ORIGINAL

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of:

WATERFORD STEAM ELECTRIC STATION

Location: Bethesda, Maryland Pages: 1 - 52

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WATERFORD STEAM ELECTRIC STATION

Nuclear Regulatory Commission
7920 Norfolk Avenue
Room P-118
Bethesda, Maryland

June 8, 1984

The Commission met, pursuant to notice, at 12:30 p.m.

SPEAKERS AND ATTENDEES:

MR. COLLINS
MR. DENTON
MR. CRUTCHFIELD
MR. HARRISON
MR. SHAO
MR. THATCHER
MR. PERANICH
MR. EISENHUT
R. LEDDICK
MS. GUARD

PROCEEDINGS

MR. DENTON: This is a meeting between the NRC staff and the management of Louisiana Harbor -- to discuss the results of our special review team. I know we've had an unprecedented effort going on at your facility the past few months.

The people I have with me here at the table are -- Eisenhut, Director of the Division of Licensing, John Collins, the Regional Administrator, -- Jim Taylor, Deputy Director of the Division of Special Enforcement, -- Crutchfield on my left, who's -- review team.

The heart of this meeting is being transcribed. So, I'd like to request that anyone that wants to comment, identify themself so that the Reporter can know who you are.

I want to turn the meeting at this point over to Darryl Eisenhut, who will describe in more detail what we hope to accomplish.

MR. EISENHUT: As you all know, there are a number of issues --

(BAD TAPE - CHANGED TAPES)

MR. EISENHUT: Those relate to the classical FSAR issues. There's a few of those. There's a major effort underway reviewing base mat (Phonetic). There's

a number of areas before the Hearing Board, I guess a couple of areas, at least, principally the base mat there. And we've had a number of efforts going on at the plant, that is the review team that was going forth, both in the areas of, of what I'll call routine matters, routine inspections and what I'll call the special review team effort.

Today's focus in principally that special review team effort. Denny Crutchfield, who has been identified previously over on the left here, was a couple of months ago appointed the overall principal manager to orchestrate, guide and direct all agency matters relating to the NRC's functions on, on Waterford, that is the licensing matters, all hearing matters, investigation matters that from a technical standpoint, inspection matters and a special review team.

The special review team was an effort the staff undertook. It was a, basically, staff initiated effort that was layed out taking information that we had gleamed from various sources, information we'd received from the Office of the Investigations.

The staff went and sought out that information in somewhat of a new and novel approach. Today we're here to try to summarize the principal problems

that nave been identified as a result of that effort. We do -- I say the potential significant issue because they're really in a form where there are now questions back to the utility. And you're going to have to -- we'll put, put the questions to the utility. Some are potentially significant. But we felt we didn't want to delay any further. These things are falling out of our review. We will put these questions together in a formal letter to LP&L. We will be drafting and putting together a staff safety evaluation, summarizing a lot of the details we looked at, including these areas.

We'll be putting all that together. As Harold mentioned, we're, we're keeping a transcript of the meeting today to facilitate going forth with the details of that.

Today we're going to really concentrate on those areas where we have identified problems which require information back from the utility. And we're not trying to resolve them today. We're trying to just identify those.

The meeting today will follow sort of the standard policy. At the end of the meeting, I'll give anyone, interested parties, members of the public, an opportunity to make a short statement. It won't be

in the form of questions and answers or a dialogue. It will be basically a short statement.

The meeting today has two parts. The first part is the review task team effort. This is the special review team, the questions. Again, I want to concentrate -- these are by no means the full scope we looked at, but these are the areas we want to emphasize today with questions.

The second part is the staff has some major questions we'd like to put to LP&L today on how LP&L has been going about handling safety concerns that have been raised within their own company. That will be the second part, though.

And at this time, I'd like to turn the meeting over to Mr. Crutchfield who has been managing and directing this overall activity, and I'm sure he'll introduce the rest of his staff and go forth from there.

MR. CRUTCHFIELD: Thank you. What we have done is identified four teams on-site that we had look into specific areas. These teams were led by Mark Peranich at the far end of the table, who is from I&E Headquarters. He was looking into the inquiry team which is a number of quality assurance, quality control areas specifically identified last summer.

Larry Shao from our Office of Research looked into the civil structural of piping and mechanical errors. Jeff Harrison from Region III, right here on my immediate left, is looking into the quality control, quality assurance aspects. Dale Thatcher, the third person down there, is from NRR Headquarters. He looked into the instrumentation and control areas.

What I'd like to each of them do now is to summarize for LP&L the findings of their team efforts to date. I'd like to start with Mark, if you would, please.

MR. PERANICH: All right. The, the inquiry team conducted inspections on the period. A majority of these findings will be addressed in the inspection report that will be released through Region IV offices. There are a number of areas, though, each week, the -- licensing needs to follow-up and to insure proper disposition.

The first of those areas pertains to the qualifications of the concrete material -- personnel. This relates to a problem that was first identified as far as a generic problem by the LP&L QA task force verification effort. The matter was addressed through your system of NCR's and disposition.

Our particular area of concern relates to the

dispositioning of certain personnel that were qualified by written statements by their supervisors, managers or co-workers. We feel further follow-up on your part is necessary in that area.

The other matter pertains, generally, to the LP&L QA construction status and transfer findings. In particular, walk-down findings associated with 15 systems that was being reviewed by your general contractor during the last week of our inspection for adequate disposition of the LP&L QA walk-down findings.

