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NUCLEAR REGULATORY COMMISSION

ORIGINAL

COMMISSION MEETING

In the Matter of: PUBLIC MEETING

DISCUSSION OF AND POSSIBLE VOTE ON FULL POWER OPERATING LICENSE FOR LASALLE UNIT 1

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1 UNITED STATES OF AMERICA

2 NUCLEAR REGULATORY COMMISSION

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5 DISCUSSION OF AND POSSIBLE VOTE ON

6 FULL POWER OPERATING LICENSE FOR LASALLE UNIT 1

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8

9 PUBLIC MEETING

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12 Nuclear Regulatory Commission
Room 1130
13 1717 H Street, N. W.
Washington, D. C.
14
Tuesday, July 27, 1982
15

16 The Commission met, pursuant to notice, at

17 10:00 a.m.

18 BEFORE:

19 NUNZIO PLALLADINO, Chairman of the Commission
JOHN AHEARNE, Commissioner
20 THOMAS ROBERTS, Commissioner
JAMES ASSELSTINE, Commissioner
21
STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:
22
S. CHILK
23 L. BICKWIT
F. REMICK
24 H. DENTON
D. EISENHUT
25 J. KEPPLER

1 AUDIENCE SPEAKERS:

2 R. VOLLMER
R. WALKER
3 C. NORELIUS
R. PARRISH
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DISCLAIMER

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

2 CHAIRMAN PALLADINO: Good morning, ladies and
3 gentlemen.

4 The Commission meets for discussion of and
5 possible vote on the full power operating license for
6 LaSalle Unit 1.

7 On April 17, 1982, the Director of the Office
8 of Nuclear Reactor Regulation issued a license limited
9 to low power operation for LaSalle Unit 1. On June 21,
10 1982, the LaSalle Unit 1 reactor achieved initial
11 criticality.

12 During the last several months the Region III
13 Office has received allegations regarding construction
14 activities at the LaSalle nuclear facility. A special
15 investigation was conducted in response to several
16 allegations regarding the adequacy of construction of
17 the LaSalle Station. On July 19, the Regional
18 Administrator issued a report on the special safety
19 investigation, and the reported concluded that the
20 LaSalle Unit 1 can be operated safely above zero power.

21 On July 26, I received a letter from the
22 Government Accountability Project that provides
23 allegations associated with heating, ventilating and air
24 conditioning system work at LaSalle. Mr. Keppler will
25 address this letter during his presentation on the

1 status of the facility.

2 The question now before us is, can the plant

3 be allowed to go to full power after low power testing

4 up to 5 percent.

5 Unless my fellow Commissioners have any

6 opening remarks, I am going to turn the meeting over to

7 Mr. Denton and Mr. Eisenhut to receive a status report

8 on the LaSalle Unit 1 as far as the Office of Nuclear

9 Reactor Regulation is concerned, and then we will turn

10 it over to Mr. Keppler.

11 Do you have any comments?

12 COMMISSIONER AHEARNE: No.

13 MR. DENTON: Thank you, Mr. Chairman.

14 We will discuss the activities of the staff

15 since our last meeting of the Commission, and Darrell

16 Eisenhut will cover some of the licensing activities,

17 and then Jim Keppler will discuss the regional

18 activities.

19 Darrell, why don't you begin?

20 MR. EISENHUT: Thank you.

21 If I could have the outline slide.

22 (Slide.)

23 MR. EISENHUT: This is an outline of the

24 topics that we will be addressing today. This is a

25 follow up, of course, to our briefing on June 22nd,

1 where we went through OL license, and we went through
2 most of the issues.
3 Today, we are only going to be addressing
4 those issues that were identified such as the plant
5 status, operating experience, the disposition of the
6 allegations from 2206 petition, and the licensing
7 actions since there have been in the past period of time
8 about three licensing amendments, minor amendments,
9 which are primarily clean up of tech specs, and we will
10 summarize those.
11 I guess we will turn over, to go through the
12 status, the operational experience and the allegations,
13 to Jim Keppler of Region III.
14 CHAIRMAN PALLADINO: Are there any questions
15 of Darrell Eisenhut?
16 MR. KEPPLER: I am going to have Roger Walker
17 describe the status of the plant and the limited
18 experience that the plant has seen to date, and then we
19 will go into the allegation information.
20 MR. WALKER: Roger Walker.
21 The status of the plant currently is, it is a
22 hot shutdown at around 120 pounds. They went down at
23 midnight last night, approximately midnight last night,
24 when they had an automatic depressurization system
25 flex-hose/air hose failure on one of the accumulators.

1 That accumulator to isolate it, you had to isolate three
2 of them, to put them in a tech spec action statement.
3 They took the plant down at around midnight,
4 manually scrammed it to take advantage of that shutdown
5 with the start-up test program to test control rod
6 drive. While they are down, they have to repair that
7 flex-hose. They have a bearing on the service water
8 pump tha is chattering and they have to fix it. There
9 is some balance of plant stuff to fix.
10 They expect to be back up at approximately six
11 o'clock tonight. That may slide a few hours here and
12 there. The next seven to nine days, they are scheduled
13 for 5 percent power operation, maybe ten days.
14 Basically, the licensee performance since we
15 last talked has been that they achieved criticality for
16 heat-up on 7/21/82 at about three in the morning. I
17 arrived at around five in the morning, and staged on
18 site basically, between me and my resident inspectors,
19 for the next three or four days. They are still on
20 site.
21 They did a start up and went up to around 150
22 pounds, did control rod drive testing. They proceeded
23 to 250 pounds. They did some surveillances on the
24 relief valves. They did have one scram at this point
25 from a pressure regulator failure, which caused a bypass

1 valve to open. The operator took it out manually,
2 scrammed it manually.
3 They restarted, they did achieve essentially
4 rated pressure last weekend, and they had another scram
5 on Saturday evening which was caused by an isolation of
6 the main steam isolation valves on high area catcher in
7 the steam tunnel. It was a steam line open, a
8 three-quarter inch test line.
9 Essentially that is what has occurred since we
10 last talked. That is the plant status. Operator
11 actions, when I witnessed the first scram, were
12 excellent.
13 CHAIRMAN PALLADINO: How far up the scale of 5
14 percent power have they gone up, if any?
15 MR. WALKER: They have essentially achieved 5
16 percent power. It is a nominal 3.5 percent-5 percent on
17 the APRM. They are banging against that stop right
18 now. They will stay at that stop, at rated pressure and
19 varying pressures, throughout the next seven to ten
20 days.
21 COMMISSIONER AHEARNE: I have a couple of
22 questions.
23 I think they have had, what, two or three
24 scrams?
25 MR. WALKER: The last two of them were manual,

1 and one was an automatic. The first one, half the scram
2 was from an IRM response, and the other half, the
3 operator got the other channel manually. One IRM was
4 ranged down lower than the other one.
5 COMMISSIONER AHEARNE: Would this be viewed as
6 relatively normal, three in five days?
7 MR. WALKER: I would say, when you are going
8 through initial plant testing, that is not unusual. You
9 do find some bugs that you work out.
10 That pressure regulator failure was an
11 isolator failure.
12 COMMISSIONER AHEARNE: I am sure there are
13 always reasons for them.
14 MR. WALKER: I am sorry.
15 COMMISSIONER AHEARNE: There are always
16 reasons for them, I am just wondering.
17 MR. WALKER: I am not uncomfortable with that
18 amount of scram.
19 COMMISSIONER AHEARNE: So there is nothing so
20 far that you would say that you would be uncomfortable
21 with?
22 MR. WALKER: No.
23 The second scram, I did not like the fact that
24 the three-quarter inch steam line was left open. We
25 have investigated and found why. No, I am not

1 uncomfortable with that.

2 COMMISSIONER AHEARNE: The operator crew, they

3 have enough on site?

4 MR. WALKER: They have an abundance of people

5 on people on site, sir. As a matter of fact, one of the

6 things that I stressed to them was that sometimes I

7 thought they had too many people in the control room,

8 and they took action.

9 MR. DENTON: Commissioner, I think they are

10 operating with either five or six shifts, so they meet

11 the kind of criteria that we talked about with you the

12 other day. They have at least four crews in operation

13 and one in training. I think the sixth crew is the

14 relief.

15 MR. WALKER: There are six crews, which gives

16 them the opportunity to put out extra NSOs and SROs in

17 the control room for revolutions. Beyond that, they are

18 bringing their crews an hour early to get a good

19 turnover from the shift before before they send the

20 one.

21 COMMISSIONER AHEARNE: The last question is,

22 do I gather that they would be ready to go above 5

23 percent in seven to ten days?

24 MR. WALKER: That is my estimate, sir. Things

25 do happen that make that slide.

1 COMMISSIONER AHEARNE: Of course.

2 MR. WALKER: But that is my estimate at the

3 moment.

4 COMMISSIONER AHEARNE: Thank you.

5 CHAIRMAN PALLADINO: What sort of things must

6 they do in the next seven to ten days?

7 MR. WALKER: They are basically centered

8 around low power testing in the area of control rod

9 drives, the reactor core isolation cooling system, some

10 system expansion testing, piping vibration testing,

11 neutron monitoring testing, and that sort of thing,

12 sir.

13 CHAIRMAN PALLADINO: Any other questions?

14 (No response.)

15 CHAIRMAN PALLADINO: Do you want to go ahead,

16 Jim?

17 MR. KEPPLER: At the Commission meeting on

18 June 22, you will recall that we described the approach

19 to the investigation that was being undertaken in

20 response to the allegations that were received via the

21 Illinois Attorney General's Office, the Illinois Friends

22 of the Earth, and the Government Accountability

23 Project.

24 We broke down the list of items into three

25 categories: those that we felt needed to be addressed

1 for operation of LaSalle Unit 1; those that we felt
2 could be addressed in a later time scale; and those that
3 we felt were so general in nature that we did not pursue
4 them.
5 At that time, we briefed the Commission on the
6 fact that there were 20 of the category one items that
7 needed to be resolved for operation of the plant, and
8 that 19 of them had been resolved at that time.
9 The 20th issue related to a problem or a
10 concern with respect to falsification of torque wrench
11 calibration records. Subsequent to that meeting, we
12 brought in a technical consultant on the matter.
13 We reviewed the records in question, and we
14 required the company to retorque the bolts on all safety
15 related valves, other than those on the pressure
16 boundary itself, on the operator to yoke area. We
17 required them to complete all of the retorquing inside
18 containment prior to start up, and we would put a
19 requirement in the license that they would do those
20 outside containment prior to January 15, 1983.
21 Up to 2600 bolts that they examined within the
22 containment, only five were found not to be torqued
23 properly. Four were what I would describe as loose, and
24 one was some tenth of a pound under the specified torque
25 value.

1 The concern over the question of the
2 falsification matter, and enforcement related aspects
3 that we may decide upon on that, is still a matter that
4 remains to be pursued, but in terms of the technical
5 adequacy of the bolting issue, we are satisfied.
6 At that point in time, we put together our
7 investigation report, and we proceeded to arrange to
8 meet with the Illinois Attorney General's Office,
9 representatives of the Friends of the Earth, and the GAP
10 Organization in Region III to discuss the results of the
11 investigation.
12 On July 15, in making arrangements for the
13 meeting, in the discussion that I had with the
14 representative of the GAP Organization, she asked me
15 whether or not we had included investigation of the
16 heating, ventilation and air conditioning work performed
17 by the Zack Corporation in our investigation.
18 I told her that we did not, that we had
19 expected information to be provided to the regional
20 office on that matter. During the course of the
21 discussion, she told me that we had already had that
22 information in the regional office, and in fact had had
23 it for some time.
24 Since the call was at the end of the day, I
25 did not have the staff that I could check that out with

1 at the time. So the next morning I checked out the
2 information that she had provided and, in fact, found
3 that we did have some records that related to LaSalle.
4 I think, perhaps, because of the heavy
5 concerns that have been generated with respect to this
6 issue, and the letters which the Commission has received
7 on it, I might walk through the details of this thing,
8 to give you the background and to tell you how we had
9 approached the concerns with respect to GAP and what we
10 are doing with them today, and where we expect to be on
11 the issue.
12 COMMISSIONER AHEARNE: Could I interject just
13 for a minute, just to understand how this presentation
14 this morning is going to be covered. You had done one
15 large report, which you started talking about, that you
16 had submitted. Are you going to get back to that at
17 some point?
18 MR. KEPPLER: I would suggest that if you have
19 some questions on the report, that we deal with them
20 right now.
21 COMMISSIONER AHEARNE: Could we, before we get
22 into this other.
23 MR. KEPPLER: I wasn't planning to go into any
24 of the 20 allegations in any more detail than we
25 discussed them the last time.

1 COMMISSIONER AHEARNE: I really merely wanted
2 to ask a question on the report, which we did not have
3 the last time. It may more be a question of NRR. These
4 are all related to the coring and drilling.
5 The first question is, is it normal practice
6 to have what a least to me seemed to be a very large
7 amount of coring and drilling of the containment?
8 MR. DENTON: I don't think we have any
9 definitive surveys as to how many people core and drill
10 as extensively as they do or not. Perhaps I could ask
11 our Director of the Engineering Division who is here to
12 comment.
13 MR. VOLLMER: I guess I can only say that the
14 coring and drilling is now common, but as Harold said we
15 did not take a survey to see if this was an unusually
16 large number either in terms of size or physical
17 number.
18 COMMISSIONER AHEARNE: I recognize that it is
19 not an unusual practice. My question really is, there
20 seems to be a very large amount here, and I wondered,
21 although we may not have taken a survey, obviously we
22 must have some people who have inspected a lot of plants
23 being built, and I wondered whether anybody who has done
24 that had any information.
25 MR. VOLLMER: From that perspective, I can

1 offer that we did send some of our structural people out
2 to the architect-engineers' office to look over what was
3 done and how the verification of adequacy of the
4 structures. They saw nothing particularly unusual about
5 what was done.
6 COMMISSIONER AHEARNE: I was going to get to
7 that, Dick. More my question was whether the NRC people
8 who have had other experience with plants under
9 construction -- (a) is there such a person who has also
10 looked at this LaSalle; and (b) did they have any
11 comment on whether this was a normal amount or an
12 abnormal amount.
13 MR. KEPPLER: I did not ask that question of
14 any of the inspectors that were involved, but I could
15 get that information for you, if you would like.
16 MR. NORELIUS. Chuck Norelius from Region
17 III.
18 I think at one point here, there were
19 bulletins issued, I believe the number is 7902 and 7914,
20 which required additional supports. They did, I think,
21 contribute to additional holes being drilled to comply
22 with that bulletin. I don't know if that helps.
23 COMMISSIONER AHEARNE: Roughly what percentage
24 of the holes would you say were attributed to that
25 bulletin?

1 MR. NORELIUS: I don't know the percentage,
2 but I understand it was considerable.
3 COMMISSIONER AHEARNE: One half, one quarter?
4 MR. NORELIUS: I don't think I can offer
5 that.
6 COMMISSIONER AHEARNE: Jim, if I could get
7 that. I am not asking for a survey, it is only that I
8 am interested in understanding if this was an abnormal
9 amount.
10 The second point was that I noticed in many
11 places in many of the references in the report, in the
12 findings it refers to Attachment B, for example, an NRC
13 review of this engineering function, this was with
14 respect to the drilling of a six-inch diameter hole.
15 The NRC review is documented in Attachment B.
16 Then there is another core hole for pipes, and
17 the report says that an acceptable method to accomplish
18 the work, see Attachment B. Then later, Attachment B
19 documents NRC engineering acceptance. Again later, the
20 drilling and coring are adequate, see Attachment B.
21 After many references, I get to Attachment B,
22 and I find that it is two-and-a-half pages. The first
23 page is background, the last page is conclusion, and the
24 middle page is discussion. I guess I am a little
25 puzzled by actually what did -- I gather this was an NRR

1 effort, is that correct, that is, this is the Structural
2 Engineering Branch, and I assume that it is the NRR
3 Structural Engineering Branch.
4 MR. DENTON: Yes. I don't know yet where you
5 are, Commissioner, in this report. I did not bring a
6 copy down with me, thinking that this would not be the
7 subject of today's meeting. But we can describe the
8 basis for the acceptance of the engineering evaluations
9 that were done.
10 COMMISSIONER AHEARNE: What it says, we have
11 verified at the plant site several groups of drilled
12 holes through the use of the set of drawings that have
13 been provided to us, and believe that the record of
14 drilled holes is reasonably accurate. In spite of the
15 fact that thousands of holes have been drilled and
16 thousands of rebars have been hit, the actual damage is
17 believed to be too small to affect the structural
18 integrity of the plant.
19 It then says that you have reviewed the
20 Applicant's quality control procedures. You have
21 audited and spotchecked engineering calculations and
22 found them to be acceptable.
23 My questions are: on what do you base the
24 belief, I would assume that there have to be some
25 engineering analyses on which the belief is based, and

