about some of the bolt problems on engines
11 that were made in Japan and shipped over here, and I
12 don't know whether it was a matter of months. But that
13 doesn't prove anything. It just makes it potentially a
14 problem.

15 COMMISSIONER AHEARNE: Right. That is
16 potentially one. The second is the torque wrenches used
17 at the site may be miscalibrated, and a third would be
18 that the records were falsified.

19 MR. KEPPLER: Isn't the second and the third
20 problem the same that you are talking about?

21 MR. NORELIUS: Well, they may be. We don't
22 know whether they were miscalibrated or whether they
23 remained in calibration. What we have found now is that
24 the records look like they were duplicated and therefore
25 are false. We don't believe they did a calibration to

1 support the records.

2 COMMISSIONER AHEARNE: Now you said you went
3 through some percentage on the valves, some percentage
4 of the bolts.

5 MR. NORELIUS: Yes.

6 COMMISSIONER AHEARNE: Now were all of the
7 bolts that you checked ones that were not either by the
8 licensee or contractor or was there a mixture?

9 MR. NORELIUS: There was a mixture.

10 COMMISSIONER AHEARNE: Of the mixture of the
11 ones that were supposedly checked by the licensee or the
12 contractor, how did those turn out?

13 MR. NORELIUS: I think they came out better.
14 I think Roger has the specifics on that.

15 MR. WALKER: The sample cited was 50 as you
16 said. Twenty-four were manually operated valves. Of
17 that 24, on 13 the minimum tech. torque values were
18 met. The other 11, primarily on the body to bonnet you
19 would find some discrepancy in the values. Of those 11
20 the contractor had only worked on one. Then that leaves
21 26 of which three are air operated valves. One of those
22 was torqued and met the torque minimum torque valves.
23 The other two did not. Of those two the contractor in
24 question worked on one, but his numbers were better than
25 on the other one that was out of spec. which is the ones

1 shipped back from the factory.

2 On the other 23 valves 18 of them torqued
3 right up to spec. and five has some problems on body to
4 bonnet and three had problems on operator to yoke. Of
5 those this contractor worked on none. Of the 18 that
6 were good the contractor worked on 11 of them.

7 We don't find any strong indication in that
8 sample that the contractor has got a problem.

9 MR. NORELIUS: There is one other piece of
10 confidence that we have in this story that gives us at
11 least a little bit of feeling and that is the utility's
12 argument through all of this is he did a hydro test and
13 he hydro tested a lot of the system and at least on some
14 of the valves the bolting connections, that none of them
15 leaked. He had no problems at all during his hydro test
16 of anything in the entire system.

17 So his argument is that that gives him
18 confidence of a large fraction of the plant that things
19 are all right.

20 COMMISSIONER AHEARNE: Does that give you
21 confidence?

22 MR. NORELIUS: It doesn't give me enough
23 confidence because, for example, you know, you harken
24 back to the case where you only need maybe a few bolts
25 to keep it on leak tight and all the rest could be there

1 hanging loose.

2 We believe it gives it some confidence that in
3 fact there is at least one check on the primary system.
4 Obviously it doesn't give us enough. That is why we are
5 coming up with a requirement that prior to five percent
6 all of the safety related bolts inside the containment
7 will be checked. Further, we are saying that within
8 something like six months ---

9 CHAIRMAN PALLADINO: Are you going to check
10 them hot or cold?

11 MR. NORELIUS: I don't think we have gotten to
12 that point.

13 CHAIRMAN PALLADINO: If it is hot you will
14 have a different circumstance from when it is cold. If
15 you want them torqued to a certain level cold you will
16 find that it is different in hot. It depends on
17 relative expansions and relative rates of heat. It is
18 something that deserves a lot of attention. It deserves
19 a lot of thought before you decide what you want to do
20 with it.