These involved undersized wells which was being handled separate from the general undersized well problem which the staff found acceptable. You were dispositioning those separately on another NCR. You require follow-up to disposition that and provide a supplement to your current SED 74.

The other area pertains to the remaining hardware findings and any other effect that their disposition may have on systems already transferred to operations.

Those are the three areas or two general areas in three categories that the inquiry team findings indicates you should take relatively immediate action on. The other findings of the inquiry team will be discussed in the inquiry team report.

MR. EISENHUT: Let's see, Mark, if I could. Let me make sure I put this in the proper context. These are questions that we believe LP&L needs to follow-up on, give us your answer to, either lay out a program, lay out your -- how you're going to address these questions, and this happens to be one of the simplest, smallest areas of the four we're addressing, but I want to make sure you understand that these are matters which we feel must be addressed to our satisfaction prior to a licensing decision on this plant.

MR. PERANICH: I understand.

MR. EISENHUT: So, I think as we go from area to area to area, I want to make sure that you have a good appreciation of exactly what the issue is as best we can do today, so that you'll know what you should, should embark upon.

You will be getting a detailed report, as I mentioned earlier. You will be getting a letter from me, but to facilitate timewise, we wanted to make sure, you know, if you have any questions, to explore this, to make sure you understand, now is the time to do it as we go from one area to another.

MR. LEDDICK: Let me, let me -- as I understand it, two areas that you're talking about. One was

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Tape 2

-- concerning the qualification of some of the personnel that were involved in the inspection and testing back years before.

MR. PERANICH: Yes -- concrete material -- prior to 1982, at which time appropriate corrective action was taken by your subcontractor, Geo Testing. Prior to that time, there were a number of their personnel that were reviewed for qualifications. There was a lack of documentation pertaining to training or certification.

MR. LEDDICK: Okay. I'm familiar with this issue. I think you talked to our people at the time.

MR. PERANICH: Yes.

MR. LEDDICK: The second one is the one I'm not quite sure I understand. And I believe that you're dealing with the walk-down procedures that have been taken place prior to the -- of transfer?

MR. PERANICH: Yes. LP&L have performed walk -- well, status and transfer views. LP&L and Ebasco. The LP&L QA construction groups had identified certain hardware findings which were transmitted to Ebasco for disposition. There's a question on whether these hardware findings were adequately dispositioned at the time these systems were transferred back to LP&L construction and onto to LP&L QA operations and

accepted by the operation staff.

One area pertains to the undersized wells which is being handled, I believe on NCR separately from the basic one which evaluated the broad problem with undersized wells. And the other pertains to just the -- assuring the appropriate disposition of the hardware findings and whether, if any, they affected any of the testing that occurred.

MR. LEDDICK: The time frame that you're talking about when these various things took place, that's what, I guess, I need to --

MR. PERANICH: Okay. The time frame of when they took place were in the '83/'84 period when these systems were transferred.

MR. LEDDICK: All right.

MR. PERANICH: Would, would it help you if I gave you the system numbers?

MR. LEDDICK: Anything you've got would be helpful to pin this down.

MR. PERANICH: Uhm --

UNIDENTIFIED SPEAKER: Are you talking about mainly hangars?

MR. PERANICH: Nope. I -- this occurred during the last week of inspection. We did not get a time to complete our total review of the findings, but

there were hardware findings such as missing bolts from gear boxes, missing bolts from valves, high pointin instrumentation lines, that sort of thing.

MR. CRUTCHFIELD: Mike, we'll be giving you additional details in a letter that comes to you, identifies specifically what time, what systems are involved in situation --

UNIDENTIFIED SPEAKER: -- additional under-sized wells that you're talking about.

MR. LEDDICK: Well, anything I can get in a timely fashion which I need -- that's been my problem for a long time is getting information so I can deal with it.

MR. CRUTCHFIELD: I understand. Okay. The next area I think we'd like to have addressed is a civil structural in the piping mechanical area. And Larry Shao, who is the Deputy Director of Research Division over there will summarize those issues for us.

MR. SHAO: The civil structural -- mechanical piping team investigate about 90 allegations -- 90 allegations. We feel most of the allegations can be closed, but we do have a few open items. And let me highlight these open items.

The team cannot locate certain soil density

testing records for certain layers of soil, and as I understand, LP&L is looking at this record right now. The safety issue in this area is the seismic response may be influenced by soil densities.

MR. EISENHUT: Let's see. Larry, let me ask you. As I understand it, the original allegation was that there were missing test records for soil relating to soil backfill. I think the staff conclusion was that, that allegation has been substantiated, at least the soil records today haven't been located. So, I think that leaves you with some -- with some options and that is either you can find the records. I mean that's obviously a -- on a number of the allegations we looked at where there were questions relating to records being missing, one of the options, obviously, is if you can find the records, that could go a long way to resolving the matter.

However, correct me, my technical staff -- but this is a question about the soil backfill capability under an earthquake situation and the seismic response to that.

This is sort of a -- I interrupted because this is sort of a typical kind of question we have. We have not been able to conclude the adequacy of the soil's backfill question because there are missing

test records about the densities. Therefore, the question will be to you folks to come back to us with how are you going to address this problem.

UNIDENTIFIED SPEAKER: I understand.