1 it really doesn't come through in this. The second is,
2 at the last meeting I seem to recall that one of the
3 questions that was asked was, how many rebars would have
4 to be cut before there would be a question or a concern
5 about this integrity of the structure, and it is not
6 obvious that NRR did that calculation. If you did, I
7 would appreciate hearing about it. If you didn't, I
8 would like to understand why it was not thought to be
9 necessary, and I would like a few words about why the
10 belief was that the work was adequate.
11 MR. DENTON: There was quite a bit of
12 technical work put into verifying that the holes did not
13 weaken the concrete. They included technical meetings
14 back in Bethesda, trips to Sargent and Lundy
15 headquarters, submittals by the company of their
16 criteria. A lot of staff effort went into it, and it is
17 documented, I guess, in the reports referenced here,
18 rather than in this by itself.
19 There was a detailed evaluation made by NRR
20 technical experts and assisted by the regional experts
21 in this area that formed the basis for this conclusion.
22 Let's see if we have someone here who could describe the
23 work that went into it.
24 COMMISSIONER AHEARNE: Harold, since you
25 talked about the references, the first reference is the

1 show cause order. The second reference is a transcript
2 of the meeting. The third is a clarification of the
3 meeting transcript. The fourth is a trip report. The
4 fifth is an assessment of an off-gas filter building.
5 The sixth is an assessment of the response, talking
6 about the off-gas filter building. The seventh is an
7 inspection report. The eighth is a Sargent and Lundy
8 report. The ninth is a Sargent and Lundy report. The
9 tenth is a Commonwealth Edison report.
10 I am puzzled. I don't really see the NRR
11 analysis in the references either.
12 MR. DENTON: They were perhaps not listed.
13 What I have characterized is what was done, and the
14 references may not reflect fully the scope of work that
15 was done.
16 COMMISSIONER AHEARNE: That was my problem, I
17 was trying to track.
18 MR. NORELIUS: Let me help a little to explain
19 how we went through this.
20 Following Mr. Denton's meeting on March 31st,
21 or at that time, let me say, Sargent and Lundy and
22 Commonwealth Edison provided a copy of several of the
23 drawings that they had. They had selected nine concrete
24 elements that they felt were most critical. Where
25 either because of stress levels or a number of hit or

1 cut rebar, they considered these to be the most critical
2 areas, and they did calculations to determine the safety
3 margins in those areas.
4 Members of the NRR staff and our Region III
5 staff reviewed that information and then subsequently
6 went to Sargent and Lundy, where they talked with the
7 engineering people involved and determined the basis or
8 the judgment that they had used in coming up with their
9 conclusions as they evaluated this thing all along.
10 They evaluated the methodology that they used
11 in making the calculations for the safety margins, and
12 they were satisfied that the right types of information
13 had been considered in terms of engineering judgments.
14 They were satisfied that the nine particular elements
15 that they picked appeared to be reasonably
16 representative.
17 They also looked at some additional number,
18 and I do not know that number. But they randomly
19 selected other areas and probed into those because
20 Sargent and Lundy had continued to do an on-going
21 calculation.
22 Subsequent to that time, Sargent and Lundy did
23 a complete calculation on all of the various structural
24 elements which supported some of their initial findings,
25 which had been based just on engineering judgments that

1 they all met the design margin requirements.

2 COMMISSIONER AHEARNE: How did the staff

3 satisfy itself that the nine choices of Sargent and

4 Lundy were representative?

5 MR. NORELIUS: They looked at the actual

6 drawings which had marked on them the locations of cut

7 rebar, and from that selected areas to see that they

8 appeared to be those that might have the majority of the

9 cuts, and those areas which may have the greatest stress

10 as it appeared from the drawings. After that, Sargent

11 and Lundy did do all of it.

12 COMMISSIONER AHEARNE: Also the staff did, you

13 said, check the calculational methods?

14 MR. NORELIUS: Yes, they did. They did not

15 review 100 percent of the calculations.

16 COMMISSIONER AHEARNE: I understand that.

17 MR. NORELIUS: The approach, they did check,

18 and selected specific calculations.

19 COMMISSIONER AHEARNE: Do you have a rough

20 estimate of how much a bar damage would have been

21 required to go on the other side of that structural

22 safety?

23 MR. NORELIUS: We did not determine that, nor

24 did we determine, I don't believe, we didn't put in the

25 report the number of actual bars cut. Our approach was

1 to see if they had done proper analysis for those that
2 were cut, and to determine that the design margins were
3 adequate.
4 COMMISSIONER AHEARNE: Okay.
5 CHAIRMAN PALLADINO: Any more questions?
6 COMMISSIONER AHEARNE: No, my only comment is
7 that I believe that a few more words in the report would
8 have helped a great deal.
9 CHAIRMAN PALLADINO: Any more questions on the
10 report?
11 (No response.)
12 CHAIRMAN PALLADINO: Jim, would you like to
13 proceed.
14 MR. KEPPLER: I think what I would like to do,
15 with the Commission's acceptance, is to go through all
16 we know about the Zack Corporation, dating back to some
17 earlier problems at Midland.
18 COMMISSIONER AHEARNE: Jim, I really
19 apologize, and Joe.
20 I realize that the OGC paper also referred to
21 basically that report, I believe.
22 CHAIRMAN PALLADINO: You want to ask more
23 questions?
24 COMMISSIONER AHEARNE: I am sorry, Jim.
25 MR. KEPPLER: Go ahead.

1 COMMISSIONER AHEARNE: Len, you sent up a
2 paper with respect to the Director's denial on the 2206
3 petition, and I believe the Director's denial was based
4 upon that report. Is that correct?
5 MR. BICKWIT: That is true.
6 COMMISSIONER AHEARNE: I guess the first thing
7 I would like to understand is the procedural question of
8 the relationship of the denial, Commission consideration
9 of that denial, and the Commission consideration of the
10 operating license.
11 MR. BICKWIT: The petition asked for relief
12 prior to the grant of the license, therefore, if the
13 Commission grants the license at this stage it is, in
14 effect, denying review of a portion of the denial of the
15 petition. It is making impossible the grant of some of
16 the relief which is requested in the petition.
17 However, the petition could remain alive, and
18 the review process could remain alive, following the
19 decision to grant an operating license because some of
20 what the petitioner was requesting, it would still be
21 possible to grant.
22 COMMISSIONER AHEARNE: Such as?
23 MR. BICKWIT: Various relief has been asked
24 for. The timing of the relief would no longer be -- It
25 would no longer be possible to grant that relief on the

1 time schedule asked for in the petition, but it would be
2 possible to grant relief through revocation of license,
3 suspension of license, and the initiation of actions
4 which the Director has decided need not be undertaken.
5 COMMISSIONER AHEARNE: Is what you are saying
6 that petitioner wanted the plant not to start up, and if
7 we allow it to start up, it doesn't mean that we
8 couldn't later remove that permission.
9 MR. BICKWIT: Not only that, it doesn't mean
10 that you couldn't do so pursuant to your action in
11 reviewing the denial of the petition by the Director.
12 COMMISSIONER AHEARNE: In your paper, you
13 mention, and now I am specifically talking to the
14 section you have, "All necessary factors have been
15 considered, and extraneous factors excluded." You are
16 talking about the use of metal detectors.
17 This is on page 6. You end up concluding that
18 "an inconsistency in the staff's explanation appears
19 harmless." I am not sure, Len, whether this comes out
20 of your office or OPE, but it might be useful, at least
21 for me, if the staff addressed the question.
22 MR. BICKWIT: Have you seen a copy of it?
23 MR. DENTON: No.
24 MR. BICKWIT: I think it best if we provide
25 you with a copy of what we say. You are copied on these

1 things, but unfortunately, because of the time schedule,
2 that copy has not arrived at your desk.
3 CHAIRMAN PALLADINO: If you would restate what
4 your specific question was.
5 COMMISSIONER AHEARNE: The specific question
6 is, as they are reading, the OGC is saying that there is
7 an inconsistency in the staff's position.
8 MR. DENTON: I don't know that I can respond
9 without reading more than this one line. I need to know
10 more of the background, or the characterization than
11 just the one line. if someone could describe the
12 concern, maybe I could respond to it, or we could take a
13 break and I could read the whole thing.
14 MR. BICKWIT: Rick Parrish will respond or
15 elaborate.
16 MR. PARRISH: The basis for comment there is
17 simply that the engineering analysis that the licensee
18 submitted showed that the use of metal detectors was
19 required to minimize damage to rebar, to reinforcing
20 steel.
21 CHAIRMAN PALLADINO: Who said that?
22 MR. PARRISH: It was either Sargent and Lundy
23 or the licensee. It was their own analysis, the safety
24 analysis that indicated the requirement.
25 Region III is satisfied that alternative means

1 of insuring structural integrity were implemented and
2 were satisfied that the requirement need not be verified
3 in the field. It seemed to us that the requirement need
4 not be verified, there is not much point in it being a
5 requirement. But that if there really was a basis for
6 it being a requirement, we should have some means of
7 verifying that it is actually implemented.
8 COMMISSIONER AHEARNE: Jim.
9 MR. KEPPLER: I don't have an answer.
10 MR. DENTON: It sounds like a technical detail
11 which needs to have the technical staff look at it. I
12 recommend that we come back to it perhaps a little
13 later.
14 MR. PARRISH: On the basis of the staff
15 analysis, we considered it fairly harmless because they
16 did cite to all the various factors that went into the
17 conservative nature of the engineering assessment. So
18 we didn't see that the failure to require it in this
19 instance was critical. The assumptions that all steel
20 cut or nick damage was cut, more or less the worse case
21 analysis that they had imposed.
22 COMMISSIONER AHEARNE: Part of my reason for
23 raising the question related to it, as I just finished,
24 I wasn't completely, in fact I was quite dissatisfied
25 with the staff's description of why they were

1 comfortable with that.

2 MR. DENTON: It sounds like we need to have

3 the people who did the review be present to discuss

4 these factors, or get into them.

5 I notice that there is an Appendix D to the

6 report, which is an assessment of the effects of nicked

7 reinforcement steel, which goes into some of the staff's

8 basis for thinking that nicking of the type described

9 did not ultimately affect the load bearing capability of

10 the wall. But I didn't realize that you would need

11 those people present today, and I didn't bring down the

12 people who participated in that review.

13 COMMISSIONER AHEARNE: You have to realize,

14 Harold, that we have been flooded with a volume of

15 information and some of it arriving at five o'clock

16 yesterday, some of it arriving shortly prior to that. I

17 am trying to do the best I can to understand everything

18 that we have.

19 MR. DENTON: I have heard somewhere that

20 between Jim and I we put in 1,600 manhours investigating

21 these allegations, and maybe we didn't document as well

22 as we should have all that effort, but that is

23 considerable effort it seems to me.

24 COMMISSIONER AHEARNE: Yes.

25 This time I promise, that is the last said on

1 that.

2 COMMISSIONER ROBERTS: I have a minor

3 question, I guess of Rick Parrish, in the same area.

4 The engineering assessment, whose engineering

5 assessment?

6 MR. PARRISH: That required the use --

7 COMMISSIONER ROBERTS: I just want to know,

8 when you refer to the engineering assessment, whose

9 engineering assessment?

10 MR. PARRISH: Sargent and Lundy's, the

11 licensee's contractor.

12 COMMISSIONER ROBERTS: Okay, thank you.

13 MR. NORELIUS: Let me just add what I think I

14 might be able to read in this.

15 As I recall, this was some instructions that

16 Sargent and Lundy, as part of their engineering

17 assessment, had put on the drawings in terms of

18 instructions to the contractor, to use metal detector to

19 locate rebar. I don't believe it was any absolute

20 requirement that we had placed on it, but it was one

21 that they had developed as part of their own internal

22 procedures.

23 Certainly the point of putting it there would

24 be to minimize the contact with reinforcement steel.

25 But we didn't have any program, when we went out and

1 verified that use on a routine basis was one of the
2 internal instructions.
3 So I think it is correct that we did not have
4 a routine inspection program to verify that they used
5 metal detectors. Those were the instructions that came
6 with the Sargent and Lundy instructions.
7 CHAIRMAN PALLADINO: Rick, you implied
8 something that I would like to clear up. You implied
9 that if something is a requirement, it has to be
10 verified. Was this a requirement that the NRC should be
11 verifying.
12 MR. PARRISH: It doesn't seem that it was an
13 NRC requirement, and I am not sure --
14 CHAIRMAN PALLADINO: Who do you feel should
15 verify it? NRC nevertheless should verify it.
16 MR. PARRISH: NRC, obviously, can't go out in
17 the field and verify very requirement that even NRC
18 imposes, but somehow it should be picked up in the QA
19 system of review, if it is actually an NRC requirement.
20 COMMISSIONER AHEARNE: I go farther than that,
21 Joe. In this particular case, the staff has relied
22 extensively on Sargent and Lundy's conclusions. Just a
23 minute ago, for example, Harold pointed out that this
24 report contains an appendix which addresses the
25 acceptability of nicked steel. It is true, it does, it

1 is a Sargent and Lundy report.

2 So if we are going to rely extensively on

3 Sargent and Lundy calculations, and Sargent and Lundy

4 procedures, then I think the fact that there was a

5 Sargent and Lundy procedure, a requirement within their

6 procedures, I think it takes a little bit greater

7 emphasis.

8 CHAIRMAN PALLADINO: Yes, I am trying to

9 understand whose procedure and what requirement we have

10 for verification. I would not deny the prudence of

11 verification, I am just trying to understand the legal

12 basis for the verification.

13 COMMISSIONER AHEARNE: The issue that was

14 catching my attention was not so much the legal basis as

15 it was, we have a number of issues that were raised,

16 allegations that things were done and they were unsafe.

17 We looked into it, and we concluded, yes, in many cases,

18 it had been done, but we also concluding that it is not

19 unsafe. A large part, it seems to me, of that

20 conclusion rests upon the work done by Sargent and

21 Lundy. Therefore, if imbedded in their procedure they

22 have a requirement, at least it raises the question,

23 should not those requirements have been followed, if we

24 are going to base our conclusions --

25 CHAIRMAN PALLADINO: I wanted to ask. The

1 statement here is made, "The staff confirmed the
2 underlying allegation that 'there is no evidence of
3 field verification' of the use of metal detectors."
4 Would Sargent and Lundy asked, or was there nobody that
5 asked about field verification.
6 MR. NORELIUS: Let me again try to address
7 this.
8 Where it was a cored hole, as many of these
9 were, there was a conservative assumption made by
10 Sargent and Lundy to start with that certain of the
11 rebar would be hit, and that was considered in their
12 analysis for cored holes. In some cases, they still
13 wrote instructions to try to minimize that by the use of
14 metal detectors.
15 So we think the analyses that they performed
16 were still on the conservative side, and they tried to
17 apparently prohibit the cutting of rebar that was
18 unnecessary, but still the analysis comes out on the
19 conservative side.
20 COMMISSIONER AHEARNE: You are drawing a
21 distinction, then, between the practice of where they do
22 the coring and then the analysis after having done it.
23 MR. NORELIUS: That is correct.
24 While we did not verify specifically that it
25 was used in all cases, we do have some evidence that it

1 was used because they do have metal detectors on site.
2 Randomly, our inspector say that in the past they have
3 seen them using them, but we cannot say that it was
4 verified in the sense of a formal program to verify the
5 use of metal detectors.
6 MR. DENTON: I guess our review of that area
7 was shaped by the first impressions that these walls did
8 have considerable margin and tolerance to nicks, and
9 that there had been a system to record nicks. When
10 rebar was nicked, it was treated as though the rebar
11 wasn't there. The staff sampled and reviewed the
12 calculations that were done and found that these walls,
13 even with the holes that were there, met the code
14 requirements.
15 COMMISSIONER ROBERTS: You consider a nick the
16 same as a cut?
17 MR. DENTON: I think from an analytical
18 standpoint, all nicks were considered complete severance
19 of the bar.
20 COMMISSIONER ROBERTS: I would say that that
21 is a little heavy-handed.
22 MR. DENTON: It was the first screening tool
23 and if it passed that test, he did not have to get into
24 more detail. I understood that the staff, after looking
25 into it, did have the impression that these walls had

1 substantial tolerance for nicks and cuts.

2 COMMISSIONER ROBERTS: I wasn't being critical

3 of you on this.

4 COMMISSIONER AHEARNE: It seems that the

5 method is that you assume the worst, and if it is still

6 satisfactory under that case, you don't have to then do

7 any modification, which works well if it turns out, when

8 you have assumed the worst, it is satisfactory.

9 MR. DENTON: Then, they look at a number of

10 different walls and floors, and slabs, and tried to pick

11 the most critical areas, and based on that, they scoped

12 the kind of program that they did do. If they had been

13 designed with a lot less margin, then it would have been

14 a much more finer tuned analysis than it was.

15 COMMISSIONER AHEARNE: The staff's review

16 process as described here sounds adequate, but I must

17 submit that as written in the report, it wasn't quite as

18 clear.

19 CHAIRMAN PALLADINO: Do you have any more?

20 COMMISSIONER AHEARNE: No.

21 CHAIRMAN PALLADINO: Do you want to give it

22 another try?

23 MR. KEPPLER: Let me digress for a second.

24 (General laughter.)