21 MR. KEPPLER: I think that is right. In
22 fairness, this problem may well apply to every other
23 reactor. I don't think we have looked into this area
24 yet at all before. It is a new area that has surfaced
25 and we are just sharing with you what we know right at

1 the moment. I think you are correct. We have got to do
2 a lot of thinking about this before we decide what is
3 the final disposition of the problem.

4 CHAIRMAN PALLADINO: Did you find outside of
5 those two that were, let me say anomalies for the moment
6 where they could be turned by hand, did you find
7 significant deviations from the supposed torque level?

8 MR. WALKER: Yes, sir. The ones that concern
9 me the most are the motor operator to yoke. You would
10 find like the 200-foot pound requirement, that some of
11 them had as low as 15. And on some of the body to
12 bonnets you would find a 500-foot pound requirement.
13 Again, these requirements are very vague because there
14 is really no code requirements here. They were working
15 on sizes, diameters, volts, et cetera, and they were
16 generated basically from bolt schedules, et cetera, and
17 tech. manuals where they could get them. But anyway,
18 you would find 500-foot pounds and some of them were
19 down to 50. It is scattered all over the place, sir.

20 Do that help you?

21 CHAIRMAN PALLADINO: No, it doesn't help give
22 me confidence.

23 (Laughter.)

24 COMMISSIONER AHEARNE: It gives you an idea of
25 the magnitude.

1 (Laughter.)

2 CHAIRMAN PALLADINO: It gives me an idea of
3 the magnitude. It is tricky. You have got bricks and
4 everything under the sun.

5 MR. DENTON: This is very recent information
6 and it has come up in only the last day or two. I think
7 what you have heard today is as far as we have gone as
8 to include that whatever the eventual outcome here that
9 the licensee should get the bolts that are inaccessible
10 during operation fixed before going above five percent.
11 He has agreed to that I understand. Those are the ones
12 within the containment, and we are still discussing how
13 to verify the other more accessible ones.

14 CHAIRMAN PALLADINO: Are you going to do this
15 hot?

16 MR. DENTON: I don't think we have a bolting
17 expert involved yet. So we have really discussed hot or
18 cold.

19 MR. NORELIUS: The only other piece we did was
20 we took the position that we would like to have the rest
21 of the bolts, all of the bolts resolved within six
22 months. Outside of containment would follow on down the
23 line. Of course, that is subject to change based on
24 what is down inside of containment which is required
25 prior to five percent.

1 This is an exactly of where although on one
2 hand I think we would be ready to, you know, a lot of
3 the technical specialists to go for the first refueling
4 outage. But at this time we wanted to work out with the
5 utility ---

6 COMMISSIONER AHEARNE: Is that based on your
7 assumption that if the bolts were to fail that it
8 wouldn't be a concern based on your assumption that
9 there aren't likely to be enough bolts that are going to
10 fail?

11 MR. DENTON: It is based on the assumption
12 that if this plant is put together typically in the
13 vendor's shop the way most plants are and we have got
14 the experienced data that we normally assume and see
15 would occur here.

16 MR. EISENHUT: And the ones outside are
17 lesser, certainly of lesser ---

18 MR. DENTON: What we don't know yet is whether
19 there is something unique about these ---

20 COMMISSIONER AHEARNE: I would conclude from
21 that you believe that were one to go and check the
22 torques on bolts in a typical plant that you are likely
23 to find a number that do have this wide a variation?

24 MR. DENTON: Well, bear in mind, as I said,
25 this is only a two-day briefing information. I know no

1 more than what we have heard right here. I guess I
2 defer to our engineering judgment ---

3 COMMISSIONER AHEARNE: I was just trying to
4 track. Your conclusion of being comfortable seemed to
5 be based upon if this plant is built like the others. I
6 have to be able to turn that around and say that the
7 others must be built like this plant.

8 MR. DENTON: I think there are two points.
9 One is good assurance that the bolts that are inside the
10 containment that normally are the least accessible and
11 the most important safety related features are correct.
12 Based on that sample we have learned a lot more.