MR. EISENHUT: And all I want to do today is lay the problem on, on your menu, so to speak. This is another matter. It's a kind of matter where you're going to have to address to our satisfaction prior to us going forth with the license. I said, obviously, you can -- there are different ways to address these problems. This one actually from a technical or technology standpoint is one of the easier ones. You can conduct a review of the soil packages and go out and find the documents. You can go back and conduct testings of the soil in the areas where the records are missing. You could conduct analyses to justify that the soil density is not a critical factor in the overall seismic response to the building or the site or the area where this is questioned. So, there's a number of different ways that you can approach these problems.

I think the key element is, though, on a number of these just like on Mr. Peranich's area and as we get into some of the more detailed ones, we can highlight the problem to you. We can identify the

issues. The balls in your court, so to speak. I wanted to make sure we all understood where we are on these kinds of issues.

MR. LEDDICK: May I make a generic response -- based on this particular -- I think this particular issue is one that we can deal with. I think that we can find backup records. The biggest problem we've been facing is related to the way that allegations are dealt with. It's been very, very difficult for us to know what the allegation was, and we're not terribly interested in who that, but we're terribly interested in knowing what is the allegation. And that has been a very difficult thing for us to deal with.

MR. DENTON: Right. I can appreciate that. It's been a difficult subject for us, too, but as I mentioned, in the first place, in this project we did it a little different.

Usually we have the situation where someone brings us a box of allegations or a box of affidavits and said, those are my allegations. This project we didn't. Generally, these allegations are what I'll call internally generated questions. We sought out people. We talked to people. We followed up every possible lead we had. We didn't want to say,

here's 500 questions for you. We looked at them and followed up on all of them, but we came down to the conclusion these are the areas where we believe there is a technical question that you need to answer.

And I appreciate it's taken some time. We've had a -- Denny didn't mention it, but I think we've had something on the order of anywhere from 40 to 60 people working a large fraction of their time at the site and going through records and going through documents, doing field walk-downs, doing physical inspections of poor components, and it just took this long to get to the point where we are now down to these issues.

As I said, the review process is not completed. Mr. Peranich mentioned, for example, that he hadn't gotten to following up on some of his items. But these are the issues identified to date, and we wanted to bring this list to you as soon as we could. By no means -- I don't want to infer this is the whole list. There may well be other matters coming to you as we wrap up our review but, certainly, this is the principle matters that we're aware of, that we're trying to identify.

MR. LEDDICK: I understand and I --

MR. DENTON: The process just is a very

thorough process.

MR. LEDDICK: I don't want to be critical of the individuals, Bob, because I think they really gave, gave it their all. I'm really critical of the process, though, where so much time and effort is spent protecting the allegers, many of who which I would have pinned a medal on if I could have identified them, for telling me in a timely fashion what problems I might have had, that it's been hard, hard to communicate.

MR. EISENHUT: That's why Item 2 is on the agenda because the basic contention that I have, which is my contention, is that much of this information was available to you for several months if you had followed up on it adequately, but we'll -- that's Item 2 in the agenda.

Larry, I interrupted you.

MR. SHAO: Okay. The second item, we had trouble in finding out the exact number of -- wells used, the number of -- wells tested and the number of -- wells rejected in each structure. I understand the LP&L is working on this subject.

MR. LEDDICK: Certainly, certainly, our, -- we are going to be providing a great deal of data that you don't have, providing -- we're assembling information that's presently in our records in a -- in

a fashion that it can be used for an analysis.

UNIDENTIFIED SPEAKER: Good.

MR. SHAO: Okay. The data is -- the information will be used to evalue the testing results. That's the purpose of this -- getting this information.

The third item is we cannot locate records to show the shop wells of TMB piping we inspected during hydrotests. The piping was manufacturered by -- hydrotest, put it together and do the hydrotest, but there were records that showed that the field -- but there were no records to show the shop wells were inspected. According to NRC Code, you have to inspect all wells during hydrotest.

MR. EISENHUT: Either in the shop where they're fabricated or if you deferred in the shop, they would be inspected during the field hydrotest.

In this issue, it's my understanding that based on information we've seen, is that when it was fabricated by Dravo (Phonetic) in the shop, the inspection of the wells during a hydrotest were deferred to the field hydrotest, but in the field hydrotest, the only records that exist are the records for the check of the wells that were field fabricated, not the shop fabricated wells.

MR. LEDDICK: I understand the question, but I don't believe the problem is quite in that fashion, but that's one we'll have to respond to.

MR. EISENHUT: That is our understanding of the problem as we see it. That is there's --

MR. SHAO: I suspect you have inspected, but so far, we haven't came upon the records.

MR. EISENHUT: And I think the ASME requirement that you have inspected both the shop and the field wells during a hydrotest. And I'm not addressing --

MR. LEDDICK: No, I'm --

MR. EISENHUT: -- the, the significance of the test on the findings of the test or what it really means. There might be --

MR. SHAO: It's most likely -- it's most lilely when an inspector inspects wells, he wouldn't inspect every well -- inspection of field wells. So far we didn't come upon the records.

MR. CRUTCHFIELD: It's a question of documentation.

MR. LEDDICK: But it's not -- I'm familiar enough with this one is that it's not missing documentation. It's interpretation of the documentation we probably have. That's the issue.

MR. CRUTCHFIELD: The documentation that

we have from Thompkins and Beckworth is a certification that the wells were, indeed, inspected. The procedure that they called out that they utilized was to inspect field wells only.

And, therefore, if we put the documentation together, we don't see evidence that a hydrotest was visually inspected for the shadow wells, but that's the documentation these were missing.