25 MR. KEPPLER: Of the 20 areas that we did

1 address, I think the bottom line conclusion was that 18
2 of them were either found not to present a problem to
3 public health and safety, and there were two that we
4 required licensee action on. One was the bolt issue
5 that I discussed, and the other issue had to do with
6 some security problems that were identified and which we
7 required some augmentation of the surveillance program,
8 the security program.
9 COMMISSIONER ROBERTS: If I can read my notes,
10 two-tenths of one percent of the bolts had to be
11 corrected?
12 MR. KEPPLER: Of the 2,600 within the
13 containment --
14 COMMISSIONER ROBERTS: Five.
15 MR. KEPPLER: Five were not torqued properly.
16 COMMISSIONER ROBERTS: Two-tenths of one
17 percent.
18 MR. KEPPLER: That was another reason why we
19 concluded that those outside of the containment were
20 acceptable to be done on a longer time frame.
21 COMMISSIONER ROBERTS: I think that that is a
22 reasonable assumption.
23 COMMISSIONER AHEARNE: I think so.
24 MR. KEPPLER: Should we discuss Zack.
25 COMMISSIONER ASSELSTINE: Before we do that,

1 as I understand the Zack Company allegations are a
2 matter of on-going investigation; is that correct?
3 MR. KEPPLER: That is correct.
4 COMMISSIONER ASSELSTINE: Is discussion of
5 those allegations at this point going to in any way
6 hinder your investigation, our discussing them in open
7 session?
8 MR. KEPPLER: No. Let me suggest that the
9 discussion of the on-going investigation, I don't intend
10 to go into a lot of detail on. I think in view of the
11 questions that have been raised by the media and the GAP
12 Corporation, the Commission has to know the staff's side
13 of the story as to what has been done, and how we have
14 handled the matter, and what our view of the problem is,
15 so you can make a decision as to whether or not to vote
16 on the license.
17 CHAIRMAN PALLADINO: Why don't we go ahead.
18 MR. KEPPLER: I am going to give you quite a
19 bit of background information before we get up to the
20 current problem areas.
21 Let me start off by saying that Zack is the
22 heating, ventilating and air conditioning contractor for
23 the LaSalle, Midland, and Clinton sites. The purpose of
24 the heating, ventilating and air conditioning units is
25 to control the environment for both equipment and

1 personnel at the plant.

2 COMMISSIONER AHEARNE: When you say they are

3 the HVAC contractor, they are then the only or the

4 principal contractor for all the HVAC?

5 MR. KEPPLER: They handle all of the HVAC

6 work, and they procure some equipment from

7 subcontractors.

8 Our first experience in Region III with the

9 Zack Company went back to Midland. I am not sure of the

10 time frame, but I believe it was somewhere in 1979,

11 maybe 1978. But basically, we became aware of some

12 allegations regarding largely the installation work

13 being done by Zack at Midland.

14 As we looked into these allegations, we found

15 that they were substantiated. We found that the utility

16 had known about the problems, and were attempting to

17 deal with the problems, but in our review of the matter,

18 they were dealing ineffectively with the problems. They

19 were allowing bad work to continue.

20 CHAIRMAN PALLADINO: This was Commonwealth

21 Edison?

22 MR. KEPPLER: No, I said, this is Midland.

23 CHAIRMAN PALLADINO: Midland.

24 MR. KEPPLER: Consumers Power Company.

25 As a result of our review of those

1 allegations, and our conclusion that Consumers Power
2 Company's quality assurance program was not effectively
3 being implemented, we took action to require that work
4 be stopped in that area until the problems could be
5 examined and corrected, and the program augmented and
6 strengthened to preclude recurring problems. We issued
7 a civil penalty against Consumers Power Company for our
8 investigation findings.
9 COMMISSIONER AHEARNE: This was focused
10 specifically on?
11 MR. KEPPLER: This was Midland.
12 COMMISSIONER AHEARNE: It was on
13 installation?
14 MR. KEPPLER: It was largely installation. I
15 have not had a chance to go back and look at all of the
16 items of non-compliance.
17 The concern that I recall that we had was
18 largely that on-going work was continuing, it was
19 involving faulty welding. While they were trying to get
20 the problems straightened out, the work was continuing
21 to go on. Our criticism of Consumers was that they had
22 not action to stop the work at that time. I am just
23 giving you this as fill, so that you know we have had
24 some experience with Zack in the past.
25 In 1979, and I believe it was somewhere around

1 August, NRC inspectors, conducting an inspection at
2 LaSalle found some problems with the installation of
3 hanger welds for the heating, ventilating and air
4 conditioning work. This was an NRC inspection finding.
5 When we brought that to Commonwealth Edison
6 Company, their quality assurance program looked into the
7 matter, and Commonwealth Edison Company issued a stop
8 work order on the work going on at LaSalle.
9 They brought in a company called Conam,
10 C-o-n-a-m, to do a reinspection of all previous shop and
11 field welds on hangers related to the HVAC work, and
12 they were retained to do 100 percent overview of the
13 hanger welds in the future.
14 At that time, other steps were taken, such as
15 I believe the quality control supervisor for Zack was
16 replaced at that time, and there were procedural changes
17 and retraining of the Zack QC inspectors.
18 As a result of the effort by Conam and
19 Commonwealth Edison Company, we know there were a lot of
20 problems identified with the Zack work at LaSalle, and
21 that is evidenced by the fact that there were some 2,400
22 non-conformance reports that were written against the
23 work there.
24 CHAIRMAN PALLADINO: At LaSalle?
25 MR. KEPPLER: At LaSalle.

1 CHAIRMAN PALLADINO: Over what period of
2 time?
3 MR. KEPPLER: I am going to assume that it was
4 over the next two months because the stop work order
5 remained in effect for approximately two months.
6 CHAIRMAN PALLADINO: You mean in the 1979 time
7 frame.
8 MR. KEPPLER: Yes. The stop work order, I
9 believe, was in effect until early October.
10 COMMISSIONER AHEARNE: That is the
11 Commonwealth Edison stop work order.
12 MR. KEPPLER: That is correct.
13 Obviously, that being an inspection finding on
14 the part of the NRC, we were aware of what was going on
15 with respect to this effort. Sargent and Lundy
16 evaluated the non-conformance reports, and resolved
17 them.
18 I don't have details as how these were
19 actually dispositioned, but I can tell you that our
20 inspectors audited the effort on a sampling basis of
21 what Sargent and Lundy did. I believe the last audit in
22 some of this area --
23 I am sorry, I am getting ahead of myself
24 here. I don't know when they did that audit, but they
25 did it on a sampling basis and concluded that Sargent

1 and Lundy's dispositioning of these non-conformance
2 reports was proper.
3 The next critical time period in terms of our
4 dealing with Zack and LaSalle came on September 25,
5 1981, when the Zack Company, following an internal
6 audit, wrote a letter to Commonwealth Edison Company,
7 and I believe also to Consumers Power Company, and
8 Illinois Power Company, although I have not verified
9 that point. They wrote a letter to them alerting them
10 to a problem with material certifications and
11 documentation. That was on September 25, 1981.
12 Commonwealth Edison Company issued a report to
13 the Commission, a 50.55(e) report to the Commission, and
14 I believe the date of that report is September 30th. So
15 five days later, approximately, they notified the
16 Commission of the problem. The 50.55(e) report
17 addressed, among other things, but I believe the main
18 concern was the question of whether or not the materials
19 were proper, documents were missing, and incomplete
20 documents.
21 I am told that that 50.55(e) report was
22 subsequently closed out and reviewed by our inspectors.
23 MR. WALKER: It was closed in April. It was
24 reviewed about a month and a half before, and not closed
25 because all the installation wasn't finished. I think

1 the inspection report numbers are 50-378 and 50-317.

2 CHAIRMAN PALLADINO: The September 25th report

3 was just to alert us that the situation existed.

4 MR. KEPPLER: The September 25th report was

5 from Zack to the utilities, and not to the NRC.

6 CHAIRMAN PALLADINO: I thought you said that

7 Com-Ed had reported to NRC on September 25th.

8 MR. KEPPLER: That was on the 30th.

9 CHAIRMAN PALLADINO: The 30th, okay, I am

10 sorry.

11 MR. KEPPLER: Five days later.

12 COMMISSIONER AHEARNE: What did their 50.55(e)

13 report say?

14 MR. KEPPLER: The 50.55(e) reports were a

15 notification of the problem, and they centered around

16 the questions of improper materials, missing documents,

17 and incomplete documents. There were, I believe three

18 at that time.

19 COMMISSIONER AHEARNE: Then, this was followed

20 up by later reports from Commonwealth Edison, and

21 others?

22 CHAIRMAN PALLADINO: How did it get resolved?

23 We heard a little bit from Roger, but I am not sure that

24 I heard it all.

25 MR. WALKER: I think there were several -- I

1 can't say for certain, sir, but I think there were
2 several interim reports, or at least one interim report,
3 which is normal for 50.55(e), telling you the status of
4 their review.
5 We had inspectors, particularly an inspector,
6 go down and review at least twice the status of that
7 50.55(e), review the documentation, review what was done
8 on the NCRs to satisfy us that, indeed, the problem was
9 being taken care of. That was finally closed in one of
10 our inspection reports in April.
11 MR. KEPPLER: I think they are asking, though,
12 did the company submit a final close-out 50.55(e)
13 report?
14 MR. WALKER: They have to, yes. I can't
15 guarantee, but I know they did or Harvey would have
16 never closed the 50.55(e). You don't close a 50.55(e)
17 unless you have a final report.
18 MR. KEPPLER: Commonwealth Edison, in the
19 back, are saying that they submitted, but I can't tell
20 you when.
21 VOICE: December 2nd was the final report.
22 COMMISSIONER AHEARNE: But there is nobody
23 here from your staff who is familiar with that?
24 MR. KEPPLER: I don't have the inspector in
25 here who closed out the 50.55(e) report.

1 CHAIRMAN PALLADINO: But it was closed out?

2 MR. KEPPLER: Yes, and it is in an inspection

3 report.

4 MR. WALKER: It absolutely was closed out in

5 one of our inspection reports in April.

6 COMMISSIONER AHEARNE: But you must recognize

7 that the substance of the close-out is also important.

8 MR. KEPPLER: Absolutely. I am just giving

9 you the historical perspective here.

10 COMMISSIONER AHEARNE: Yes.

11 CHAIRMAN PALLADINO: Are we talking about

12 specialized materials here?

13 MR. KEPPLER: Pardon?

14 CHAIRMAN PALLADINO: Are we talking about

15 specialized materials here.

16 MR. KEPPLER: We are talking about material

17 that serves as the ducting work.

18 CHAIRMAN PALLADINO: Is that special material,

19 or is it commercial grade ducting?

20 MR. KEPPLER: It is not an exotic strength

21 material that we are talking about.

22 COMMISSIONER ROBERTS: Less than exotic.

23 CHAIRMAN PALLADINO: Is it commercial grade

24 equipment basically that you are talking about?

25 MR. KEPPLER: Essentially, yes.

1 MR. DENTON: I think, with regard to the
2 normal ducts and the copper pipes, and that sort of
3 thing, I think the NRC has no special requirement, so it
4 would be commercial grade galvanized steelsheet type of
5 tubing, and this sort of thing.
6 The special requirements of the NRC, to the
7 extent that they affect this, would go to the seismic
8 restraints and supports for the ducting work. In that
9 area there has to be special analyses done to be sure it
10 can withstand earthquakes that sort of thing. But the
11 material itself, from which the ducts are built, is
12 commercial grade galvanized sheets.
13 CHAIRMAN PALLADINO: But do we have special
14 requirements on the pedigree? Must there be a trail of
15 paperwork to establish that it meets certain
16 requirements?
17 MR. DENTON: Some of the equipment in the
18 heating and air conditioning is safety grade equipment,
19 then that would fall under our umbrella of Appendix B
20 for quality assurance.
21 CHAIRMAN PALLADINO: Does that apply to all
22 the equipment and duct work as well?
23 MR. DENTON: I think about a third of the
24 systems that are in the heating, ventilating, and air
25 conditioning system are safety related.

1 COMMISSIONER AHEARNE: When you talk about the
2 ventilation system, does that include such things as the
3 filters and the airflow pumps?
4 MR. KEPPLER: It includes the compressors and
5 the whole units.
6 COMMISSIONER AHEARNE: Those are the systems
7 that are responsible for the habitability of the control
8 room?
9 MR. KEPPLER: That is correct.
10 CHAIRMAN PALLADINO: But I was trying to
11 understand where the material's pedigree problem was.
12 Is it in the duct work, is this what we are talking
13 about, or are we talking about the critical equipment?
14 MR. KEPPLER: The material questionability
15 aspect centers around all of the material. The duct
16 work, the stiffeners, the hangers, the bolts and
17 washers.
18 Let me address your question a little bit
19 differently. I think what the staff has to look for is
20 adequate assurances that the unit will do its intended
21 safety function. That is the issue, so documentation
22 has to be available to portray or to convince us that
23 that is the case, or other means have to be taken.
24 CHAIRMAN PALLADINO: I think you were
25 misunderstanding what I said. If we are using

1 commercial grade material for duct work, why would we
2 have a special pedigree requirement?
3 If it had to do with a critical component, or
4 hangers that are important in a seismic event, I could
5 understand. I am just trying to get a feel.
6 MR. DENTON: I think we apply the requirement
7 the other way around. If it performs an essential
8 safety function, it falls under the QA umbrella. If
9 commercial grade can satisfy those functional
10 requirements, then commercial grade equipment is fine,
11 but even that has to have the pedigree traceability in
12 it, the way the regulation is applied.
13 A lot of the safety related equipment in the
14 plants is commercial grade, and doesn't have to possess
15 any special characteristics. But perhaps Dick Vollmer
16 from our Engineering Group might like to address that.
17 MR. VOLLMER: When the design is performed,
18 certain assumptions are made for the materials in terms
19 of their strength, ducting, stiffeners, and so on. So
20 the QA program should only be to require that those
21 conditions are met, i.e., the materials will satisfy the
22 design conditions.
23 Commercial grade materials, in many cases, are
24 adequate, particularly in a system or an application
25 like this, to assure that. So what we need to be done

1 is simply the assurance that that type of commercial
2 grade material is used, whether they do that by some
3 sort of material certification, or a testing of the
4 material itself, it is sort of immaterial as long as the
5 end objective in terms of strength is assured. It is a
6 little bit different than when you have more specialized
7 materials used in the primary system or something like
8 that.
9 COMMISSIONER ROBERTS: The absence of a mill
10 test report for duct work doesn't necessarily prove
11 anything, when the only material you can buy is going to
12 be acceptable.
13 MR. VOLLMER: That could very well be the
14 case, yes.
15 CHAIRMAN PALLADINO: This is what I was trying
16 to get a feel for. If we are talking about commercial
17 grade equipment, I don't think there are pedigrees in
18 commercial grade equipment. You have typical specs that
19 they meet or a content. I was just wondering, is that
20 what we are talking about, the pedigree.
21 MR. VOLLMER: Rather than using the word
22 "pedigree," I would rather use some assurance that the
23 material used is in conformance with the design
24 calculations and specifications. Usually, they just
25 pick a standard material that has known properties,

1 known strengths, for commercial ducting material, so
2 that is how the application is made.
3 Sometimes you need a piece of paper to assure
4 yourself that that is indeed the material that was put
5 in, rather than a low number or something else, for
6 example, so that it has the strength. That is simply
7 the real requirement.
8 COMMISSIONER AHEARNE: In the material
9 throughout all of this, is there any material in there
10 that is of a higher quality, where there is a
11 requirement on it of being of higher quality than normal
12 commercial grade?
13 MR. KEPPLER: I have a specification here for
14 the material or what was called for by Sargent and
15 Lundy. For the sheet material, it was two types,
16 galvanized steel, 16 gauge and lighter, and 14 gauge and
17 lighter, ASTM 85-26, and ASTM 85-27.
18 Then as you get into things like the
19 stiffeners, that is 575 -- I can't read this thing, it
20 is a facsimile copy.
21 COMMISSIONER AHEARNE: perhaps we can find a
22 corrected copy somewhere.
23 MR. KEPPLER: H-120, ASTM 80-36. That is the
24 types of material that are in there.
25 MR. DENTON: I think when we talked about it,

1 the kind of components we saw, and let me just give a
2 different reading of it, it is galvanized duct work,
3 which is a large part of the materials, which is
4 stiffener, bolts, rivets, some sheet tubing, and that
5 sort of thing, and you would be concerned about the
6 gauge. If it were too thin a gauge, it might not do.
7 Then there is some stainless steel duct work, and
8 associated with that are various stiffeners and
9 supports.
10 I think we tended to look at two aspects of
11 it. There is the supports for it, which you want to
12 make sure it won't fall on some other piece, and that it
13 will do its function. So the supports are one thing to
14 look at. Then the duct work itself, to be sure it is
15 the right gauge. I think, just looking at the list, it
16 is hard to identify any unique materials that are called
17 for in this.
18 COMMISSIONER AHEARNE: But is that an
19 exhaustive list?
20 MR. DENTON: It is representative.
21 COMMISSIONER AHEARNE: I can well recognize
22 that heating, ventilating and air conditioning firms,
23 even in a power plant, most of the work is going to be
24 on this commercial grade. All I am trying to find out,
25 is there any end of that spectrum which brings in the

1 need for some much more specialized material that does
2 have higher quality requirements.
3 MR. KEPPLER: Not that I am aware of.
4 COMMISSIONER AHEARNE: Okay. One of these
5 letters that was provided to us, perhaps you can give
6 some clarification of what the company might have meant,
7 I realize that it is not an NRC question.
8 This is a letter from the United States Steel
9 to the Zack in September of 1981, and they are
10 referencing apparently a letter from Zack to U.S. Steel,
11 and they say, "The above confirming orders all read
12 safety related. These orders were not called in to our
13 sales person as safety related, therefore, they were
14 handled in our normal procedure and not run through our
15 V&T program. Please advise us what is meant by the term
16 "safety related," and what obligation if any does this
17 impose on the supplier."
18 Do you have any idea what they meant?
19 MR. KEPPLER: Let me say, as Commissioner
20 Asselstine mentioned, we are investigating what we
21 consider to be the pertinent question that have been
22 raised here. We intend, as part of this investigation,
23 to talk to that company, along withthe other two
24 companies that wrote the letters that provided signed
25 certifications, to find out what U.S. Steel meant by

1 that and why the other two didn't provide it.