13 At the same time I am on bolts outside of the
14 containment going on the assumption that at the moment
15 there is no reason to think that the assembly of these
16 yokes and motors is any different than a typical plant
17 for which they seem to perform all right or, you know,
18 or what we have accepted the level of performance we see
19 that appears unrelated to bolting performance.

20 Mr. VOLLMER: If I could expand a little on
21 that since you asked for some of the rationale. On the
22 body to bonnet bolts, as was indicated before, the hydro
23 gives assurance that ---

24 COMMISSIONER AHEARNE: That enough of them are
25 tight now.

1 Mr. VOLLMER: --- that enough of them were
2 tight at this point in time, and also that you do have a
3 fairly good leak rate detection system throughout the
4 plant. If one should start to spring a leak then tech.
5 specs. would bring them out. Now there are safety
6 related bolts both inside and outside containment. So I
7 am applying the same rationale.

8 On the motor operator to yoke bolts, what you
9 need there is something that holds the operator in place
10 basically. The tightness is not such a stringent
11 requirement. There for the stuff inside of containment
12 we feel it is very important to get reasonable assurance
13 that they are on. For the stuff outside of containment,
14 this stuff is visited rather regularly by operators and
15 the longer time scale presumably would give you some
16 comfort that the stuff is observed from time and time
17 and that if the operators are in place there is a pretty
18 good assurance that they will operate.

19 CHAIRMAN PALLADINO: As a matter of fact, I
20 think I am more concerned about the ones that are loose
21 because there you could lose the bolt. Even if the bolt
22 has quite a variation in the torquing you still can
23 function as a containment off pressure. It may begin to
24 leak but it is not going to cause the whole bottom to
25 fly off.

1 So that is why I asked you about the range
2 because if they are down as low as 15-foot pounds when
3 they are supposed to be up at 200 they may be getting
4 loose enough to where you worry about their disappearing
5 and their falling out.

6 MR. WALKER: Mr. Chairman, I want to give you
7 proper perspective on that. When you found the same
8 sample where it was down at 15 or 50, you would usually
9 find (_____) would be up to torque and one would be
10 outlined. So it would tend to lead you to believe it is
11 going to stay in place. Also, during the pre-op test
12 program I don't know of operators to fall off.

13 CHAIRMAN PALLADINO: But I was getting at the
14 fact that they carry load even if they are not tight as
15 long as they are there. So I gain a little more
16 confidence, except ---

17 MR. DENTON: The sample is very small and we
18 have got a lot more work to do before we understand what
19 it all means. Our initial approach on hearing this was
20 to move toward verifying that they are all proper inside
21 the containment as our initial regulatory reaction and
22 we may want to do more as we learn more about the
23 problem.

24 CHAIRMAN PALLADINO: Bolts are a very
25 interesting subject and most engineers don't get exposed

1 to them until they get in trouble. That is how I got
2 the little bit of knowledge that I have got.

3 (Laughter.)

4 CHAIRMAN PALLADINO: What are you proposing?
5 You haven't decided yet what you are going to do on this
6 one?

7 MR. NORELIUS: I think on this we don't know
8 the full extent of the information yet. So I think
9 until we understand the problem we won't be in a
10 position to recommend what we would do or how we would
11 approach it.

12 MR. KEPPLER: Our plan though is at the moment
13 that all of these category one items will be resolved
14 prior to Harold letting them go above zero power, prior
15 to going to five percent power.

16 MR. DENTON: I would need the results of their
17 investigation and appropriate corrective actions from
18 the licensee so that I can make a conclusion that they
19 should go higher.

20 CHAIRMAN PALLADINO: So with your
21 investigation not being complete, you are not ready to
22 say you are going to allow them to go up to five percent
23 power?