MR. SHAO: Yeah. The procedure only called for inspection of field wells, were silent on the --

MR. LEDDICK: This has a potential for a lot of argument, but I think we will or I will try to answer it --

MR. CRUTCHFIELD: You understand the issue?

MR. LEDDICK: I do understand the issue.

MR. SHAO: The next item something similar to -- we have -- 6 out of the 13 structure inspector review for qualifications, do not have the proper certification.

MR. LEDDICK: Sorry, which --

MR. SHAO: These are the inspectors, the -- inspector for J.A. Jones --

MR. EISENHUT: This is a question about the size of the welding or --

MR. LEDDICK: No, this is -- J.A. Jones --

but these are the inspector for J.A. Jones and -- work on -- and J.A. Jones work on general soil and concrete.

The next one, we find -- we found out that incomplete inspection record related to both -- main stream line -- and I understand your staff is working on this method.

MR. LEDDICK: Would you please repeat the last --

MR. SHAO: That incomplete inspection records relating to the -- main stream line restrain framing. The main stream line restrain framing.

The next one is we know that Ebasco is reviewing the speed letters related to J.A. Jones and also the engineering information requests for items that safety impact. We -- allowed them to complete a review for license.

The next item is the welding and the inspection records for wells on the containment spray piping supports are not complete. Again, I think your staff is working on the subject.

MR. LEDDICK: Would you repeat it, please?

MR. SHAO: It's a weld on the containment spray piping supports. The welding and the inspection records are not complete.

MR. LEDDICK: This is a documentation

problem?

UNIDENTIFIED SPEAKER: Well, it might be a safety problem.

MR. LEDDICK: I'm trying to understand what he said.

MR. SHAO: Yes, if we came upon the record, we can evaluate the --

MR. LEDDICK: Record, missing record, is that what -- missing record, all right.

MR. EISENHUT: Let me -- being passed out now is a typed up list of the billets of the items we're going through. We're not going through them in exactly the order on the pages here. So, it's a little bit difficult, but all the items are here. That happens to be the -- on Page 2, the last item on the typed up list. This is just a list which will help you for the ease of reference and keep track, keep track where we are.

MR. SHAO: These are all the items I have.

MR. CRUTCHFIELD: Let's see, there's a follow-up --

MR. SHAO: There's one more item. There's one more item. We could not find documentation of the welding on the instrumentation cabinets supports.

MR. EISENHUT: It's the third item on

Page 2 there. As I understand this, there was a question of the adequacy of the welding on the instrument cabinets, cabinets supports inside, inside the containment building.

It appears the documentation was just missing, which means there's no way to determine the welding was adequate or not adequate. Again, you could either locate the welding records. You could cut out the wells, rework the -- I mean there's a number of solutions to the problem.

MR. SHAO: Well, you can't -- to see whether the weld is okay.

MR. LEDDICK: Yeah, I'm familiar with this.

MR. EISENHUT: Okay, but I think the point is, again, all of these issues, and I think we should have touched on all the issues on Page 2, I think all of these issues you ought to understand. They are all in a mode of where we don't feel we have an adequate technical bases from a safety standpoint to go forth and following up on our previous dialogue. It really, at this point, has nothing to do with an alleged -- these are questions that I feel I need to adequately address prior to going forth.

UNIDENTIFIED SPEAKER: Larry, did you cover all the --

MR. SHAO: I covered --

MR. LEDDICK: To the best of my knowledge, corrective action was flowing on all of these. I -- however, I am not personally acquainted with some of these, but as far as I can determine, those that I am aware of, corrective action has been underway for a considerable period of time.

MR. EISENHUT: Well, then, gee, your previous comment that not knowing the issue and the allegation was a big impact, really must not have been a big impact up to this point, at least.

MR. LEDDICK: I said there was a generic statement. In fact, let me just clarify. During the time that the construction appraisal team was on site, that was very easy for us to communicate, and we did I think a marvelous job of communicating.

When the allegation team was on site, the rules that they were operating under made it very difficult for them to communicate to us and vice versa. I'm not sure how many surprises there were, but I think it's the rules that you're operating under that bothered me and I'm sure they bothered you, too.

MR. CRUTCHFIELD: Before we go onto to Jay Harrison, Mark has identified those systems, Mike, that you're interested in. He'll give you the system

numbers now.

MR. PERANICH: They're either systems or sub-systems. And the numbers are 18-3, 36-1, 36-3, 43(b), 43(b)(9), 46(c), 46(e), 46(h), 55(a), 56(a), 59, 69(b), 71(b)(2), 72(a) and 91(e).

Now, our, our interest in this area is to assure that the LP&L hardware walk-down findings were either adequately dispositioned or adequately identified on the Ebasco and LP&L status and transfer letters to the operation staff.

And if they were not, what effect, if any, which they may have on the activities that occurred within operating such as testing?

MR. CRUTCHFIELD: Okay. Anything else? Thank you, Mark. Jay Harrison from Region III was in charge of our quality assurance and quality control team, and he'll summarize the findings to date of his efforts at the site.

MR. HARRISON: In response to -- first of all, in response to Mr. Leddick's comment that we didn't pass all the information along as we normally would have done in an inspection, I'd like to say that the majority of our findings were passed onto the team escorts interface people in most cases.

We did plan to have a couple of meetings

with Mr. Leddick during this review which we did not have. I did meet with some LP&L and Ebasco management people and various supervisors about three weeks ago and did highlight my problem areas or the areas that my team found and did provide them a list of various nonconformance reports, welders that we had problems with as far as qualifications. So, all the specific information you need on people's names, welder's numbers and so forth was all given to your staff about three weeks ago.