2 COMMISSIONER AHEARNE: I gathered from reading

3 the letter that it isn't that U.S. Steel is asking Zack

4 what do they mean by now saying that this material was

5 to be safety related.

6 MR. KEPPLER: I think, though, to try to

7 dredge that letter until we talk to the company, I can't

8 address it here.

9 COMMISSIONER AHEARNE: I was trying to

10 understand it.

11 MR. DENTON: I think it gets back to the

12 question that Chairman Palladino raised, that Appendix B

13 imposes certain traceability recordkeeping requirements

14 on safety related materials, and a third of these

15 heating and ventilation systems are safety related, and

16 therefore all under the Appendix B umbrella. So the

17 company is attempting, no doubt, to obtain the

18 information to show they complied in having the

19 traceability trail.

20 We were trying to characterize, though, that

21 the type of material is not exotic material by and

22 large.

23 CHAIRMAN PALLADINO: But if somebody decides

24 that commercial material will satisfy that situation, is

25 not the standard to which commercial material is

1 developed satisfactory, or is there more required?

2 MR. DENTON: Appendix B does allow for a

3 showing on --

4 CHAIRMAN PALLADINO: For some of the duct

5 work, here is a sheet that shows what the material

6 content is, and they have a range.

7 MR. DENTON: Yes. I am sure U.S. Steel --

8 CHAIRMAN PALLADINO: Or must there be

9 something very special because it happens to be nuclear

10 related.

11 MR. DENTON: You need a trace. I am sure U.S.

12 Steel makes no special nuclear related duct work.

13 (Laughter.)

14 CHAIRMAN PALLADINO: You are misunderstanding

15 my question. I am saying, if you are saying that the

16 commercial material is acceptable, then is it acceptable

17 to have the normal specs that are met by that material

18 or must you have something special, speaking of duct

19 specifically.

20 MR. VOLLMER: As I said before, if the

21 commercial material is what was specified in the design

22 as the proper strength requirements, then all you need

23 is assurance that that commercial grade was provided.

24 Appendix B just requires that your assurance is such

25 that you can tie the link between the design

1 requirements and the performance requirements of the
2 material you choose. In this case, nothing exotic is
3 really required, just the trace requirement of the
4 material, and the material specified probably has enough
5 range and characteristics so that when the design was
6 done, and I understand some very conservative design
7 requirements were done, that they would normally take
8 something that had enough margin so that taking
9 commercial grade material would assure them that even
10 the lower bound of that material strength would be
11 adequate for the design.
12 CHAIRMAN PALLADINO: I was trying to find out
13 what paper trail to I need for commercial material. I
14 gather all I need is to have evidence that I did use
15 commercial grade material and for the benefit of the
16 designer to get a record of the specifications to which
17 the commercial grade was manufacted.
18 MR. VOLLMER: Let's say, in this case, a piece
19 of paper from companies that manufactured the material
20 saying that this, indeed, met the ESTM, whatever the
21 number was, would be an adequate record for QA purposes
22 and meet Appendix B in a case like this.
23 CHAIRMAN PALLADINO: So writing the steel
24 company and saying that this is safety related, if it
25 were duct work, all they needed to have asked them was,

1 does this meet your normal commercial grade
2 specifications.
3 MR. DENTON: That is correct, because
4 obviously U.S. Steel does not have an "Appendix B" QA
5 program to manufacture this particular product. All
6 they are asking for, to meet the Appendix B requirement,
7 is that documentation.
8 COMMISSIONER AHEARNE: I can't tell from the
9 letter what it was they bought from U.S. Steel, can
10 you?
11 CHAIRMAN PALLADINO: I agree.
12 COMMISSIONER ROBERTS: Obviously, U.S. Steel
13 Supply Division, they didn't know either.
14 COMMISSIONER AHEARNE: They had a list of
15 orders.
16 COMMISSIONER ROBERTS: But the letter that you
17 referred to.
18 COMMISSIONER AHEARNE: I was just puzzled, but
19 you two seemed positive what it was.
20 CHAIRMAN PALLADINO: No, I said, if it were
21 duct work.
22 COMMISSIONER AHEARNE: Can you make an
23 estimate for me, which would help me certainly, of all
24 of the material that might be questioned that Zack
25 purchased and installed, that focuses on the necessarily

1 trail for commercial grade.

2 Is purchase and installation 100 percent

3 normal commercial grade material, 90 percent, 95

4 percent, what is the percentage?

5 MR. KEPPLER: I don't think we know.

6 COMMISSIONER AHEARNE: I guess in the absence

7 of knowing that, it is a little hard to be completely

8 comfortable on the fact that commercial grade would be

9 acceptable.

10 I woud agree with you that you don't need a

11 big paper trail for that.

12 CHAIRMAN PALLADINO: If it is commercial

13 grade.

14 COMMISSIONER AHEARNE: I just have no way of

15 pinning down. If they were positive that it was 100

16 percent commercial grade, I would be a lot more

17 comfortable.

18 CHAIRMAN PALLADINO: There may be other pieces

19 of equipment. I don't know whether they are talking

20 about the other material or this.

21 COMMISSIONER AHEARNE: The greatest difficult

22 I have had in the last day in trying to go through all

23 of this is trying to understand what is it that is at

24 issue, what kinds of equipment, and what is the

25 significance of this equipment.

1 MR. KEPPLER: I guess my problem is that I
2 don't know whether this represents a complete list of
3 the materials. I will tell you that yesterday there was
4 a meeting with Sargent and Lundy to go over what
5 assumptions were used in the determination of the
6 specification of material. NRR people are down now
7 looking into the validity of the calculations that were
8 used.
9 But to represent this as the complete list, I
10 can't do that here.
11 CHAIRMAN PALLADINO: Do you want to continue
12 with what I thought was a chronology?
13 MR. KEPPLER: Yes.
14 CHAIRMAN PALLADINO: You got to April 1982,
15 the resolution of the 50.55(e).
16 MR. KEPPLER: What I want to do here is jump
17 ahead of the story a little bit, to tie it in when I got
18 involved in this matter, and then go back and tell you
19 what I have subsequently learned.
20 Beginning in late March, as you know, we
21 started looking into allegations that were raised by the
22 Illinois Attorney General's Office, Friends of the
23 Earth, and the Government Accountability Project.
24
25

1 And in the course of that investigation, we
2 met with the parties involved on June 2, 1982, to
3 discuss what we were learning from interviews with
4 people, and with an attempt to try to make sure that we
5 understood all the allegations and what all the concerns
6 were.
7 During the course of that meeting, we were
8 told that there were some concerns with respect to Zack
9 work, and we were given the name of an individual to
10 contact. We made contact with this individual, and I
11 might also add that we had had contact from the same
12 individual two years ago with respect to Zack work at
13 LaSalle, and we had provided him with a copy of our
14 inspection report of the effort that related back in
15 1979, related to the findings of the stop work order
16 that went into effect at that time.
17 When we contacted this individual, he said
18 that he did have some concerns about LaSalle and he
19 would send them to us. He sent us a package, and it
20 related to Midland. We made a subsequent contact with
21 him. He said he would put something in the mail on
22 LaSalle, and we have yet to receive that information.
23 Then, on June 24th, Mr. Norelius --
24 COMMISSIONER AHEARNE: Could I just ask one
25 question?

1 MR. KEPPLER: Yes.

2 VOICE: You said this issue came up in the

3 June 2nd meeting.

4 MR. KEPPLER: We were going to be hearing some

5 information on Zack.

6 COMMISSIONER AHEARNE: Yes. Who from your

7 office was at that June 2nd meeting?

8 MR. KEPPLER: There were several people.

9 MR. WALKER: Both of us were.

10 MR. KEPPLER: Both of these two were present.

11 It was a meeting of several NRC people, representatives

12 of --

13 COMMISSIONER AHEARNE: Just out of question,

14 were any of Foster, Phillips, Wyle, Wescott, Williams,

15 Schaffer, Pashell?

16 MR. WALKER: I don't think so.

17 MR. KEPPLER: Not at the June 2 meeting. They

18 were mainly the people that were involved in the ongoing

19 investigation of the LaSalle work.

20 On June 24, Mr. Norelius received a call from

21 a representative of GAP, telling him that there were

22 concerns with respect to Zack work, and that she had

23 become aware of a group in Chicago that was quite

24 concerned about it, that had been unwilling to come to

25 NRC, and that she was trying to make contact with them

1 to get information to provide to NRC, that the purpose
2 of the call was to urge him not to go ahead with the
3 closeout of this investigation, because we -- she was
4 becoming aware that the Zack issue was a big issue.
5 I subsequently had a call from the same person
6 telling me that she was going to have an opportunity to
7 sit down and look at the Zack records, and that she was
8 still trying to get the people to come forth to the NRC,
9 but had been unsuccessful.
10 She asked if we could in effect provide some
11 information to her on a fairly quick time frame of
12 things that she might look for as she looked at the
13 records, and so I called people together and established
14 a point of contact. The call was never returned, and we
15 attempted to contact her again with respect to this
16 matter but were unsuccessful.
17 Now, as we closed out this investigation, the
18 investigation of the other allegations, I recognized
19 that we probably would hear something more on LaSalle,
20 but I felt that we had satisfied ourselves with respect
21 to the allegations that we had looked into, that
22 legitimately I had no basis to keep the plant down
23 further, and that we would proceed ahead and treat any
24 further allegations that came in as we would treat them
25 on any other plant, look into them at that time frame.

1 So, we went ahead to proceed to set up the
2 meeting with the Illinois Attorney General's Office and
3 the Friends of the Earth and the GAP people to discuss
4 the results of our investigation, and --
5 CHAIRMAN PALLADINO: When was that meeting?
6 MR. KEPPLER: That meeting was held on the
7 19th.
8 CHAIRMAN PALLADINO: Of July?
9 MR. KEPPLER: Of July. Now, in setting up the
10 meeting on the 15th, I received a call from one of the
11 GAP representatives who I had been having contact with
12 regarding the ongoing investigation, and she asked if we
13 were including in our investigation the results of the
14 Zack investigation.
15 I told her at that time that basically what
16 had happened, that we were still waiting for information
17 to come in, we had made several attempts to get that
18 information, and at that time she told me, "Mr. Keppler,
19 you have had that information in your office since May
20 3rd," that there had been a meeting, an individual had
21 come in, an ex-employee from Zack had come in.
22 I was somewhat taken by surprise by the
23 matter, although after the call I had recollected that
24 an individual had come in from Zack a few months ago,
25 but the concerns that were expressed to me at that time

1 were related to Midland.

2 So, that next morning what happened was, I

3 called my staff together to try to find out what I could

4 about this matter, and I was informed of several things

5 that take me back in the chronology here a minute.

6 I was informed that on May 3rd, an ex-Zack

7 employee came into our office and met with several

8 representatives of my staff, and expressed concerns with

9 respect to the tampering with the quality assurance

10 records by Zack, with respect to intimidation of quality

11 assurance document reviewers at Zack, and particularly

12 that Zack was doing nothing about concerns.

13 Now, contrary to the information that is

14 contained in the GAP letter to the Chairman, my staff

15 told me that the fundamental thrust was at Midland, and

16 in fact that the individual was asked if he had a

17 concern about LaSalle, and he said he had no serious

18 concerns about LaSalle, but I was told that the

19 fundamental thrust was on Midland, with a secondary

20 concern as to LaSalle and Clinton.

21 Now, related to this --

22 CHAIRMAN PALLADINO: Did he say he had no

23 major concern for LaSalle, or at least was it reported

24 to you that that is what he said?

25 MR. KEPPLER: Can you characterize what he

1 said?

2 MR. WALKER: I can only give you secondhand

3 information, sir. The gentleman that he talked to said

4 that when asked if his concerns were primarily Midland

5 or were they LaSalle and Clinton, he said he did not

6 have significant -- I am quoting someone else now -- he

7 did not have significant concerns with LaSalle, that his

8 major concerns were with Midland.

9 Now, I wasn't present at the meeting, but that

10 is what was passed on to me.

11 MR. KEPPLER: And by the way, when you look at

12 the documentation in the office related to this, you get

13 the sense of it, that it was largely Midland.

14 COMMISSIONER AHEARNE: Can I ask you a

15 question on that?

16 MR. KEPPLER: Yes.

17 COMMISSIONER AHEARNE: I am now reading from

18 the affidavit of that person. "I went personally to

19 talk to the NRC. I spent three hours with a team of

20 investigators, including James Foster, Gerald Phillips,

21 Charles Wyle, Harvey Wescott, Cordell Williams, Wayne

22 Schaffer, and Jim Pashell. Mr. Wayne Schaffer of the

23 NRC office was the host investigator."

24 Now, is that correct? Did all --

25 MR. KEPPLER: All of those people were

1 present.

2 COMMISSIONER AHEARNE: All those people met?

3 Okay. So that is --

4 MR. KEPPLER: The only part that isn't correct

5 is that Schaffer isn't an investigator. He was the

6 individual who -- the prime point of contact.

7 MR. WALKER: Mr. Williams isn't an

8 investigator, either.

9 CHAIRMAN PALLADINO: Can't hear you.

10 MR. WALKER: Mr. Williams isn't an

11 investigator, nor is Mr. Pashell. They are all three

12 inspectors, nor is Mr. Wescott.

13 COMMISSIONER AHEARNE: Okay, but as far as

14 meeting with all these people from the NRC staff, that's

15 true?

16 MR. KEPPLER: That's correct.

17 COMMISSIONER AHEARNE: Okay, so that the fact

18 that this fellow came in with concerns about Zack was

19 not restricted knowledge to one or two people.

20 MR. KEPPLER: No.

21 COMMISSIONER AHEARNE: There were a large

22 number of people who understood that.

23 MR. KEPPLER: And as part of that, let me say

24 that --

25 CHAIRMAN PALLADINO: And he apparently also

1 got a good ear. They didn't dismiss him.

2 COMMISSIONER AHEARNE: That's not clear yet.

3 MR. KEPPLER: Yes. You know, I wasn't there,

4 so I don't know about the three-hour part of it, but

5 there is a memo that was written discussing the matter,

6 and let me put it in this context.

7 When he came in, we found out that the

8 individual had made contact with Consumers Power Company

9 on April 15th, to discuss these concerns, and it was

10 largely related -- he expressed the point that Consumers

11 was not doing enough with it when he came to our office,

12 and it was put in the system to be investigated. It was

13 not viewed as a matter that needed to be investigated at

14 that time.

15 COMMISSIONER AHEARNE: Okay. He says that,

16 "They asked for more documents to copy, which I

17 supplied. I left them almost all the documents attached

18 here as exhibits. I cannot be sure, since I have not

19 yet received the receipt they promised to send. Not

20 receiving the receipt is disturbing, especially since

21 last Monday Mr. Norelius said he had sent it the

22 previous day."

23 MR. KEPPLER: Did we send them a receipt?

24 MR. NORELIUS: I don't recall saying that.

25 MR. KEPPLER: Well, let me tell you, we did

1 send him a receipt, and the request for a receipt came
2 very recently, and it was sent out.
3 COMMISSIONER AHEARNE: Well, I don't want to
4 get into issues such as whether you normally give
5 receipts for documents, et cetera, but have you has
6 anybody had a chance to look and see whether, are these
7 the same documents? The reason I am asking the question
8 is that these documents seem to pertain less to a
9 specific plant and more to the system by which Zack
10 tracked, which would not therefore be necessarily
11 plant-specific.
12 MR. KEPPLER: I have not looked at what you
13 have there, but let me --
14 COMMISSIONER AHEARNE: Well, this is just the
15 material that --
16 CHAIRMAN PALLADINO: It just came in last
17 night, and he did not have a chance to see it.
18 MR. KEPPLER: I haven't gotten a copy of it
19 yet.
20 CHAIRMAN PALLADINO: It did give us a chance
21 to read the letter.
22 MR. KEPPLER: Let me say this. I think this
23 part of it is important.
24 When I met with the staff on, I guess it would
25 have been the 16th, the Friday before the meeting, I

1 immediately put together four people, and I said, I want
2 you to sit down and go through this material, and see
3 how much of it relates to LaSalle.
4 Now, when they did that, they came back and
5 there were two areas that I think focused on LaSalle.
6 One was the question of the material certifications, and
7 by the way, when I say focused on LaSalle, I should say
8 went beyond Midland, broadened beyond Midland, and there
9 were specific papers addressed to LaSalle, I am told.
10 COMMISSIONER AHEARNE: Those are two different
11 perspectives. One is what focused on LaSalle, and the
12 other is what went beyond Midland, and so, for example,
13 basic charges of confusion or miscertification at Zack
14 headquarters would not be focused on LaSalle.
15 MR. KEPPLER: That's correct.
16 COMMISSIONER AHEARNE: It potentially could
17 involve LaSalle, but it wouldn't be focused on it.
18 MR. KEPPLER: That's correct, and I think --
19 all I can tell you is that when the individuals who
20 interviewed -- when our individuals who interviewed the
21 person that came in from Zack, the former Zack employee,
22 they came away from that meeting with the fact that the
23 fundamental concern was oriented at Midland, and that --
24 CHAIRMAN PALLADINO: Which meeting are you
25 talking about?