24 MR. DENTON: Well, I would await for the
25 Region's completion of the investigation and the report.

1 That would provide the documented basis for me to take
2 corrective actions with the licensee.

3 CHAIRMAN PALLADINO: Are you going to allow
4 them to go up to five percent even if there are loose
5 bolts or even though you may not have developed your
6 plan for ---

7 MR. DENTON: Knowing only what we know today,
8 our plan was to require that they be completed before
9 going above five percent for bolts in the containment.
10 That is, as I said, based on this very late-breaking
11 information. If it seems like a wider problem, we will
12 be more restrictive. That is the initial assessment.

13 COMMISSIONER AHEARNE: At the moment they are
14 restricted to zero power?

15 MR. DENTON: That is right.

16 COMMISSIONER AHEARNE: So at the moment are
17 you saying that you are not prepared to let them go
18 above zero power?

19 MR. DENTON: That is correct. I think the
20 Region envisions completing the report and get it
21 documented sufficiently by next week sometime that we
22 could respond to a petition.

23 COMMISSIONER AHEARNE: I imagine it depends on
24 how much more they find out about it.

25 MR. KEPPLER: I think the issue involving the

1 false records, it is hard to predict what will happen.
2 If that issue washes out we hope to be in a position to
3 wrap this area up next week, but if it doesn't, then we
4 will have to go where that takes us.

5 MR. EISENHUT: The previous license condition
6 related only to that, I guess the first two items in the
7 212.6. We would have written it in the sense of you
8 must resolve the hit rebar problem and the off-gas
9 building thickness of the roof prior to going above zero
10 to five percent power without our approval. That is
11 what the license condition said.

12 We have subsequently interpreted in several
13 documents responding to 212.6 in letters back to the
14 Attorney General that that obligation really means the
15 entire 20 items here. That is all of the items as
16 amended by the 212.6's. So we feel it is an actual
17 license condition which formally needs to be lifted
18 before the plant can go above zero percent power.

19 CHAIRMAN PALLADINO: Yes, that is what I
20 gathered your order stated. It said review and approve.

21 MR. EISENHUT: I just wanted to point it it is
22 actually formerly in the license.

23 MR. DENTON: Now with regard to the meeting, I
24 think in the original meeting I had with Mrs. Goodie
25 back in March she had requested that she have an

1 opportunity to meet with us on the results of our
2 investigation or evaluation before we reached a final
3 decision. I think she put that in writing in some
4 request to you or I one and we tended to say, yes, we
5 will get back to you and go over it with you the results
6 to date. I think that is the meet that you plan in
7 Chicago.

8 CHAIRMAN PALLADINO: Well, I answered a lot of
9 questions as to why, and many of the people in the
10 Regions have answered and I&E have answered a lot of
11 questions on why did you let so and so see the report
12 before it was finished.

13 Maybe, Len, you might have some comment on
14 that.

15 MR. DENTON: I don't want to speak for you,
16 John, but it wasn't so much as to see the report as to
17 get back to the person who had made the allegations with
18 some of your principal conclusions. That is a little
19 bit different than going to any other party, it seems to
20 me.

21 COMMISSIONER AHEARNE: When you say the person
22 who made the allegations, you mean the allegor or the
23 Attorney General?

24 MR. DENTON: The Attorney General.

25 MR. KEPPLER: The Attorney General's Office

1 and the Friends of the Earth people.

2 MR. DENTON: Who represented the people that
3 made the allegation.

4 COMMISSIONER AHEARNE: Who represented the
5 people who made the allegations.

6 MR. DENTON: That is right.

7 MR. KEPPLER: But really I guess the thought I
8 had here was that it was important to try to get some
9 feedback from them as to how they felt about the depth
10 of the investigation, about the findings of the
11 investigation and whether or not they had any more
12 information to shed on this thing before we put out the
13 report. I view that a lot different than going to a
14 licensee and sharing information with him.

15 COMMISSIONER AHEARNE: Sure.

16 CHAIRMAN PALLADINO: I don't see any
17 difference. Now if you are asking him for more
18 information, then I see a difference. But then you
19 don't need to give them the report. You just interview
20 him as you would anybody else. But I see quite a
21 difference between asking for more information and
22 discussing the adequacy of the report. It is not
23 different than going to anybody that has an interest in
24 the matter.