In reviewing the, the areas that we looked into, we ended up with approximately eight findings as of today, eight major findings. And the first issue was on inspection personnel, in that we found that the credentials on quality assurance and quality control inspectors had not been verified by their employers to assure that the backgrounds and education met the requirements of the agency standards.

The specific findings were 37 of 100 mercury inspectors fall in this category, that is, were not qualified to have been certified. And, additionally, 38 Thompkins Beckworth inspectors were reviewed, and 14 of those were also found not to have been qualified to have been certified.

Additionally, we could find no evidence

that background checks had been performed for any QA/QC personnel at the site. There's an IE circular 80-22 that makes the -- a requirement that some type of action be taken by the utility to assure these checks are done.

LP&L did respond to this finding, but --

MR. LEDDICK: Would you give me the number, again, please?

MR. HARRISON: 80-22 circular. LP&L did respond to this circular, but it appears that the response only encompassed personnel working in the operation area, not the construction area. We feel this is significant because unqualified inspectors reviewing and accepting construction work activities could have accepted work that is unacceptable.

The second area or the second problem that we found a major problem is missing instrumentation documentation. The Ebasco spec originally required that certain instrumentation be installed to a code, to be 31.1 in lieu of ASME. We have no problem with that since the design considerations are the same; however, it appears that no records were ever generated for these installations for local men and instruments.

The type of records that we could find no

evidence of would be things like base materials, welding material, inspections, etc. Some of the systems affected were safety injection, charging. I think that's the only, only examples I have are those two systems.

MR. LEDDICK: What systems, please?

MR. HARRISON: Safety injection and charging.

MR. LEDDICK: Nothing about local mounted instruments?

MR. HARRISON: Yes. It's where there's a double isolation valve and from the second isolation valve for the instrument, there appears that no records were ever generated or inspections were ever performed.

MR. LEDDICK: And there's a requirement for that?

MR. HARRISON: Yes.

MR. LEDDICK: In 31.1?

MR. HARRISON: No. In Appendix B. The commitment was to -- was to -- 50 Appendix B. And B 31.1 does not require -- now, LP&L discovered this problem, I think it was in 1982, and had the requirement changed to ASME code requirement, to require records. So, I'm not sure -- I can't tell from looking

how many instruments are affected, but we do have some examples that -- I think there were five instruments that, specifically, are affected.

MR. LEDDICK: Are these safety related instruments?

MR. HARRISON: Yes. The third major problem was instrumentation expansion loop separation. On the reactor cooling system, instrumentation lines ran in -- were installed in a tube track for a supporting purpose and also a separation criteria purpose, where you had installed expansion loops in the system or loops for expansion and where the tubing exited and reentered the tube track, a separation criteria violation. This is on a reactor cooling system, though. People when we left were looking at the problem to see if it was generic or if it was an isolated case.

The fourth area is lower -- corrective action documents were not being upgraded to non-conformance reports. And that is that field change requests, design change notices, engineering deficiency notices which are a design type of document were being issued for after the fact nonconformances in, in lieu of a before the fact design change.

Also, that the discrepancy notices of

Thompkins Beckworth were not upgraded to Ebasco NCRs as required by the procedures. They don't get upgraded. They don't get the requirement for affordability review of 50.55(e).

I gave a -- about three weeks ago I gave a list of all these reference examples, problems to your staff. So, they know which ones that we used as examples.

MR. EISENHUT: And let's see, Jay, we're going to put in the letter we send you, we will identify the sample -- we looked -- sample size we looked at. We'll identify the sample number where we found, for example, field changes, changes that should have been upgraded to NCRs in our opinion, and we'll give you a sample listing or example list of the -- of such cases. We won't necessarily give you all of the ones we've identified, but we'll certainly give you enough that you can adequately know what the problem is so you can go out and devise a program to address that kind of an element.

MR. HARRISON: Let me just give you one example so you'll understand where we're coming from. One of these changes identified a problem with a snubber and -- as non safety related, installed on a reactor cooling system. It's a standard snubber. And

the thing was issued and closed out by engineering. We could find no evidence that the problem of the procurement and installation of a non-safety -- snubber on a reactor cooling system was ever properly identified, disposition and closed out. That's just one example.

A fifth major problem area is a problem with a vendor documentation, in that the conditional release system, as described in Ebasco program, was not complied with and that equipment furnished by combustion engineers or the NSSS System was released to the site conditionally; however, the conditional release at the site by the vendor was not picked up in your systems. During our review, we determined that one problem, for example, was the reactor vessel and internals, there was some missing documentation of problems with tech manual not furnished, as-built drawings not furnished. This missing documentation, supposedly, was received before we left the site, however, we did not review it as far as I'm aware.

So, by not putting this in your system, there's no way that we can tell if all problems were identified and if the problems were properly corrected.

The sixth item is the disposition of non-

conformance reports. The staff found that a large percent -- and the numbers will be in the letter when you get it or in the report -- of nonconformance reports were not properly dispositioned in that they either did not address the nonconformance itself or they did not address the nonconformance corrective action properly or that the close-out of the non-conformance was not documented. If a resinspection was required, there were no records to substantiate the reinspection was ever performed.