1 MR. KEPPLER: The May 3rd meeting.

2 CHAIRMAN PALLADINO: I lost you. It was okay

3 with you up until May 3rd, and then you said something

4 about another meeting that came later.

5 MR. KEPPLER: Well, I am trying to respond to

6 Commissioner Ahearne's question.

7 COMMISSIONER AHEARNE:

8 VOICE: But when you say --

9 MR. KEPPLER: There are two aspects to this.

10 COMMISSIONER AHEARNE: Yes, but, Jim, when you

11 say that they were -- that they came away, was that from

12 the memo to the record that said that, since nobody here

13 attended that meeting. Was it after the fact, or was it

14 a memo to the record that said, here is a memo, we have

15 spoken to this guy, and his concerns are focused upon

16 the Midland plant?

17 MR. KEPPLER: I had not seen the memo up until

18 this last period of time when I became aware of --

19 COMMISSIONER AHEARNE: Yes, I know, but you

20 have since looked at the memo. Was that a

21 contemporaneous memo to the record which --

22 MR. KEPPLER: I think the memo is written to

23 the point that it extends the -- it suggests that the

24 concerns do apply to LaSalle and Clinton as well as

25 Midland.

1 COMMISSIONER AHEARNE: Okay. Right.

2 MR. KEPPLER: There are generic concerns with

3 the process, is what I am saying.

4 CHAIRMAN PALLADINO: And this is a memo that

5 described the May 3rd meeting?

6 MR. KEPPLER: Yes. This was --

7 COMMISSIONER AHEARNE: It was written shortly

8 thereafter?

9 MR. KEPPLER: Pardon?

10 COMMISSIONER AHEARNE: Was it written

11 shortly --

12 MR. KEPPLER: Yes, this was an internal memo

13 written following the meeting, that although the -- when

14 you look at the volume of material that came in that we

15 have, it predominantly relates to Midland, but in fact,

16 there are generic items in there.

17 Now, I am just telling you that when they had

18 the meeting, it was their conclusion that the

19 individual's primary thrust was aimed at Midland, and as

20 you know, Commissioner, we have been inundated with

21 investigations out there, and it was put in the lower

22 priority bracket. We did not treat this as an item that

23 needed to be resolved prior to licensing.

24 COMMISSIONER AHEARNE: So therefore the

25 people, this collection of six to eight individuals from

1 the staff who talked with this guy, they also concluded,
2 on the basis of what they heard and perhaps read, that
3 there were no major concerns with respect to LaSalle?
4 Because obviously --
5 MR. KEPPLER: Yes.
6 COMMISSIONER AHEARNE: -- you don't take the
7 alleger's view as to whether this is or is not
8 important. You reach your own --
9 MR. KEPPLER: They did not go into detail in
10 the review of these records, at that time.
11 COMMISSIONER AHEARNE: Is that another way of
12 saying they didn't read them?
13 MR. KEPPLER: They skimmed through them.
14 COMMISSIONER AHEARNE: Okay.
15 CHAIRMAN PALLADINO: But you said that they
16 did make a decision that they didn't think these were
17 problems that needed to be addressed before the
18 startup.
19 MR. KEPPLER: That was largely based on the
20 discussion with the individual.
21 COMMISSIONER AHEARNE: Yes, but was that
22 because they thought it was primarily Midland?
23 MR. KEPPLER: Yes.
24 COMMISSIONER AHEARNE: And they knew the
25 status of Midland?

1 CHAIRMAN PALLADINO: I don't know that, I am
2 just asking.
3 I think you made the statement, and I want to
4 make sure that I heard it right, that they made a
5 conclusion that these were allegations they didn't have
6 to investigate before LaSalle started up, and I was
7 going to ask you how did they decide that, if that is
8 true.
9 MR. KEPPLER: They made the conclusion that
10 the information related predominantly to Midland, and
11 they largely accepted the fact that -- I guess they
12 based their decision on what to do about LaSalle largely
13 on the discussions with the individual, who told them
14 that his main thrust was at Midland. Now, you know, I
15 can't go back and recreate the thing --
16 COMMISSIONER AHEARNE: Sure.
17 MR. KEPPLER: -- because I wasn't there, but I
18 am giving you the feedback that I have received on the
19 matter.
20 There is a point here that I think is
21 important, too. We knew, based upon the individual
22 being in our office, that Consumers Power was doing an
23 investigation of the matter, and with our workload, we
24 just looked at it, we would wait and get the results of
25 Consumers Power's investigation of the matter, and

1 determine whether or not there was anything that the NRC
2 needed to do beyond that.
3 Now, let me go on and say that --
4 CHAIRMAN PALLADINO: Jim, you started to
5 describe a meeting in which you said -- you concluded
6 that there was a focus needed on two things, and I
7 didn't know which meeting it was nor the two things you
8 were focusing on.
9 COMMISSIONER AHEARNE: That was the four
10 people that you said you had go back through --
11 CHAIRMAN PALLADINO: When was that, just --
12 MR. KEPPLER: On June 16th -- I'm sorry, July
13 16th. That was the day after I had the call with the
14 individual from GAP. I called my staff together to find
15 out about this history, and at that time --
16 CHAIRMAN PALLADINO: What were the two
17 focuses, materials?
18 MR. KEPPLER: Oh, the task force review that I
19 put together, four people, to look through all these
20 records, and the task force review came away with --
21 that the basic thrust of the concerns was on the
22 material certifications, materials used, and the
23 adequacy of welding.
24 CHAIRMAN PALLADINO: The materials used, the
25 certification, and the adequacy of welding?

1 MR. KEPPLER: Welding.

2 CHAIRMAN PALLADINO: When you say the two

3 issues were adequacy of welding, not adequacy --

4 MR. KEPPLER: The installation.

5 CHAIRMAN PALLADINO: The physical adequacy of

6 welding, not the material?

7 MR. KEPPLER: Yes. Now, at that time we

8 debated about whether or not to cancel the meeting on

9 Monday in view of the information we had. We then

10 proceeded to see what we knew about these problems, and

11 at the same time we called in Commonwealth Edison

12 Company in the afternoon to have them tell us all they

13 knew about the Zack issues and what they had done with

14 them.

15 CHAIRMAN PALLADINO: When was that, on July

16 16th?

17 MR. KEPPLER: Yes. Following our reviews and

18 the meeting with the company, we made -- and I also had

19 some discussions with the NRR people regarding this

20 matter -- we looked at two things. We said, with

21 respect to the welding issue, we were aware that we had

22 found problems. We were aware that there had been a

23 stop work order that had been put into effect back in

24 '79.

25 We were aware that Conam had been brought in

1 to re-review all of the welding work, both the past and
2 the ongoing, and I was aware that the NRC had monitored
3 that effort, and had concluded it was a good effort. On
4 that basis, I did not have a concern with the welding.
5 With respect to the materials, we were aware
6 that Zack identified the concerns or the problems to
7 Commonwealth Edison Company. We were aware that
8 Commonwealth Edison Company had conducted a review of
9 the records and had conducted -- and had written a
10 50.55(e) report, and had dispositioned the
11 50.55(e)report.
12 The one thing that I didn't know at that time
13 was whether or not the 50.55(e) report had been closed
14 out on the basis of assuming that the records that were
15 there were in fact accurate. In other words, how
16 reliable was the closeout of the 50.55(e) to the
17 records.
18 We did not have that information, but based on
19 the fact that I had satisfied myself with respect to the
20 welding issue, the fact that I knew that Zack had
21 reported the issue on certifications and that
22 Commonwealth Edison Company had done a review of the
23 matter, and the fact that the fission product inventory
24 at 5 percent power was not significant, and the low
25 probability of an earthquake, I concluded it was

1 acceptable for the plant to go up to 5 percent power,
2 pending getting additional information on these
3 matters.
4 Now, at that time we didn't have anything, and
5 I guess I didn't have the full perspective of what the
6 concerns were with respect to the falsification at that
7 time, and it wasn't until I got interviewed by a local
8 NBC channel out in Chicago that I got to look at these
9 records on my own for the first time.
10 Our people now are conducting further
11 investigations into these matters. We are looking
12 primarily into it enough to satisfy ourselves that the
13 materials that are used are proper.
14 CHAIRMAN PALLADINO: We will take a short
15 break.
16 (Whereupon, a brief recess was taken.)
17 CHAIRMAN PALLADINO: Mr. Keppler, I wonder if
18 you might proceed.
19 COMMISSIONER AHEARNE: You were mentioning the
20 NRC is now looking --
21 MR. KEPPLER: Yes. Let me just say, we made
22 the decision to go ahead with authorization of the plant
23 up to 5 percent power for the reasons which I discussed,
24 and right now, based upon all of the information that
25 has been made available.

1 I might add, we are still trying to get some
2 additional documents that we know have been made
3 available to some parties. We have sent inspectors down
4 to the Zack Company, including participation by Region
5 IV for the vendor inspection program.
6 I have also --
7 CHAIRMAN PALLADINO: When were these
8 inspectors sent?
9 MR. KEPPLER: Pardon?
10 CHAIRMAN PALLADINO: When, what time?
11 MR. KEPPLER: Well, they were down there, I
12 believe, Thursday and Friday of last week, and they
13 should be back pursuing matters again this week.
14 We are also sending inspectors, as part of
15 this effort, in addition to the records that are being
16 looked at, and so forth. They will be going to some of
17 the subcontractors that provided papers that are viewed
18 as questionable right now. We also want to interview
19 the three Zack employees who were involved in the record
20 alteration work that was discussed in Zack's September
21 25th letter to Commonwealth Edison to understand the
22 circumstances by which they altered the records, and to
23 what depth they were altered.
24 And in addition, we have cut out 30 samples of
25 duct work, stiffener work, and hanger work, and sent

1 those to an independent laboratory to be analyzed to
2 determine the chemical composition.
3 CHAIRMAN PALLADINO: How many? Twenty-two,
4 did you say?
5 MR. KEPPLER: Pardon?
6 CHAIRMAN PALLADINO: How many samples?
7 MR. KEPPLER: Thirty.
8 COMMISSIONER ROBERTS: And what sort of tests
9 are going to be conducted on the 30 samples?
10 MR. KEPPLER: Chemical analyses, to determine
11 what the material composition is of it.
12 Now, you have in front of you, which I have
13 not yet had a chance to look at, a package of material
14 that was provided by the Government Accountability
15 Project yesterday, and we will have to go through that
16 to see whether there are other actions that are going to
17 be necessary on the part of the staff.
18 CHAIRMAN PALLADINO: Do you have a
19 recommendation on what we ought to do with regard to
20 continuation of license or going to full power or
21 whatever?
22 MR. DENTON: I have a recommendation. Let me
23 kill that one first.
24 CHAIRMAN PALLADINO: Fine.
25 MR. DENTON: I talked to Jim back on the 15th,

1 prior to our decision to act on the 206. Based on the
2 information I knew at that time, and the fact that I
3 felt low power operation had minimal risk, and the fact
4 that a lot of work had been put into trying to ascertain
5 the nature and character and significance of the Zack
6 allegations, I concurred in granting the 5 percent
7 authorization and did so.
8 You have heard this morning that the company
9 is perhaps seven to ten days away from finishing the
10 tests they can do under the present authorization. I
11 recommend that the staff read the new material that has
12 come in, complete the mylographic examination of
13 specimens, satisfy ourselves that there is no technical
14 safety barriers to operation above 5 percent, and that
15 we do that prior to authorizing operation above 5
16 percent, and that we have some days in here to do that.
17 Now, that is not what GAP has recommended that the
18 Commission do.
19 COMMISSIONER ROBERTS: Could we hear what Jim
20 has to say?
21 MR. KEPPLER: Yes. I guess basically I would
22 concur.
23 I think that there has been some questions
24 raised as to whether or not the material that is
25 installed can satisfy its required safety function, and

1 I think we need to examine that before the plant goes
2 above 5 percent power, and we would intend to do so, but
3 my recommendation to the Commission would be to go ahead
4 and vote on the license as you see it.
5 We probably will have allegations coming in on
6 this plant. They seem to come in on a continuous basis,
7 as they do on other plants, and they have to be looked
8 at, and I would treat it almost as though you would look
9 at it for a plant that has already been given a
10 license.
11 CHAIRMAN PALLADINO: There is a difference, I
12 think, between a plant that has been given a license and
13 one that hasn't.
14 I think in the case of a plant that hasn't
15 been given a license, we have to make a finding that
16 there is reasonable assurance we can operate it safely.
17 I think there is a difference.
18 I don't want to put words in your mouth. I am
19 not sure what you meant about saying, go ahead and give
20 the license. Are you saying, subject to review of this,
21 or subject to the staff being satisfied, or what?
22 MR. KEPPLER: No, I am saying that I think the
23 burden is on Harold and I to satisfy ourselves that the
24 installation will perform its intended safety function.
25 COMMISSIONER ROBERTS: And is the benchmark of

1 that the chemical analysis of these 30 samples?

2 MR. KEPPLER: I think we need to find out more

3 about some of the records that have been provided as

4 well, but in effect, it will be a combination of the

5 samples that we have taken plus additional interviews

6 and reviews.

7 COMMISSIONER ROBERTS: How long does it take

8 the lab to give you the chemical analysis?

9 MR. KEPPLER: Well, we are expecting the

10 chemical analyses to be completed by Friday of this

11 week. So that by itself doesn't represent any hold to

12 anybody.

13 COMMISSIONER ROBERTS: Yes, but what is the

14 time frame? You mentioned earlier, what, they really

15 don't need the license for seven --

16 MR. DENTON: Seven to ten days, depending on

17 how --

18 COMMISSIONER ROBERTS: There won't be a quorum

19 of the Commission here, seven to ten days from now.

20 CHAIRMAN PALLADINO: That is why I was

21 asking. If I understand --

22 MR. KEPPLER: I am suggesting --

23 VOICE: You go ahead.

24 MR. KEPPLER: I am suggesting that the

25 Commission authorize full power pending satisfactory

1 completion of this matter by the staff.

2 MR. DENTON: That is what I was recommending

3 also, that you recommend -- that you approve issuance of

4 full power subject to satisfactory resolution of this.

5 In other words, it depends on what these attempts to

6 verify the material turn out to be and what other

7 information may be contained in the package of material

8 that we have just recently received.

9 CHAIRMAN PALLADINO: This is resolution by the

10 staff to the satisfaction of the staff.

11 MR. DENTON: Yes, and treat it in the sense of

12 a 206 petition. It is new information, and we will have

13 to see if it brings to light things we haven't

14 considered up to now.

15 CHAIRMAN PALLADINO: I don't know, has there

16 been any assessment by either of you as to the safety

17 significance of all this?

18 MR. DENTON: No, I received it about an hour

19 ago, and left it back in Bethesda, to be looked at.

20 MR. KEPPLER: I guess I will volunteer a

21 comment on that.

22 This is a safety system, and to that

23 standpoint the NRC, I feel, must satisfy itself that the

24 system can perform its intended safety function, but

25 when I look at it in a spectrum of safety importance, I

1 don't see it in the same degree of importance in terms
2 of what the material is as I do, say, the primary system
3 or the primary coolant system welding work or the
4 barriers that protect one against fission products being
5 emitted to the atmosphere.
6 I view this as a passive type of system in
7 play. Its main concern is that it stay supported
8 properly and that it not fall on other equipment that
9 might cause a safety problem that way. While I feel
10 that the welding work, we have a high degree of
11 confidence in, I think we have already satisfied
12 ourselves to the biggest extent of the problem.
13 I do feel with the concerns that have been
14 raised that we need to go the extra step and assure
15 ourselves that this material will hold up, but I guess
16 on a spectrum of safety importance it is not my highest
17 priority matter.
18 COMMISSIONER AHEARNE: I would tend, I guess,
19 to almost completely agree with you, Jim, on that. The
20 one hesitation or two hesitations I have are, first, I
21 haven't yet fully comprehended everything that the Zack
22 effort entailed, orcovered, so I don't have the
23 equivalent ability to reach the conclusion that you do.
24 The second is, I haven't yet reached the conclusion on
25 how important it is that a failure of the Zack systems,

1 the effect it could have on the habitabilty of the
2 control room, which could become very important.
3 MR. KEPPLER: Yes.
4 COMMISSIONER AHEARNE: That is the only thing
5 that would prevent me from completely agreeing with
6 you.
7 CHAIRMAN PALLADINO: Have any of the
8 inspectors looking at the plant felt that the duct work
9 was below standard, or that it was not satisfactory?
10 MR. WALKER: We have had several inspections
11 of the area in the past three or four years, and the
12 answer is, to the best of my knowledge, no, sir. There
13 is no one -- none of our inspectors expressed a
14 statement in his inspection forms that it is less than
15 satisfactory.
16 MR. KEPPLER: Let me add one point. We know
17 that the system has been preoperationally tested as part
18 of the preoperational test program, and we know that the
19 design has been verified in the system.
20 MR. DENTON: I think one of the main things we
21 will be wanting to assure is that the seismic supports
22 are adequate, and that the materials and strengths can
23 stand the vibration that might occur in it. As Jim
24 says, you can test a system itself under normal
25 operation rather well.