25 COMMISSIONER AHEARNE: There is one different

1 character of it. It is not going to the person who is
2 being investigated.

3 COMMISSIONER ASSELSTINE: Who is under
4 investigation, that is right.

5 CHAIRMAN PALLADINO: But it is going to a
6 member of the public and the member of the public can
7 give it to anybody he wants. I am not trying to make an
8 issue out of something that isn't an issue, but believe
9 me I have got a lot of scares related to this subject
10 and Bob Engleton in Region V has quite a few of them and
11 his may be a little deeper.

12 MR. KEPPLER: Could I make an observation on
13 it that I think is important?

14 CHAIRMAN PALLADINO: Sure.

15 MR. KEPPLER: Remember when we talked about
16 Zimmer and the Applegate allegations and so on. I see
17 this more of an extension of trying to avoid the kind of
18 predicaments we have gotten into where the intervenors
19 come back later and say you didn't look deep enough into
20 a problem. By sharing with them, if you will, what you
21 have generated to date and the extent of where you have
22 gone and keeping an open mind on anything else that they
23 may bring forth, I think you avoid that kind of a
24 problem.

25 COMMISSIONER AHEARNE: In this sharing did you

1 intend to share a document?

2 MR. KEPPLER: No. We were going to go over
3 basically what we have talked about here with them and
4 perhaps in more depth.

5 CHAIRMAN PALLADINO: You have instructions I
6 believe from the EDO saying you won't do that.

7 MR. KEPPLER: Well, I guess I took the
8 instructions from the EDO to mean with the licensee.

9 CHAIRMAN PALLADINO: No, it didn't say that.
10 It said you won't share the report with anybody until it
11 is done, I believe, but we can check what it said.

12 MR. KEPPLER: You are correct that way. I
13 guess it is my interpretation of the problem.

14 CHAIRMAN PALLADINO: Well, I guess I won't let
15 you out on the limb by yourself. We may want to talk
16 about this as a question of ---

17 COMMISSIONER AHEARNE: At this stage it is
18 clear that not only are you out there, but you are out
19 there against the wishes of EDO.

20 (Laughter.)

21 CHAIRMAN PALLADINO: I think we ought to talk
22 about it and I think we will want to get the benefit of
23 legal counsel and perhaps the thinking that has gone on
24 in OI on what we should release and what we shouldn't.

25 MR. DENTON: I think as a general philosophy

1 that when an elected official like the Attorney General
2 of a State says I would like to meet with you one more
3 time, our tendency is to say sure. It is not as though
4 we are going to pass a document. I haven't read this
5 last memo with maybe the attention I should either, but
6 I typically accede to requests for meetings by people
7 who bring matters of concern to our attention.

8 COMMISSIONER AHEARNE: I don't think the
9 Chairman was saying we shouldn't meet with these
10 people. The point that had come up after the Hayward
11 Tyler event was the sharing of information on an
12 uncompleted investigation outside of the agency. That
13 was the issue. It wasn't don't meet with these people.
14 It was don't meet with someone and share with them what
15 the investigation has divulged.

16 CHAIRMAN PALLADINO: But I admit this is a
17 special case, and I think it is wise if we can take a
18 little bit of time to explore it before we get ourselves
19 inadvertently over our heads.

20 COMMISSIONER AHEARNE: In the discussion
21 certainly ---

22 CHAIRMAN PALLADINO: We may get in over our
23 head anyhow, but if we decide that that is the right
24 thing to do, then we will try to ---

25 COMMISSIONER AHEARNE: In the discussions that

1 I think we had we did not focus at all, or at least I
2 know I didn't, on the situation you are now talking
3 about. We really were, at least I was thinking of
4 sharing these results with someone who was under
5 investigation.