MR. EISENHUT: And, and, Jay, I guess the point you made is we're giving -- these, these are some large numbers. In the letter that we send you, we've given you -- we're going to give you a list of examples. The list of examples is on the order of 25, and those are examples.

The same thing holds, I think back when we were talking of field change requests that should have been NCR's, etc. I don't want to leave the impression that these are a few isolated cases we found. I'm just looking at the field change requests. We reviewed 63 FCRs and 21 revisions, and out of those 63, it appears 35 should have been NCRs, in our opinion.

Another one, just looking at engineering

discrepancy notices. We reviewed 66 -- 76. Of the 76, it appeared that 51 should have been NCRs. So, I'm -- I want to leave the impression that this potentially is a -- is not an isolated case and these are some significant issues and significant problems and questions that are before you to, to address. These are pretty broad kind of numbers --

MR. LEDDICK: I understand. Some of this is debatable, too. I hope you understand that.

MR. EISENHUT: Oh, I appreciate that, and that's --

MR. LEDDICK: It's a matter of opinion, much of this.

MR. EISENHUT: That's why I --

MR. LEDDICK: Not all of it but much of it.

MR. HARRISON: We -- as you know, from about four or five man years in these efforts. So, you'll find elaborate substantiation I think behind all of these, and they do indicate, you know, a very serious problem for you.

MR. LEDDICK: We are taking it serious.

MR. HARRISON: I would hope so. I would also like to give you one example of an NCR that we feel was improperly dispositioned.

There was NCR written on a problem that welds were painted prior to the initial inspection being performed. A letter was written to justify the reinspection of these welds. The welds were inspected through paint. So, you've got some source of a primer on a well that never received divisional inspection. We, we feel that the painting of wells could mask all types of visual defects, cracks, porosity, etc. The letter said you only had to strip paint off one well out of X number of hundreds of wells. And we feel that that's totally unacceptable.

The next issue is that NCRs were missing. Some NCRs were written and were never included into the NCR system. We found -- I think there were around 12 NCRs that were missing and had never been placed in the file or ever in a log book but they had been either been destroyed, thrown away or couldn't be located. We could not determine, but there was no evidence that these NCRs still existed. An NCR, once it's written, is a historical record. It's very difficult for us now to determine if this may have any impact on the integrity or the safety of the system.

The next area was -- we have a problem with welder qualifications and some welding problems aside

from the welder qualifications. This issue mainly evolves around the Mercury Company and lack of proper action to correct those problems. For example, we found welders were not qualified to correct welding procedure. The welder qualifications did not reflect that a welder was a qualified to a process, although he took tests. I don't know if it's a record keeping problem. The Mercury records were -- some of them were very difficult to go through and determine was everything there that was required, as were the welder qualification records.

Additionally, we found that the requirement for the rebaking of low hydrogen electrodes was not being complied with in accordance with ASME and and AWS codes. That is that the required temperature and time frames and the site required procedures was different than the codes.

We brought this up the first week of our inspection, and we asked that if you did something different, to provide justification. And we're down the road now over two months, and I've not seen anything yet from anybody at LP&L or Ebasco.

Additionally, we also discovered or observed doing this review that even though you had -- the rods were being rebaked at a lower temperature

for a longer period of time, in the Ebasco warehouse that the electrodes were being issued out of the rebake open while they supposedly they were in a rebake cycle.

And the final item that I have is a -- we looked into the QA breakdown -- QA program breakdown between Ebasco and Mercury Company, and we found that even though the NRC had identified this problem and had taken enforcement action in the form a civil penalty in 1982, that the corrective action committed to by LP&L was not followed up on or was not completed.

We also found that the audit program for the site for Ebasco or any contractor that we looked at, which was many, had never been completely audited for the -- for the history of the project. In other words, you had an audit schedule, and that schedule was not complied with.

Also, for what audits were done, corrective action recommendations were made, but that corrective action was not carried out and/or was not effective in that the problems continued to occur, to occur.

That's all I have.

MR. EISENHUT: Let's see. Does, does LP&L have any questions or clarifications, you know, of Mr. Harrison before we -- I guess -- otherwise, before we go to the next area?

MR. CRUTCHFIELD: The next area is Dale Thatcher, who had the instrumentation and control effort down to the site, roughly a dozen issues that he looked into down there. Dale?

MR. THATCHER: Okay. Out of those dozen areas, we found two major areas of concern. The first area, we -- that there was inadequate documentation demonstrating that the nonseismic equipment will not physically degrade the safety equipment as a result of an earthquake. This aspect of the design is covered by requirements in Regulatory Guide 129. And although we found that this area was considered, we concluded there was -- there was inadequate document to demonstrate that it had been adequately addressed.

The second area involved incomplete inspection of drilled in expansion type anchors concrete. It's the category one structures. The inspection that was done did not include certain atrributes or characteristics of these type of anchors. And although it appeared that they were installed in these attributes or characteristics, the inspection that was done was not confirmed that it was so inspected. That's basically all we have.

MR. EISENHUT: Any questions on, on this

area? I started to say, if not, those are the only, only problem areas that we've identified, but I shouldn't say the only.

Let me -- let me follow-up on Mr. Harrison's comments. While as we went through a number of those areas, if you're not really sensitive to the overall area of QA/QC, they sound like an Item 1 and Item 2 and an Item 3. There's another item, I guess, and that is the overall collective significance of what all of these QC findings tell you. And I certainly hope that when you're addressing these, one of the things we certainly will ask you in the letter we send you but I think it's something that you ought to be a lot more sensitive to and that is, you need to sit back and reflect that what does this all tell you about what's been going on in the overall area of quality control at your plant for the last few years, even if a small fraction of each of these items is borne out and we all agree to the problems. That is, I think you really need to look at what the root cause of these problems has been in the past, whether you think it's addressed today for looking in the future, whether you need to look back at it now and say, well, what impact did it have on the plant, physically and its bottom line safety.