1 The other thing I think we need to do is to be
2 sure that when Commonwealth closed out in two previous
3 instances the allegations that were brought to their
4 attention, that the basis for their closeout, as we
5 mentioned before, has not been upset by the discovery of
6 falsified records or some other cause. So we need to
7 make sure that the basis for which we have concluded
8 that either previous construction or materials were
9 adequate has not been significantly affected by the new
10 disclosures.
11 In that sense I think we would need, from the
12 Commonwealth Company, a report that documents how this
13 new information, whatever it is, would affect the
14 previous conclusions that they may have made and
15 submitted to the Commission and that we relied on in
16 part in reaching determinations.
17 CHAIRMAN PALLADINO: Commissioner Roberts, do
18 you have a question?
19 COMMISSIONER ROBERTS: What is the ASTM spec
20 for the structural supports for the duct work? You have
21 given us the sheet spec.
22 MR. KEPPLER: The stiffeners, hangers, and
23 supports is A575 and A36.
24 COMMISSIONER AHEARNE: Sam, is there a quorum
25 throughout this week?

1 MR. CHILK: Through Friday.

2 CHAIRMAN PALLADINO: Do we have a quorum

3 through Friday?

4 MR. CHILK: Yes, sir.

5 CHAIRMAN PALLADINO: Do we have a quorum

6 Monday or Tuesday?

7 MR. CHILK: You mean of the following week?

8 CHAIRMAN PALLADINO: Yes.

9 MR. CHILK: Yes, but we have barely a

10 quorum. In other words, we have a three-person.

11 COMMISSIONER AHEARNE: I guess I would

12 probably then prefer -- I don't want us to be in the

13 situation of where, because we aren't, there is no

14 quorum. Should we try to go ahead?

15 COMMISSIONER ROBERTS: Right. I will be

16 here. I mean, don't worry. I won't let that happen.

17 COMMISSIONER AHEARNE: No, but Sam has said

18 there is a quorum.

19 CHAIRMAN PALLADINO: There is a quorum Monday

20 and Tuesday.

21 MR. CHILK: There is a quorum Monday and

22 Tuesday.

23 CHAIRMAN PALLADINO: And who would be missing

24 on Monday and Tuesday?

25 VOICE: Mr. Gilinsky and Mr. Roberts.

1 CHAIRMAN PALLADINO: But you would be here if
2 we needed it.
3 COMMISSIONER ROBERTS: If it was necessary.
4 COMMISSIONER AHEARNE: Well, but if we have a
5 quorum.
6 I recognize the difficulty, as you say, always
7 issues can come up, given the finite resources of the
8 agency, one always has to allocated those resources to
9 the most critical areas. We can't put ourselves in the
10 position where because some large volume of paper flows
11 in at the last minute, that therefore we stop a
12 licensing action which otherwise should go ahead based
13 upon the calculation of the acceptability on safety
14 significance.
15 In this particular case, it is close to that
16 kind of a situation. I find that there are still enough
17 issues that I would hope that you could get some answers
18 to in three or four or five days, that I would prefer to
19 hold until that time, although if there were no quorum
20 available, I would then defer to the staff, I believe.
21 CHAIRMAN PALLADINO: One of the problems I
22 find is, I don't want to rush them into doing less of a
23 job than they feel they want.
24 COMMISSIONER AHEARNE: That is why I just
25 added my last comment, that I would be willing in that

1 case.

2 CHAIRMAN PALLADINO: Well, would you be

3 willing to following -- let me try a variation.

4 COMMISSIONER AHEARNE: Sure.

5 CHAIRMAN PALLADINO: I haven't thought it all

6 the way through. The recommendation of the staff is

7 that we authorize the full power license subject to

8 resolution of these allegations to the satisfaction of

9 the staff.

10 Now, I still am a little bit like you, I would

11 like to hear what is going on, and maybe also subject

12 also to a status report by the Commission. I am trying

13 to protect ourselves two ways.

14 (General laughter.)

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1 COMMISSIONER AHEARNE: The situation is, that
2 there are --
3 CHAIRMAN PALLADINO: I am willing to allow it
4 to go to the resolution of staff, but if something
5 arises, I expect they are going to tell us.
6 COMMISSIONER ROBERTS: If something is wrong,
7 they are not going to sign off.
8 COMMISSIONER AHEARNE: I prefer to hear from
9 them and, say, on Tuesday, I point out to you that
10 whether there are four of us here or three of us, it is
11 going to take, if two of us were to go for not releasing
12 it, if there were four here it wouldn't make any
13 difference. If two of us are willing to go for it, then
14 I would guess that three of us could handle it.
15 CHAIRMAN PALLADINO: I would be willing to go
16 with the recommendation of staff, but you would prefer a
17 variation on that.
18 COMMISSIONER AHEARNE: I would rather wait.
19 CHAIRMAN PALLADINO: Tom.
20 COMMISSIONER ROBERTS: I would be willing to
21 base it on --
22 (General laughter.)
23 COMMISSIONER ASSELSTINE: Given the particular
24 circumstances involved here, that is the fact that we
25 are likely to get some additional information within the

1 next few days, we have a package of paper that the staff
2 has not seen yet, but that they can look at fairly soon,
3 that I haven't had a chance to look at yet, I think I
4 would feel more comfortable in holding off until early
5 next week to see what information we can get at that
6 point.
7 I share your concern, I don't think that we
8 want to unnecessarily rush the staff in trying to hurry
9 up their review faster than an average review might
10 require, but I think I would feel more comfortable by
11 having them come back to us at that point, giving us a
12 report on where they are at that point on what they know
13 at that point, and then making the decision at that
14 stage rather than today.
15 COMMISSIONER AHEARNE: But if they, for
16 example, were to go through this kind of a review, and
17 get their information by Friday afternoon, we could
18 easily use a speaker phone, so that you do not need to
19 bring the people back from Chicago, while we go through
20 the process of meeting here in the afternoon.
21 CHAIRMAN PALLADINO: We would have to pick a
22 time for the meeting. We could do that a little bit
23 later this afternoon. But there will be many interested
24 people who would like to have a little bit of advance
25 notice.

1 COMMISSIONER AHEARNE: Right.

2 CHAIRMAN PALLADINO: Suppose, after we

3 conclude here, we take a little opportunity to look at

4 the schedule and see if we can't pick a date, so that we

5 can announce to the members of the public in advance, so

6 it does not have to be a short notice.

7 I gather, then, we will defer the decision

8 until the next meeting, which would be either late this

9 week or early next week.

10 COMMISSIONER AHEARNE: Okay.

11 CHAIRMAN PALLADINO: Is there any more that

12 should be said on this subject?

13 (No response.)

14 CHAIRMAN PALLADINO: Thank you. We will stand

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: PUBLIC MEETING - DISCUSSION ON AND POSSIBLE VOTE ON FULL Power Operating License for LaSalle Unit 1

Date of Proceeding: July 27, 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.

Patricia A. Minson

Official Reporter (Typed)

Patricia A. Minson

Official Reporter (Signature)

LA SALLE COUNTY STATION, UNIT 1

FULL POWER OPERATION OUTLINE

- CONTINUATION FROM JUNE 22 BRIEFING
- PLANT STATUS
- PLANT OPERATING EXPERIENCE
- DISPOSITION OF ALLEGATIONS
  - REPORT OF INVESTIGATIONS
  - DIRECTOR'S 2.206 FINDINGS
- LICENSING ACTIONS
  - FULL POWER AMENDMENT
  - PREVIOUSLY ISSUED AMENDMENTS

DIRECTOR'S 2.206 FINDINGS

- BASIS FOR FINDINGS - REGION III REPORT

- ALLEGATIONS CATEGORIZED INTO 3 CATEGORIES:

  CATEGORY 1 - MATTERS REQUIRING SATISFACTORY RESOLUTION TO PROCEED WITH LA SALLE UNIT 1 LICENSING PROCESS

  CATEGORY 2 - MATTERS JUDGED TO REQUIRE FOLLOWUP SINCE MOST PERTAIN TO LA SALLE UNIT 2

  CATEGORY 3 - MATTERS REQUIRING NO FURTHER ACTION

- LA SALLE UNIT 1 - PETITIONS DENIED AND LICENSEE AUTHORIZED TO PROCEED TO 5% POWER ON JUNE 19, 1982

- LA SALLE UNIT 2 - DECISION DEFERRED PENDING FURTHER INVESTIGATIONS

FULL POWER AMENDMENT

- AMENDMENT 4 - ADDITIONS AND CHANGES TO THE LICENSE
  - INCREASE POWER FROM 5% TO 100% OF RATED POWER
  - ADMINISTRATIVE ITEMS DEALING WITH EXEMPTIONS, REPORTING TO THE COMMISSION AND COMPLETION DATES FOR EQUIPMENT QUALIFICATION
  - CONFIRM THAT VACUUM BREAKER VALVES CAN WITHSTAND POOL SWELL FORCES
  - LICENSE DURATION OF 40 YEARS SINCE ISSUANCE OF OPERATING LICENSE

PREVIOUSLY ISSUED AMENDMENTS

- AMENDMENT 1 - TECHNICAL SPECIFICATION ADDITIONS, MODIFICATIONS AND CHANGES
  - THE RECOMBINER HEATER TEMPERATURE
  - MAIN STEAM ISOLATION VALVE CLOSURE SET POINT VALUE
  - A SPECIAL CONFIRMATORY FLOW INDUCED VIBRATION TEST
  - A REVISED SNUBBER LIST FOR SURVEILLANCE
  - TENDON SURVEILLANCE SCHEDULE
  - INCREASE THE NUMBER OF FIRE DETECTION INSTRUMENTATION
- AMENDMENT 2 - TECHNICAL SPECIFICATION CHANGES
  - REDUCE COUNTS OF SOURCE RANGE MONITORS
  - REVISE ALARM SETPOINT FOR THE RCIC SYSTEM
- AMENDMENT 3 - ADDITION TO THE LICENSE
  - AS A RESULT OF 2.206 ALLEGATIONS, A LICENSE CONDITION WAS ADDED FOR CHECKING OF TORQUING ON NON-PRESSURE BOUNDARY BOLTS ON SAFETY-RELATED VALVES

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Docket No.: 50-373

Mr. Cordell Reed
Vice President, Nuclear Operations
Commonwealth Edison Company
Post Office Box 767
Chicago, Illinois 60690

Dear Mr. Reed:

Subject: Issuance of Amendment No. 4 to Facility Operating License NPF-11
La Salle County Station, Unit 1

The U. S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 4 to Facility Operating License NPF-11 to the Commonwealth Edison Company for La Salle County Station, Unit 1, located in Brookfield Township, La Salle County, Illinois. Amendment No. 4 authorizes operation of the La Salle County Station, Unit 1, at 100 percent power (3323 megawatts thermal); addresses omissions, an addition, and changes in the areas of exemptions, reporting to the Commission and completion date of equipment qualification; and confirmation of vacuum breaker valves to withstand pool swell forces.

Also enclosed is a copy of the Federal Register Notice of Issuance of Amendment No. 4 to Facility Operating License NPF-11, which has been forwarded to the Office of the Federal Register for publication and an assessment of the effect of 40 years license duration with respect to environmental matters.

Sincerely,

Darrell G. Eisenhut, Director
Division of Licensing

Enclosures:
1. Amendment No. 4 to Facility Operating License NPF-11
2. Assessment of 40 Year License for Issuance of Amendment No. 4
3. Federal Register Notice

cc: See next page

La Salle

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The Honorable Tom Corcoran
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Chairman
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-373

LA SALLE COUNTY STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

License No. NPF-11
Amendment No. 4

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:

   A. The application for license by the Commonwealth Edison Company (licensee), complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application as amended, the provisions of the Act, and the regulations of the Commission;

   C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, paragraph 2.C.(1), 2.C.(11), 2.C.(32), 2.D, 2.F and 2.H of the Facility Operating License No. NPF-11 is hereby amended to read as follows:

   (1) Maximum Power Level

   The licensee is authorized to operate the facility at reactor core power levels not in excess of full power (3323 megawatts thermal).

   (11) Environmental Qualifications (Section 3.11, SER, SSER #1, SSER #2)

   (a) No later than December 31, 1983, the licensee shall be in compliance with the provisions of NUREG-0588, "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment", for safety-related electrical equipment exposed to a harsh environment.

(b) Complete and auditable records must be available and maintained at a central location which describe the environmental qualification methods used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with NUREG-0588. Such records shall be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified to document complete compliance no later than December 31, 1983.

(c) The licensee shall complete the corrective actions stipulated in Appendix C to Supplement No. 2 of the Safety Evaluation Report by July 30, 1982.

(32) Vacuum Breaker Valves

Prior to November 1, 1982, the licensee shall complete a test and shall submit its evaluation of the results which confirm the capability of the vacuum breaker valves to withstand the opening and closing forces associated with pool swell.

D. Exemptions from certain requirements of Appendices G, H and J and 10 CFR Part 73 are described in the Safety Evaluation Report and Supplement No. 1, No. 2 and No. 3 to the Safety Evaluation Report. In addition, an exemption was requested until the completion of the first refueling from the requirements of 10 CFR §70.24 and an exemption from 10 CFR Part 50, Appendix E from performing a full scale exercise within one year before issuance of an operating license, both exemptions are described in Supplement No. 2 of the Safety Evaluation Report. These exemptions are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. Therefore, these exemptions are hereby granted. The facility will operate, to the extent authorized herein, in conformity with the application, as amended, and the rules and regulations of the Commission (except as hereinafter exempted therefrom), and the provisions of the Act.

F. Reporting to the Commission:

(a) The licensee shall report any violations of the requirements contained in Section 2, Items C(1), C(3) through (32), and E of this license within twenty-four (24) hours by telephone and confirmed by telegram, mailgram, or facsimile transmission to the NRC Regional Administrator, Region III, or designee, not later than the first working day following the violation, with a written followup report within fourteen (14) working days.

(b) The licensee shall notify the Commission, as soon as possible but not later than one hour, of any accident at this facility which could result in an unplanned release of quantities of fission products in excess of allowable limits for normal operation established by the Commission.

H. This license is effective as of the date of issuance and shall expire April 17, 2022.

3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Darrell G. Eisenhut, Director
Division of Licensing

Date of Issuance:

WETWELL TO DRYWELL VACUUM BREAKERS

In May 1982, the Mark II Owners Group informed the NRC staff of an additional potential problem with the vacuum breakers installed in Mark II containments. Namely, that pool swell pressurization of the wetwell air space is a possible additional load for the vacuum breakers.

Preliminary analyses indicated that vacuum breaker valves may experience about 25 radians/second opening and about 30 radians/second closing impact velocities during the pool swell phase of a loss-of-coolant accident. The licensee indicated that, based on analyses and consideration of loads involved, the La Salle 30 inch vacuum breaker valves, which are manufactured by General Precision Equipment (GPE), can withstand conservatively calculated opening and closing velocities due to pool swell. However, the NRC staff requested the licensee to provide the analyses for these valves. Based on preliminary data furnished, the staff was not satisfied that the available calculations completely resolved the matter.

We met with the licensee on July 22 and 23, 1982 to obtain additional information and to physically observe the installation of these valves at La Salle Unit 2, which are the same as the La Salle Unit 1 installation. The licensee provided information at these meetings obtained by Nutech on similar 18 inch and 24 inch GPE vacuum breaker valves showing that these valves can withstand at least 20 radians/second, and indicated that because of plasticity effects and the dynamic nature of the load that additional margin beyond 20 radians/second is expected. In addition, the licensee provided information

indicating that the expected valve disc velocity would be less than the 25 to 30 radians/second indicated above due in part to the La Salle design of having three valves in series (two butterfly and a vacuum breaker) rather than one as considered in data presented by Nutech.

Because detailed analyses and tests to cover the pool swell loads have not been performed on the 30 inch GPE valves installed at La Salle, the licensee has committed by letter dated July 26, 1982, to perform a bounding test on one of the 30 inch GPE valves now installed on Unit 2. Such testing will be completed and the results evaluated prior to November 1, 1982. Also, the licensee will notify the NRC staff in advance of the date of the bounding test to allow for NRC staff to observe the test.

Based on the similarity of the 30 inch GPE valves to the 18 inch and 24 inch valves for which detailed data are available and the low probability of a double ended guillotine failure of the largest line during the interim operator period, the staff concludes that operation up to full power pending completion of this confirmatory test is acceptable.

ASSESSMENT OF THE EFFECT OF LICENSE DURATION ON MATTERS DISCUSSED IN THE FINAL ENVIRONMENTAL STATEMENT FOR THE LA SALLE COUNTY NUCLEAR POWER STATION UNITS 1 AND 2 (Dated November 1978)

INTRODUCTION

The Final Environmental Statement (FES) for the operation of the La Salle County Nuclear Power Station Unit Nos. 1 and 2 was published in November 1978. At that time it was staff practice to issue operating licenses for a period of 40 years from the date of the construction permit. This was approximately 30 years of operating life. (See FES, page 9-5).