6 COMMISSIONER ASSELSTINE: So was I, yes.

7 MR. BICKWIT: I still think there is a problem
8 in this circumstance. I don't think you intend to do
9 this in a public session. If you did it in a public
10 session then you would be sharing it with the licensee.

11 MR. KEPPLER: As a matter of fact, I was.

12 MR. BICKWIT: Were you?

13 MR. KEPPLER: Yes.

14 MR. BICKWIT: Well, then you are sharing it
15 with the licensee.

16 MR. KEPPLER: The meeting was between us and
17 the parties that we mentioned. I guess we talked about
18 this today in Harold's office and Commonwealth Edison
19 overheard the comment and they know about the meeting.
20 They asked if they could attend and I said, sure, our
21 meetings are public.

22 MR. BICKWIT: Then you do have the problem
23 that was raised.

24 CHAIRMAN PALLADINO: I think it is worth
25 talking about it so we know all the answers.

1 COMMISSIONER AHEARNE: I guess that
2 realistically would mean you would have to postpone your
3 meeting.

4 CHAIRMAN PALLADINO: When is your meeting set?

5 MR. KEPPLER: Tomorrow morning.

6 (Laughter.)

7 CHAIRMAN PALLADINO: I would recommend
8 postponing it.

9 MR. KEPPLER: Okay. We will postpone it. I
10 guess I urge that you as you discuss this matter take
11 into account the point I was trying to deal with here.
12 I think if we can find a way to deal effectively with
13 people who are representing concerns, I think we are
14 better off to share information with them ahead of time
15 rather than have to deal in a public meeting with it
16 afterward.

17 CHAIRMAN PALLADINO: What I was thinking of,
18 Jim, if we would spend a few minutes after the meeting
19 with Len, and I think I would like Jim Fitzgerald if we
20 can get him, to talk about this specific problem before
21 you go off and change your meeting that it may turn out
22 that the issue is so different here that we will take a
23 different risk and we may say okay let's take it.

24 COMMISSIONER AHEARNE: Had you intended to
25 also discuss the falsification of records issue?

1 MR. KEPPLER: Let me answer that by saying ---

2 CHAIRMAN PALLADINO: That is one of th 20.

3 COMMISSIONER AHEARNE: I understand it is, but
4 you see now here is a situation where if it is really
5 falsification, whereas the rest of these so far it seems
6 the conclusion they are reaching is that there is no
7 problem, and clearly there is a problem. Now it may not
8 end up being a significant safety problem, but it is
9 clearly a problem and action is going to have to be
10 taken.

11 MR. NORELIUS: I might just comment that that
12 is one that the licensee is clearly aware of. You know,
13 they know that we think there is falsification of
14 records now.

15 COMMISSIONER AHEARNE: Yes, sir.

16 MR. NORELIUS: They are fully aware of that,
17 and I guess there wouldn't be anything that we would say
18 in that meeting that they don't already know on that
19 issue.

20 COMMISSIONER AHEARNE: Unless if the records
21 were falsified, whoever did falsify the records may not
22 know.

23 MR. KEPPLER: I think it would be my intent on
24 that subject that it is still an open subject and not to
25 pursue it at the meeting other than to address there

1 still is an open issue.

2 CHAIRMAN PALLADINO: Well, I was going to
3 suggest that since you are here, and what time do you
4 have to leave?

5 MR. KEPPLER: We have plenty of time.

6 CHAIRMAN PALLADINO: Do you have some time?

7 MR. BICKWIT: Sure.

8 CHAIRMAN PALLADINO: And I would like to see
9 if we could get Fitzgerald in and see where we stand on
10 our options.

11 Any more on this, Jim?

12 MR. NORELIUS: Again, we could go into detail
13 on the others.

14 COMMISSIONER ASSELSTINE: Could you just touch
15 briefly on No. 13, sabotage, which I gather was putting
16 flammable materials in fire extinguishers.