That is as you look at one item and find one item, to look at the generic concern or the collective significance of this.

I must say that as I look at it, I -- if all of these matters are borne out to come out as -- and everything stands up, which we don't expect every single item to be accurately come out in the end as being a deficiency, but if they did, even a large number of them, it would certainly look like this is a process programmatically where you've got a major generic question that's got to be addressed. So, I think you need to address that in your -- when you continue to evaluate each of these items. Fair enough, Jay?

MR. HARRISON: Yes.

MR. EISENHUT: Denny, are you going to go on to the second part of the agenda?

MR. CRUTCHFIELD: Okay. The second area of the agenda, if you will, we'd like to talk about is the process whereby the -- there were allegations available within the LP&L system, that we are concerned about the way they were handled.

Back in January of this year, Mr. Leddick, you issued a memo to all QA personnel on site, indicating to them that there would be surveys or

interviews with them over the next several weeks and exit interviews with them as they left the site after their term of employment or the job was done.

We broke that down into two parts and looked into that. The survey aspect of it, you looked, you talked to those folks. You tried to categorize what the issues were. You went back to Mr. Barkhurst, Mr. Garretts, as well as Ebasco, to get them to assess the issues, responded to those issues and responded to the individual employees, individual QA folks with your assessment of it.

The second aspect was the conduct of the exit interviews. Those interviews occurred with some of your QA folks,at least two,talking to the people as they left the site. You documented the concerns that those folks had. You indicated what they were. And, again, your process is beginning to start whereby you send them out to Mr. Barkhurst, Ebasco and whoever to get the answers to those.

Now, one of the -- some of the problems we have identified are the following: You have not followed up in many cases the items that were listed, either on the survey or the exit survey. An issue was raised and it was dropped. There may have been some questions that could have elaborated the specific

issue or given you additional information to go track down potential problems. Instead of that, the, the issue was raised. In some cases you said not enough information, drop the issue. In other cases, you could have asked questions that would have elaborated and got you the information you needed to go forth.

One area, someone said there is an instrument line problem. There was no indication of any follow-up to that, that you went forward and did anything, to ask further questions or that you went out and checked what specific lines were involved.

There's a question about a possible forgery of an NCR. There's no indication that there was any follow-up activity there, to see whether, indeed, there was a forgery or whether there was not a forgery. And overall, we're concerned that you're handling those responses has not been adequate.

MR. EISENHUT: I guess Denny put it another way. Let me -- let me turn it around a little bit. We went back and I don't believe -- I don't have all -- any of the literature. So, I don't remember the specifics. But it was something in the January time frame of this year.

In January, you undertook to say that you're going to conduct -- you asked everyone on your staff

in the quality arena, do you have any concerns . You gave them something on a five or six point questionnaire to fill out. They all filled them out. They started coming back to you sometime in January.

It now appears to us in some of the very same questions we're now addressing, sitting here on June 8th, are some of the same questions that you had on your -- back in January. Certainly in January/ February time frame you started getting those questionnaires back in.

And I think the basic concern we have is, and it's basically a question at this point is, how, you know, what have you put in place on how you're going to go about handling such concerns? Are you really committed to follow-up when you get a QC inspector or a QC personnel tell you, I have questions. This thing was not adequately followed up on. This thing was a forged document. This thing was not properly handled. When it appears to us that it took some months for those issues to be handled and followed up on.

So, I think one thing we're really looking to you for is, is give us a better feeling, a better handle on why we should have confidence now that the issues that we're bringing up really are going to be

adequately dealt with and resolved.

Now, it also appears and this is more in the form of a question. It's certainly -- we're not to the point where we come down definitively on any of this. It appears that we went in and did an audit internally of your questions or your interview sheets, survey sheets, and it appears that the staff may well have been there a month or o ago and we were there before LP&L management actually reviewed those detailed surveys and looked at the concerns. It just didn't seem to us like a QA process vigorously pursing those kinds of issues as they arise in the organization.

Now, let me make it in the form of a -- of a question, and I think it's the kind of question you're going to have to come back to us with an answer that shows that the process is a lot more healthy than the bleak picture I painted, and I grant that Denny and I painted it as bleak as we saw it to be, but that's the facts as we see them today. And I think it behoove to you to put together the best possible argument, to show that this was -- it was and is a healthy process pursuing these kinds of concerns. It certainly shouldn't take the, the NRC to bring up the issue before they're dealt with and,

hopefully, you'll be able to demonstrate that, but I think that is something that you're going to have to address.

Now, I had the other question, you brought it up earlier today again, that, gee, you really don't know what these concerns are. The process has been a laborious time consuming process. It's been a process you can't get your hands around the concerns. It's, it's something that's been drawn out, but at the same time, I contend that many of these you had since January/February time frame.

MR. DENTON: Let me answer that one, Darryl. I missed the part of the discussion about the dates. Perhaps you've been too preoccupied with dates to realize the problems that have been brought to you.