By letter dated September 23, 1981, Commonwealth Edison Company requested that the operating license for their La Salle County Nuclear Power Station, then under consideration by the staff, have a duration of 40 years from the date of issuance. On April 17, 1982, a license, conditioned to not exceed 5% power, effective for a 40-year period was issued to Commonwealth Edison Company for the operation of La Salle County Nuclear Station Unit 1.

DISCUSSION

The staff has reviewed the La Salle FES to determine which aspects considered in the FES are affected by the duration of the operating license. In general, the FES assesses various impacts associated with operation of the facility in terms of annual impacts and balances these against the anticipated annual energy production benefits. Thus, the overall assessment and conclusions would not be dependent on specific operating life. There are, however, four areas in which a specific operating life was assumed:

1. Project costs are based on a 30-year levelized cost.
2. Radiological assessments are based on a 15-year plant midlife.

3. Uranium fuel cycle impacts are based on one initial core load and 29 annual refuelings.

4. Uranium availability is evaluated through 30 years of operation.

These were assessed to determine whether the use of a 40-year operating period rather than a 30-year operating period would significantly affect our assessment concerning these areas.

EVALUATION:

The staff's appraisal of the significance of the use of 40 years of operation rather than 30 as it affects these four areas is presented in the following discussions:

1. Projected Costs - The projected cost of the facility which includes the cost of decommissioning are based on a 30-year operating life and are levelized over that period of time. The use of a 40-year operating period rather than a 30-year period would not significantly affect the operating and maintanance cost. If the facility's capital cost were spread over a 40-year period the overall resulting cost of facility operation would be lowered. Therefore, any extension in the operating life of the facility would result in savings in system production costs. The production of energy at reduced cost results in an incremental net benefit for the use of a 40-year operating life of the facility.

2. Radiological Assessments - The NRC staff calculates dose commitments to the human population residing around nuclear power reactors to assess the impact on people from radioactive material released from

these reactors. The annual dose commitment is calculated to be the dose that would be received over a 50-year period following the intake of radioactivity for 1 year under the conditions that would exist 15 years after the plant began operation.

The 15 year period is chosen as representing the midpoint of plant operation and factors into the dose models by allowing for buildup of long life radionuclides in the soil. It affects the estimated doses only for radionuclides ingested by humans that have half-lives greater than a few years. For a plant licensed for 40 years, increasing the buildup period from 15 to 20 years would increase the dose from long term life radionuclides via the ingestion pathways by 33% at most. It would have much less effect on dose from shorter life radionuclides. Tables 5.9 and 5.11 of the FES indicate that the estimated doses via the ingestion pathways are a small fraction of the regulatory design objectives. For example, the ingestion dose to the thyroid is 1.05 mrem/yr compared to an Appendix I design objective of 15 mrem/yr. Thus, an increase of even as much as 33% in these pathways would remain only a small fraction of the Appendix I guidelines and would not be significant.

3. Uranium Fuel Cycle Impacts - The impacts of the uranium fuel cycle are based on 30 years of operation of a model LWR. The fuel requirements for the model LWR were assumed to be one initial core load and 29 annual refuelings (approximately 1/3 core). The annual fuel requirement for the model LWR averaged out over a 40-year operating

life (1 initial core and 39 refuelings of approximately 1/3 core) would be reduced slightly as compared to the annual fuel requirement averaged for a 30-year operating life.

The net result would be an approximately 1.5% reduction in the annual fuel requirement for the model LWR. This small reduction in fuel requirements would not lead to significant changes in the impacts of the uranium fuel cycle. The staff does not believe that there would be any changes to La Salle FES Table 5.16 (S-3) that would be necessary in order to consider 40 years of operation. If anything, the values in Table 5.16 become more conservative when a 40-year period of operation is considered.

4. Uranium Resources - In the La Salle FES the uranium resource availability is based on the cumulative lifetime (assumed to be 30 years) uranium requirements for the 236 reactor cases identified in Figure 9.1. However, as stated on page 9-4 the lifetime uranium commitment for these cases would be less than half of the currently estimated domestic resources. A 33% increase in operating life (to 40 years) of the 236 reactors would still be within the uranium resources projected in the La Salle FES. Cancellation of many of the 236 reactors since the La Salle FES was issued will result in an offsetting reduction in demand. Furthermore, the increase in operating life assumption to 40-years will reduce the need for replacement generating capacity including nuclear, at the end of 30 years.

CONCLUSION:

The staff has reviewed the La Salle FES and determined that only four of the areas related to its NEPA analysis discussed in the statement were tied directly to a 30-year operating period. We have concluded, based on the reasons discussed in the sections above, that the impacts associated with a 40-year license duration are not significantly different from those associated with a 30-year license duration and are not significantly different from those assessed in the La Salle FES.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-373

COMMONWEALTH EDISON COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

On April 17, 1982, the U.S. Nuclear Regulatory Commission (the Commission) issued Facility Operating License No. NPF-11, to Commonwealth Edison Company (licensee) authorizing operation of the La Salle County Station, Unit 1 (the facility), at reactor core power levels not in excess of 166 megawatts thermal (5 percent power) in accordance with the provisions of the license, the Technical Specifications and the Environmental Protection Plan.

The Commission has now issued Amendment No. 4 to Facility Operating License No. NPF-11, which authorizes operation of the La Salle County Station, Unit 1, at reactor core power levels not in excess of 3323 megawatts thermal (100 percent power) in accordance with the provisions of the amended license. In addition, the Amendment makes administrative modifications dealing with omissions, an addition and changes in the areas of exemption, reporting to the Commission, and completion date of equipment qualification; and requires confirmation of vacuum breakers to withstand pool swell forces.

La Salle County Station, Unit 1 is a boiling water nuclear reactor located in Brookfield Township, La Salle County, Illinois. The amendment is effective as of the date of issuance.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the amended license. Prior public notice of the overall action involving the proposed issuance of an operating license was published in the Federal Register

on June 9, 1977 (42 F.R. 29576-29577). The increase in power level authorized by this Amendment is encompassed by that prior public notice. Prior public notice of the administrative changes authorized by this Amendment was not required since these changes do not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impacts other than those evaluated in the Final Environmental Statement, its Addendum, and assessment of the effect 40 year license from issuance of this amendment since the activity authorized by the license is encompassed by the overall action evaluated in the Final Environmental Statement, its Addendum, and assessment of license duration. Further, with respect to the administrative changes in the Amendment, the Commission has determined that the issuance of this Amendment will not result in any significant environmental impact and that pursuant to 10 CFR Section 51.5(d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this Amendment.

For further details with respect to this action, see (1) Amendment No. 4 to Facility Operating License No. NPF-11; (2) Facility Operating License No. NPF-11 dated April 17, 1982, authorizing five percent power; (3) the report of the Advisory Committee on Reactor Safeguards dated April 16, 1981; (4) the Commission's Safety Evaluation Report (NUREG-0519) dated March 1981, Supplement No. 1 dated June 1981, Supplement No. 2 dated February 1982, Supplement No. 3 dated April 1982, and Supplement No. 4 dated July 1982; (5) the Final Safety Analysis Report and amendments thereto; (6) the Environmental Report and Supplements thereto;

(7) the Final Environmental Statement dated November 1978 and the Addendum to the Final Environmental Statement dated May 1981; (8) NRC Flood Plain Review of La Salle Nuclear Plant Site dated January 29, 1981, and (9) an assessment of the effect of 40 year license for issuance of Amendment No. 4 to the Operating License No. NPF-11.

These items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C. 20555, and the Public Library of Illinois Valley Community College, Rural Route No. 1, Oglesby, Illinois 61348. A copy of Amendment No. 1 to Facility Operating License No. NPF-11 may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing. Copies of the Safety Evaluation Report and its Supplements 1, 2, 3, and 4 (NUREG-0519) may be purchased at current rates from the National Technical Informative Service, Department of Commerce, 5238 Port Royal Road, Springfield, Virginia 22161, and through the NRC GPO sales program by writing to the U. S. Nuclear Regulatory Commission, Attention: Sales Manager, Washington, D. C. 20555. GPO deposit account holders can call (301) 492-9530.

Dated at Bethesda, Maryland, this day of 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing

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GOVERNMENT ACCOUNTABILITY PROJECT
Institute for Policy Studies
1901 Que Street, N.W., Washington, D.C. 20009 (202) 234-9382

July 26, 1982

The Honorable Nunzio J. Palladino
Chairman
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Chairman Palladino:

On behalf of our clients, Mr. Albert T. Howard and Ms. Sharon Marello, the Government Accountability Project ("GAP") of the Institute for Policy Studies requests that the Nuclear Regulatory Commission ("NRC") conduct a full investigation of the enclosed evidence before permitting full power operation of the LaSalle Nuclear Power Station (Unit I) in LaSalle County, Illinois. We request that the Commission's Office of Investigations ("OI") replace Region III ("RIII") in its ongoing investigation of LaSalle and the Zack Company, to which the enclosed evidence pertains.

We further request that the Commissioners direct the Office of Inspector and Auditor ("OIA") to investigate the performance of RIII's Office of Inspection and Enforcement. More specifically, we believe that RIII's oversight of LaSalle was inadequate in three areas--

(1) failure to act for three months on serious evidence of a Quality Assurance ("QA") breakdown and possible criminal falsification at LaSalle's Heating, Ventillating and Air Conditioning ("HVAC") contractor, the Zack Company, on the eve of full power operations at LaSalle despite urgent and then-independent requests from Mr. Howard and GAP;

(2) failure to uncover the Zack QA breakdown during its ongoing regulatory program; and

(3) failure to honor commitments made last November to correct RIII investigative deficiencies confirmed by OIA Report, Special Inquiry re: Adequacy of IE Investigation 50-358/80-9 at the William H. Zimmer Nuclear Power Plant (August 7, 1981).

Our action is based on the investigation our organization has conducted over the past five months, from March 1982 to date, as well as on evidence Mr. Howard, Ms. Marello and other witnesses have presented to us regarding the Region III LaSalle investigation. Enclosed as Attachment 1-8 is a packet containing Mr. Howard's affidavit and 44 exhibits; Ms. Marello's affidavit; an affidavit from Mr. Charles Grant III; and six memoranda

summarizing verification interviews conducted by our staff. The interviews confirm the personal integrity of Mr. Howard and Ms. Marello, as well as the substance of their allegations. All witnesses except for personal references are former or current Zack employees. Our evidence directly challenges the credibility of Region III's July 19 recommendation for a full power license.

GAP is a non-profit, non-partisan public interest organization that assists federal and corporate employees who report illegal, wasteful or improper activities by their agencies or organizations. GAP also monitors governmental reforms, offers its expertise about personnel issues to Executive Branch offices and agencies, responds to Congressional requests for analysis of issues related to accountable government and disseminates significant information about problems to appropriate places within the government.

Our review of the recently issued LaSalle Report (Inspection Report No. 50-373/82-35 (July 19, 1982)) reveals more deference to utility timetables than Region III has demonstrated in the past, particularly at the Zimmer station in Moscow, Ohio. Although we have had only one week to review, analyze and study Region III's report, it clearly suffers from serious omissions. This type of investigation leaves the public less realistically assured than if no investigation had been conducted at all.

Specifically, the report ignored the evidence on Zack presented by Mr. Howard nearly three months ago, on May 3, 1982. Second, Region III totally ignored significant issues that dealt with the causes of the Quality Assurance deficiencies at LaSalle, such as retaliation and manipulation of the QA program through short-staffing, conflicts of interest, and advance warning of QA inspections.

Our review of the allegations actually covered indicates that the LaSalle investigation relied far too heavily on the utility's paperwork, while foregoing witness interviews and independent hardware tests. We discovered that Region III investigators failed to take sworn statements from key witnesses who had not already provided affidavits to GAP or the Illinois State Attorney General's office. GAP had already worked closely with some of these witnesses. Our decision not to take affidavits from these employees was a gesture of good faith toward Region III; unfortunately, it was not returned.

We also found a disturbing manipulation of the allegations by omitting key facts, thus making it easier to reject the charges. Issues presented by conscientious workers were consistently rejected on the basis of suspect utility paperwork or "independent" tests that were, in fact, controlled by the utility. Further, and most seriously, the NRC's Region III office has once again failed to independently explore the full extent of the problems at a nuclear power plant before dismissing <u>the examples</u> as insufficient <u>by themselves</u> to pose a public health and safety threat.

The Nuclear Regulatory Commission has often promised to improve the dependability and quality of its investigations; however, the flaws of the

LaSalle probe confirm that NRC probes continue to rely on the utility's good faith and paperwork. It is very clear that whenever there was a conflict between eyewitnesses and utility paperwork, the paperwork won.

Unfortunately the affidavits and evidence provided by our clients reveal that the paperwork for the LaSalle site cannot be trusted.

The LaSalle investigation represents a major setback in the NRC's outreach effort to nuclear plant employees. No longer in good conscience can we recommend to nuclear workers that they speak to the NRC without counsel present. Mr. Howard, who was speaking for the fired Zack employees, had irreversible personal damage. Although as spokesman for the group Mr. Howa went to the Regional NRC office on the first work day after the entire QA department was dismissed and talked to eight investigators, not one informed him that he and his colleagues had only 30 days to file an appeal for relief under 48 U.S.C. §5851 to the Department of Labor. As a result, their legal rights to administrative relief were sacrificed.

Region III also publicly misrepresented his disclosure in an attempt to justify its own initial inaction. This is intolerable.

I. ZACK ALLEGATIONS

Background

In the fall of 1981 the Zack Company, a Heating, Ventillating and Air Conditioning ("HVAC") contractor, hired Ms. Marello, Mr. Howard, and a num of other individuals to establish a Quality Assurance Documentation Contro office. Their assignment was to insure that the Zack Company had a Documentation Department that complied with 10 C.F.R. 50, Appendix B, the American National Standards Institute ("ANSI") codes, and the contract specifications of their various clients in nuclear business. Their specif assignment was to control the documentation -- purchase orders ("P.O.'s"), material certifications ("certs"), material traceability records ("M.T.R." and certificates of conformance ("C.C."). This involved the monitoring of over 3000 purchase order "packages." Each package represented the proof o quality for up to thousands of items used to construct the Clinton, LaSall or Midland nuclear power stations.

Mr. Howard was hired as the Documentation Control Room Supervisor. Ms. M was a clerk. They, and the three or four other Documentation Control Roo employees were allowed -- in fact assigned -- to investigate documents co tained in Zack's files. Their task was to verify the accuracy, or identi the inaccuracies to the purchase order packages. This task gave them fre access to the Zack files, and also placed them in a good position to obse the "paperwork trail" of Zack's nuclear documents.

In six and a half to seven months, Ms. Marello and Mr. Howard discovered challenged a quality assurance breakdown that leaves reliability of HVAC systems, and the overall QA programs at three nuclear plant sites in ser

question. Their experiences reflect a contractor operating for years without regard for the Atomic Energy Act, and consequently the public health and safety.

They discovered documentation that had altered specifications, some with "white out," missing certifications, purchase orders with no ASTM specifications, purchase orders changed to reflect correct quality assurance approval, and adhesive stickers with questionable authenticity, used to modify documentation and reflect the correct standards. They also uncovered top-level Zack management attempts to convince vendors -- with some success -- to provide inaccurate quality and traceability certifications after-the-fact.

Both Mr. Howard and Ms. Marello worked in the Document Control Room at the Zack headquarters. Although they received no formalized Quality Assurance training, they, and the rest of the QA department, did become familiar with the various codes, contract specifications, and regulations that allegedly governed their work.

Unfortunately they suffered a pattern of harassment and attempted intimidation. The pressure increased as Zack strove unsuccessfully to meet unrealistic time demands imposed by Commonwealth Edition ("Com Ed"), which wanted the paperwork resolved to avoid licensing delays at its LaSalle site. The tension became so severe that Ms. Marello was eventually hospitalized.

Last August Zack had notified the utilities of a potential nonconforming condition under 10 C.F.R. §50.55(e), due to inadequate and inaccurate quality and identification records on vendor purchases. They also attached a Corrective Action Report ("CAR") plan which outlined Zack's intention to identify, analyze and correct all the paperwork problems at the company headquarters. This CAR also outlined the steps Zack would take to insure that the proper individuals responsible for this were appropriately disciplined.

As pressure mounted to have the LaSalle nuclear plant load fuel, the QA department at Zack fell under greater pressure to close out nonconformance reports ("NCRs") that detailed the Zack QA documentation deficiencies at LaSalle. Mr. Howard refused to provide a final report to Com Ed. On March 1, Zack submitted 99 remaining NCRs to Com Ed. Zack warned it was unlikely that necessary documentation to correct deficiencies could be obtained. This frank admission did not deter the utility and NRC rush to begin operations at LaSalle. Com Ed received permission to load fuel.

On April 13 and 15, 1982 Mr. Howard, acting as a spokesman for the entire Zack Quality Assurance department, had contacted an individual in the Consumers Power Company's Midland Project Quality Assurance department. This individual had represented to Mr. Howard and other members of the department that they should feel free to bring any allegations or problems at Zack to Midland's internal grievance system. He also guaranteed them confidentiality and protection from losing their jobs.