17 MR. NORELIUS: There were two parts to it.
18 One was that there were gauges which were broken and one
19 that somebody had put flammable liquids like gasoline in
20 the fire extinguishers.

21 In terms of gauges that may have been damaged
22 or broken, that may have been a problem, but if they are
23 safety related equipment they were fixed and they were
24 subject to the testing program. So that one we feel we
25 have a handle on.

1 In terms of the fire problem, the licensee has
2 done annual fire extinguisher maintenance records for
3 the last three years. So we believe that resolves it.
4 Whether it happened or we didn't determine, but we think
5 we are confident that there is not a problem now.

6 COMMISSIONER ASSELSTINE: There is no impact
7 on it, but you weren't able to verify whether or not it
8 had occurred.

9 MR. NORELIUS: That is correct.

10 COMMISSIONER ASSELSTINE: How about No. 18,
11 the cover up of deficiencies?

12 MR. NORELIUS: That was one that was very
13 general and we debated whether or not to try to do
14 anything. It was a former employee of the
15 architect/engineer who alleged that the supervisor had
16 made such a statement that there were deficiencies and
17 he wasn't going to tell anybody about them. We looked
18 at the Sargent and Lundy program because about the last
19 four or five on this list related to Sargent and Lundy.
20 So we looked quite a bit at their program generally.

21 This individual gave us the name of another
22 person who had worked there in a similar time period.
23 We talked to that individual who did not confirm any of
24 the same problems that the first one did and in our
25 discussions we couldn't get a handle on anything that

1 led us to believe it was a problem. So we don't know
2 what else to do and we didn't see any other indication
3 of the problem.

4 CHAIRMAN PALLADINO: Okay. Any more?

5 COMMISSIONER AHEARNE: I just have one
6 question. I didn't know whether anybody was going to
7 address it. I had asked at the agenda planning session
8 to have someone who might be able to speak to the
9 problem that had come up with the Chinese reactor which
10 was a ---

11 CHAIRMAN PALLADINO: Which one was that?

12 MR. EISENHUT: This is the problem at Kuo
13 Sheng in Taiwan.

14 COMMISSIONER AHEARNE: And therefore if it was
15 germane to ---

16 MR. EISENHUT: We believe it is not germane at
17 all. Kuo Sheng is a BWR-6 and the injection point is
18 higher. The injection point for LPC is higher and,
19 secondly, the fuel is different. So the flow really
20 can't get to the point where it vibrates the instrument
21 LPRMs, if that is the problem you are referring to.
22 They had a problem where they had an LPI flow that
23 vibrated the instrumentation. It is a physically
24 different arrangement. That is a Mark III BWR-6.
25 LaSalle is a Mark II. It is really the BWR-5 is the

1 difference. The actual core configuration is physically
2 different.

3 COMMISSIONER AHEARNE: So you are saying that
4 you do not believe that there would be a problem.

5 MR. EISENHUT: We don't believe it is a
6 problem. We have it under generic evaluation, but we
7 don't think it is a BWR-5 problem.

8 COMMISSIONER AHEARNE: Then the big meeting of
9 the BWR owners was not related to that.

10 MR. EISENHUT: The meeting of the ---

11 COMMISSIONER AHEARNE: On hydrodynamic loads
12 and the instrument line.

13 MR. EISENHUT: No, there really was a
14 difference. That was -- (Inaudible).

15 MR. KEPPLER: Mr. Chairman.

16 CHAIRMAN PALLADINO: Yes.

17 MR. KEPPLER: Can we offer a counterproposal
18 here on the matter? Chuck suggested that maybe what we
19 could do is limit the meeting tomorrow that we have
20 scheduled to only those matters that are a matter of
21 public record that were submitted with the affidavits
22 and restrict our discussion to strictly those things that
23 we already been discussed in open session.