On April 18, 19 and 20, an audit team from Consumers and the Bechtel Corporation arrived in the Chicago office. The QA department anticipated a complete

investigation and professional support for its effort. However, their anticipation was belied as naive. On April 30 the entire department was dismissed, allegedly due to an office reorganization.

On May 3, 1982, the first working day following the purge, Mr. Howard began a series of contacts with Region III. He provided specific allegations about LaSalle and to a lesser extent Midland and Clinton, evidence and his offer of full cooperation with an NRC investigation. However, nothing happened. After 2½ months, when Mr. Howard and the others realized the NRC was not going to respond to their allegations, which had cost them their jobs, they took their information to the press and then to GAP.

Specific Allegations

The three affidavits, exhibits and supporting verification memoranda evidence specific allegations about Zack's QA documentation and utility oversight. Certain issues pertain to the fundamental of Zack's QA program--

1) Absence of any formal Quality Assurance Documentation Program-- Until Ms. Marello, Mr. Howard and others were hired in the fall of 1981 to honor corrective action commitments there was no QA formal program for documents. As a result, they were in an uncontrolled state, i.e., a mess. Documents were piled on the floor. (Attachment*/ 3, at 1-2; Att. 3, at 1; Att. 8, at 4-5).

2) Inadequate qualifications of personnel performing significant roles-- Individuals without any previous nuclear experience were assigned to make decisions requiring engineering judgment, as well as detailed knowledge of professional codes and legal requirments for QA documentation. They received these assignments despite protesting that they were not qualified to make such significant decisions. The qualifications deficiencies extended to the Zack auditors. (Att. 1, at 1-2, Att. 2, at 3-4; Att. 3, at 2-3; Att. 8, at 5, 11-19).

3) Missing documentation and discrepancies in welder qualifications records-- To illustrate, an October 23 Interim Report found 25 discrepancies in a partial review of welding qualifications records for the LaSalle site. (Att. 2, at 7; Att. 8, at 13).

4) Inadequate training for QA personnel-- Despite repeated requests for comprehensive training, Zack only offered informal guidance and self-study materials. To illustrate the quality of the training, Zack President Christine DeZutel and her husband were trained "in accordance with the Zack Company Quality Assurance Training Program" on the basis of one hour's instruction from a Zack executive in NRC regulations and professional QA standards. The company finally proposed a formal training program shortly

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*/"Att." All references to Attachment 8 incorporate the relevant accompanying exhibits.

before it dismissed the entire QA documentation staff. (Att. 21, at 2; Att. 2, at 2-3; Att. 3, at 2-3; Att. 4, at 1; and Att. 8, at 5, 18-19, 24).

A second category of allegations concern incomplete Zack QA documentation--

5) Missing records due to inadequate document control-- Both unauthorized management personnel, and even the owner's dog, had access to Zack QA records and Purchase Orders. As a result, records were lost or chewed up. (Att. 1, at 3; Att. 2, at 5; and Att. 3, at 1).

6) Absence of required quality verification on documents that could be retrieved-- This ranged from missing signatures to missing required test data, specifications, and certifications to professional codes. (Att. 1, at 2-3; Att. 3, at 2; Att. 8, at 4-5, 18).

7) Lack of proper identification through compliance with material traceability requirements-- This led to problems such as lack of required traceability for some 114,000 hexheads, bolts, nuts and similar items. Similarly, certain steel beams could not be traced with certainty, although indications are that they come from Argentina. (Att. 8, at 17-18, 21-22).

A third category of allegation concerns widespread falsification and improper modifications of Zack QA documents during the corrective action program for deficient records--

8) Improper alteration of QA records through stickers containing signatures of questionable authenticity (Att. 2, at 3; Att. 3, at 2; Att. 8, at 14-15).

9) Improper alteration of QA records through whiting-out previous information in order to create the appearance of compliance with legal requirements (Att. 1, at 2; Att. 8, at 15).

10) Improper requests by Zack management for vendors to supply unavailable information or to inaccurately upgrade quality documentation-- Some vendors, such as U.S. Steel, refused to participate in the improprieties. Other vendors cooperated to the letter of the request, even retyping the spelling errors in model certification letters supplied by Zack. Another vendor returned a blank form for Zack to fill in as needed. (Att. 2, at 7; Att. 3, at 2; Att. 8, at 16, 25-6).

A fourth category of allegations involves deficiencies in Zack's program for purchases from its Approved Vendors List--

11) Failure to distinguish between commercial and nuclear purchases on Purchase Orders-- Since items purchased for nuclear use have much stricter quality verification requirements than those purchased for commercial use, this omission led to the improper upgrading program described above. (Att. 2, at 2; Att. 8, at 18).

12) Unqualified vendors on the AVL-- This occurred due to the absence of necessary surveillance of vendor QA programs. (Att. 3, at 2-3; Att. 8, at 15-16).

13) Failure to remove unqualified vendors from the AVL-- Even if Zack determined a vendor were unqualified, that did not guarantee the vendor's removal from the AVL. For example, Zack received approximately 38 Purchase Orders from the Delta Screw Company during the period it was "removed" from the AVL. (Att. 8, at 18).

A fifth area of allegations concerns the attitude of Zack management. It was incompatible with the Quality Assurance criteria of 10 C.F.R. Part 50, Appendix B--

14) Management awareness of QA breakdown-- Zack management was painfully aware of the problem. As the company conceded, "There has been a breakdown of the quality assurance program as related to criterions /sic/ VI - Documents Control, and VII - Control of purchased material, equipment and services...." (Att. 8, at 6). The company promised reform and training to the QA staff. But the commitments were not honored. Instead, Zack management scapegoated the staff for problems created by its own neglect. (Att. 2, at 6-7; Att. 3, at 3; Att. 8, at 10, 21-5).

15) Harassment, attempted intimidation and retaliation against QA staff-- All current and former Zack employees who were contacted confirmed this allegation. The tactics included dismissal threats, severe personal abuse, accusations of petty misconduct, and eventually dismissal of the entire QA documentation staff through a pretextual reorganization. (See Att. 1-8, generally).

16) Bad faith progress reports to the utilities-- Zack disguised its misconduct through false reassurances to its utility customers. To illustrate, the company reported to Midland on a partial review of some 2,900 purchase orders. Although the review was less than half complete, the Zack President characterized it as a "total document audit." (Att. 1, at 2; Att. 2, at 3; Att. 3, at 2, Att. 8, at 6, 10, and Exhibit 43S).

17) Failure to adequately discipline those responsible for records falsification-- The company promised its utility clients to identify and take apppropriate action against the guilty parties. Although the responsible executive was identified, the "appropriate disciplinary action" consisted of a paperwork demotion and additional training. (Att. 8, at 4, 6-7).

18) Surrender to unrealistic utility deadlines-- Zack was under intense pressure from its utility clients, in particular Com Ed, to rush the quality verification of its purchases. Rather than defend the integrity of its QA reform program, Zack succumbed and attempted to produce a "rush job." That is why the company pressured employees to work overtime and perform tasks for which they weren't qualified. There wasn't time to do the job properly. (When the QA staff refused to sign off on unacceptable records, management personnel did it themselves.) (Att. 1, at 3; Att. 2, at 4; Att. 3, at 1; Att. 4, at 2; Att. 8, at 7-8, 22).

A final category of allegations involves the utilities themselves. Zack could not have persisted for years in its misconduct without utility complicity--

20) Utility knowledge of the QA breakdown-- There can be no question that the utilities have been aware of the Zack breakdown. The company was the subject of previous requests to stop shipping nonconforming material, as well as previous severe enforcement action at Midland, whose owner Consumers Power even loaned a contract employee to help straighten out Zack's QA records deficiencies. (See Att. 2 and 8, generally). At LaSalle, Zack informed Commonwealth Edison that it could not supply adequate information to properly correct 69 of 99 QA nonconformances. (Att. 8, Exhibit 43S).

21) Utility complicity with the ongoing breakdown-- When formally notified of Zack's miseries, the QA management for the utilities and their contractors failed to face up to their responsibilities. Instead, Com Ed pressured for a rush job in the corrective action program. At Midland, the contractor Bechtel was satisfied if it were "highly probable" that Zack ordered the correct material. The Midland QA program responded to Zack's QA effort with an effort to rewrite the QA rules. Even before the effort was completed, the Midland QA management decided that "in virtually all cases, material is acceptable or will be deemed acceptable." (Att. 8, Exhibit 29, at 3). That philosophy cannot coexist with the Atomic Energy Act. (Att. 1, at 4; Att. 2, at 4-5; Att. 3, at 2-3; Att. 8, at 9-12, 14, 20).

22) Utility complicity with retaliation-- In desperation, Mr. Howard and another Zack QA employee, Mr. Ronald Perry, disclosed the QA deficiencies to officials at LaSalle and Midland. In each case the discussions were supposed to be confidential. In each case, the Zack employees were soon subjected to recrimination and harassment, suggesting that the confidences were not honored. In Mr. Howard's case, the entire QA staff was dismissed within two weeks of his disclosure to the Midland QA Manager.

23) Inaccurate public denials by utilities of the Zack deficiences-- To illustrate, a Commonwealth Edison spokesman stated in a Chicago television interview that the Zack records were reviewed thoroughly by its Architect/Engineer Sargent and Lundy. In fact, an internal January 1982 Surveillance Report at LaSalle revealed Sargent and Lundy had--

> ...deleted the requirements for submitting on site contractor documentation (such as Zack's) to S & L for review. This review is now the responsibility of the Zack Company.... Based on this change, S & L's letter accepting Zack's documentation is no longer required.

(Att. 8, at 11).

Contrary to the conclusions of the implicated organizations, the deficiencies summarized above are too serious to ignore or even to glance at superficially. As a Zack report concluded, only 94 of 374 material packages sent to LaSalle were correct and acceptable. Nine were judged "No Good for LaSalle." (Emphasis in original.) (Att. 8, at 7). In some cases, it is too late for the

vendors to supply verification information on purchases made in 1978 or earlier. The records simply aren't retained that long. (Att. 1, at 2).

Nor can the NRC accept Zack's work "as is" and permit any plant to operate with quality in an indeterminate state. As RIII Administrator James Keppler stated with respect to the Zimmer station, the utility would have to "rip out" and replace critical components that lack adequate quality records. ("On-Time Start-Up for Zimmer Plant Still Doubted by NRC Official," The Cincinnati Enquirer, p. D-5 (June 30, 1982). To illustrate the impact at LaSalle, it would magnify the danger and expense to rip out already installed items after the plant begins operations.

II. INADEQUATE NRC INVESTIGATIVE OVERSIGHT

Background

On December 8, 1980, on behalf of Mr. Thomas Applegate, GAP charged that a RIII investigation violated basic investigative standards through failure to speak with relevant witnesses; failure to take affidavits from key witnesses; excessive reliance on utility paperwork to resolve allegations instead of conducting necessary independent laboratory tests on the hardware; failure to investigate sufficiently to determine the causes of confirmed inadequacies; inaccurately summarizing employee allegations, with the effect of shrinking the allegations into insignificance; and on-balance exonerations despite confirmation of specific problems, before learning the full scope of the deficiencies.

Last November 18, OIA released its August 7 report, which backed GAP's charges.

In an October 8, 1981 memorandum to Chairman Palladino, Office of Inspector and Auditor (OIA) Director James Cummings observed that the probe Applegate and GAP challenged "did not satisfy...generally accepted investigative standards of other Government agencies.... Fundamentals basic to all investigations were simply not observed in this instance." Cummings cited inadequate documentation highlighted by the total absence of interview reports, as well as the failure to pursue obvious leads. He surmised that serious quality assurance welding problems the NRC uncovered last summer might have been exposed years ago if IE probes had been "sufficiently comprehensive to identify this issue in a timely manner."

In a November 16, 1981 letter to Congressman Morris K. Udall (D.-Ariz.), Chairman of the House Energy and Environment Subcommittee, you backed the OIA criticisms. You concluded that the shortcomings in the Zimmer investigation "reveal a generic problem" with IE oversight. You pledged to consider the "necessary internal reforms" for NRC probes to reach a level "consistent with fundamental standards that govern investigations by any agency."

In November Congressional testimony, NRC Executive Director for Operations William Dircks reaffirmed the commitment and pledged to deemphasize reliance

on utility paperwork while increasing reliance on witnesses and even a new NRC mobile laboratory testing unit.

With respect to the LaSalle and Zack allegations, RIII failed to honor this pledge.

To illustrate, the NRC response to the Zack allegations at LaSalle was reluctant, at best. On June 2, 1982 GAP passed along the allegation of a vindicated Zack whistleblower from Midland that a Zack supervisor had confirmed the same abuses at LaSalle. The whistleblower, Mr. Dean Dartey, complained that RIII had refused to investigate his allegations due to lack of specificity. Had RIII followed its normal practice of checking deficient purchase orders at one site that had also been sent to other utilities (see, e.g., IE Rep. No. 50-358/81-13), the NRC would have learned that illegalities in Zack-supplied Midland purchases were repeated at LaSalle. (Att. 5).

Similarly, GAP made three attempts to convince RIII to pursue evidence of misconduct by Zack at LaSalle. Mr. Howard made another half dozen attempts to convince RIII to investigate his May 3, 1982 disclosure, and evidence, all without success.

In a July 19, 1982 letter to Com Ed, Administrator James Keppler rationalized the omission by stating the Howard allegations applied primarily to LaSalle and had been deemed too general by the staff. As Mr. Howard rebutted:

> The NRC description in its LaSalle report of our meeting is absolutely false. I spoke in great detail and said my findings applied to all three sites. I emphasized problems at LaSalle more than Midland. I left my records with the staff that day, and more the next day.

Similarly, the July 19, 1982 RIII investigative report on LaSalle (IE Report No. 50-373/82-35) bears striking similarities to the Zimmer effort rejected last year at OIA. The only major difference is that this year RIII is talking to more witnesses before it relies on utility paperwork to reject their charges out of hand. That is particularly inappropriate when the same investigative report found falsification of paperwork on-site, a finding further confirmed by massive amounts of falsified Zack records relied on at LaSalle.

Specifically, GAP charged that RIII--

- **failed to take sworn statements from witnesses who had not already provided affidavits to GAP;

- **totally ignored issues that dealt with the causes of QA deficiencies at LaSalle, such as retaliation, fear of which prevented almost half of witnesses contacted from speaking to the NRC; and manipulation of the QA program through short-staffing, conflicts of interest, and advance warnings of QA inspections;

**redefined the issues it did cover by omitting key facts, such as the location of alleged deficiencies, making it easier to reject the charges;

**rejected witnesses' allegations on the basis of "independent" tests in fact controlled by the utility, as well as suspect paperwork;

**manipulated the evidence by failing to include key facts in the report -- such as its finding that approximately half of reinforcement bars were damaged -- while concluding the plant is safe;

**looked at woefully inadequate test samples on site, such as reinforcement bars on 9 drawings out of over 7000 relevant documents, or three mortar cores when literally tens of thousands of mortar blocks were suspect; and

**failed to independently learn the full extent of problems that were confirmed, before it dismissed those examples as insufficient by themselves to pose a public safety threat.

The differences between old and new NRC investigations are cosmetic, at best.

In short, the RIII investigative report on LaSalle was a final opportunity to clear up serious safety questions before the plant began operation. The report failed to answer the questions adequately at a critical moment. We are not contending that the LaSalle plant is unsafe. On the basis of this report, however, the Commission cannot reasonably assure the public that it is. As a result, Region III's Office of Inspection and Enforcement should be replaced in the ongoing investigative effort on LaSalle and Zack. OIA should investigate RIII's actions in permitting the situation to develop this far. Most significantly, the rush to begin operations at LaSalle should be halted until all the safety issues can be investigated thoroughly and resolved with realistic confidence.

Our request for this drastic action is not intended as an attack on individual RIII investigators, or Regional Administrator James Keppler. Mr. Keppler has attempted to upgrade investigative techniques. He also has taken the lead in tough public statements to improve utility QA efforts. Unfortunately, the performance has not matched the promises or the rhetoric. The Commission must take strong action to uphold its regulatory mandate and to honor its public commitments.

Sincerely,

Thomas Devine

THOMAS DEVINE
Legal Director

BILLE GARDE
Director, Citizens Clinic for
Accountable Government

Enclosures

TD/BG/my

12/81

TRANSMITTAL TO: ☑ Document Control Desk, 016 Phillips

ADVANCED COPY TO: ☐ The Public Document Room

DATE: 7/28/82

From: SECY OPS Branch

cc: OPS File

C&R (Natalie)

Attached are copies of a Commission meeting transcript/s/ and related meeting document/s/. They are being forwarded for entry on the Daily Accession List and placement in the Public Document Room. No other distribution is requested or required. Existing DCS identification numbers are listed on the individual documents wherever known.

Meeting Title: Disc. + Possible Vote on Full Power Operating License for La. Salle - 1

MEETING DATE: 7/27/82 Open ✓ Closed ___

ITEM DESCRIPTION:	Copies Advanced To PDR:	DCS COPIES: (1 of each Checked) Original Document	May be Dup*	Duplicate Copy*
1. Transcript (w/ viewgraphs attached)	1	1		
2. letter dated 7/26/82 to Chairman Russo with fr Government Accountability Project	1		1	
3.				
4.				
5.				

*Verify if in DCS, and change to "PDR available."

(PDR is advanced one of each document, two of each SECY paper.)