24 CHAIRMAN PALLADINO: Well, why don't we talk
25 about it for half an hour after this meeting.

1 MR. KEPPLER: All right.

2 CHAIRMAN PALLADINO: And I can afford one
3 other Commissioner there.

4 COMMISSIONER AHEARNE: I will let Jim. He is
5 a lawyer.

6 CHAIRMAN PALLADINO: Would you be willing?

7 COMMISSIONER ASSELSTINE: Sure.

8 CHAIRMAN PALLADINO: Anything more to come
9 before us at this session?

10 (No response.)

11 CHAIRMAN PALLADINO: Well, thank you very much
12 and we appreciate your presentation.

13 We will stand adjourned.

14 (Whereupon, at 5:33 p.m., the closed meeting
15 adjourned.)

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NUCLEAR REGULATORY COMMISSION

This is to certify that the attached proceedings before the
COMMISSION MEETING

in the matter of: CLOSED MEETING - EXEMPTION 5 - DISCUSSION OF FULL POWER
OPERATING LICENSE FOR LaSALLE-1

Date of Proceeding: June 22, 1982

Docket Number: _____

Place of Proceeding: Washington, D. C.

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

Mary C. Simons

Official Reporter (Typed)

Mary C Simons

Official Reporter (Signature)

CATEGORY 1 ITEMS

1. IMPROPER CORING AND DRILLING ACTIVITIES
2. VOIDS IN REACTOR PEDESTAL
3. IMPROPER CONCRETE WORK IN THE SCREENHOUSE
4. DEBRIS IN CONCRETE AND 55 GALLON DRUM IN CONTAINMENT BASEMAT
5. MISALIGNED CONTAINMENT WALL
6. INADEQUATE CONCRETE VIBRATION
7. IMPROPER MASONRY WALL CONSTRUCTION AND POOR MORTAR QUALITY
8. INADEQUATE QUALITY CONTROLS DURING CORING AND DRILLING ACTIVITIES
9. SECONDARY CONTAINMENT TEST EVENT
10. FALSIFICATION OF TORQUE WRENCH CALIBRATION RECORDS
11. IMPROPER INSTALLATION OF HANGER SUPPORTS
12. INADEQUATE SECURITY
13. ACTS OF SABOTAGE IN 1979
14. AUXILIARY BUILDING WALL LEAKING
15. EXCESSIVE REACTOR BUILDING SETTLING
16. INADEQUATE TRAINING OF QUALITY CONTROL PERSONNEL
17. WELDERS UNQUALIFIED OR NOT PROPERLY CERTIFIED
18. COVERUP OF DEFICIENCIES
19. NONCONFORMING MATERIAL
20. CONFLICT BETWEEN SPECIFICATIONS AND NRC REQUIREMENTS

CATEGORY 2 - RESOLUTION REQUIRED (BUT NOT IMMEDIATE)

1. INADEQUATE NRC INSPECTIONS
2. ARCHITECT ENGINEERS COULD NOT COMMUNICATE
3. UNNECESSARY PIPE HANGER INSTALLATION IN UNIT 2
4. NEGATIVE MANAGEMENT ATTITUDE TOWARD WORKERS
5. EQUIPMENT DAMAGED DURING INSTALLATION
6. UNIT 2 SCAFFOLD FIRE
7. UNIT 2 BASEMAT PITTED

CATEGORY 3 - REFER TO LICENSEE; STATE; OSHA; OR OTHER AGENCY/
NO FURTHER INVESTIGATIVE ACTION REQUIRED

1. NRC INSPECTOR CONDUCT
2. IMPROPER INSTALLATION OF PIPING
3. INADEQUATE WORKER SAFETY
4. WASTE AT LA SALLE
5. DEFECTIVE CIRCULATING WATER PIPE
6. INSTALLATION OF PARTS NOT IN ACCORDANCE WITH PRINTS
7. LOOSE BOLTS ON BEAMS IN UNIT 2 TURBINE BUILDING
8. BULGE IN CONDENSER PIT CONCRETE WALL
9. ALCOHOL AND DRUG USE