I think where we go from here will depend on your response to the issues that we raised. We intend to tell you what we found and expect you to come back with a basis for demonstrating you meet the Commission's requirements. We don't find that you meet them today in a number of areas. Perhaps you've got more information, more records, more calculations that we haven't seen but, clearly, we wanted today to move the burden back to you, and I

don't see a lot of point in arguing over the time limits of these matters. They've been kicking around for sometime and have not been faced up to. So, today we told you what we found, and the next move would be up to you to either show us that we're wrong or come up with a remedial action.

MR. LEDDICK: I don't intend to sound as though I'm arguing about issues because I'm not. First of all, most of these things that -- we are trying to find out, have been trying to find out what the NRC considers to be issues for a long time; however, that doesn't mean we're ignoring the issues that we find.

I think that we've been vigorously attacking issues as we found them for -- ever since I've been out there and probably long before that.

One more thing, though, that is mitigating about the whole thing is that you really do have to -- have to put in context what's been going on at that site in terms of, of meeting inspection requirements.

We had -- one thing that no one pays much attention to now, but we did have a construction appraisal that took place over a six week period, and we had to get ready for that and deal with it and then

resolve a corrective action plan after that. And I'm not sure that, that people realize how many people are involved in that sort of thing.

That was a massive inspection and we, in fact, had to use -- I think we figured that for every inspector involved in the construction appraisal, we had at least three or four of our quality assurance and engineering people involved on a daily basis dealing with that and that's --

MR. DENTON: Well, of course, we only send -- teams to plants where we think there's some indication they may not be meeting requirements. So, I agree it takes burden on, on you to respond but, nevertheless, here we are today. We've passed along our findings in dozens of areas. We'll formalize them next week, as soon as the team members can get their reports written and look forward to your response in these areas.

So, I think, you know, you're pushing toward an early licensing date is out the window until you've come back with an adequate response in each of these areas.

MR. EISENHUT: That's the point I was making. It's each of the areas address the collective judgments. And, thirdly, was the last issue -- got to

demonstrate that you have a, a program that you and we both can have confidence in pursuing these issues and other issues as we go forth.

Those are basically the elements you must address.

UNIDENTIFIED SPEAKER: -- ask if there are any other parties?

MR. DENTON: Yeah, I was going to. I wanted to make sure Denny and -- got anymore comments, questions or --

MR. EISENHUT: Any other members of the special team and also I wanted to ask John if he had any other comments, questions --

MR. COLLINS: Well, I'd, I'd like to say something with regards to the issues we're now talking about, particularly in the area that Jay worked through and Mark Peranich.

A number of those issues had a good corrective action program was put in place as a result of the civil penalty. These things would have either surfaced and been corrected or at least there would have been programs to correct them as they were identified.

I really feel that because you did not take strong corrective action, it caused a lot of

these to surface by us now. You should have surfaced them yourself for your own QA organization.

MR. EISENHUT: Let's see. I was going to ask if there's any other interested groups or parties, local organizations from around the plant, is there anyone else would like to make any comments -- conclusion of the meeting?

Miss Guard?

MS. GUARD: (INAUDIBLE).

MP. EISENHUT: Any others? If not, Miss Guard why don't you just go ahead.

MS. GUARD: I'm Billy Guard with Government -- I think my comments would like to, to start by saying that you stopped short of saying that what you've discovered is a QA/QC breakdown on this plant, but I think that's what you've described. You have not talked about any corrective action program and passed that back LP&L at this time.

And I m not sure if, if in between the lines of what you've said, that's what you told them. I have to agree with the comment that Mr. Leddick made a little while ago, that he has a lot of problems with the procedures that this particular -- and I would like to agree with that, but, obviously, for different reasons.

I understand that the industry and the agency are facing a lot of serious problems at plants nearing completion and that the agency has sincerely been attempting to find solutions or what to do about those situations and that this team effort grew out of that recognition. And I think that that's a step in the right direction.

Being very familiar with what happened at Zimmer and Midland, I understand our plants arriving at the end of the rope with no adequate assurance that they're built the way they're supposed to be built has caused a lot of problems for a lot of utility companies.

And, so, I'm not objecting to the actions that you took in that regard. What I am objecting to is the fact that this experimental team effort was not covered under any procedures that let Mr. Leddick know when he was going to find out what he knew, that let the public know when Mr. Leddick found out details of what they were finding at the plant and that essentially has no accountability. And those are complaints that I passed on both to you and to Mr. Crutchfield. This is an animal without a name. It's not an inspection team. It's not an evaluation effort. There's no guarantee that what you found is going to be evaluated in a sense that enforcement action would

be evaluated in.

And so I see, Mr. Eisenhut and Mr. Denton, that essentially what this team is something that does an inspection or an investigation or some variation on that theme and puts it all in your lap. And I don't think the procedures in your agency were designed to let things like this fall into the laps of two or three people. I think they were designed to make sure that all of us felt very comfortable with what was going on.

I have no complaints with the team's effort. As you said, this is not an effort that resulted from a basket, a bushel basket full of allegations being layed at your doorstep, and you're responding to those in the regular way that you had to deal with that.

I think that the feedback I have gotten from on the site from the work force, the management people from others, is that this has been an extremely comprehensive effort and I congratulate Mr. Crutchfield, you and your team, for doing that.

I don't have any complaints or don't have any argument with what you have done. My argument is with how it was done and how it's going to be handled. I hope this experiment works because the effort that's

about to happen at Comanche Peak and other troubled plants like Grand Gulf, possibly Sharon Harris (Phonetic) and others are and may need this kind of effort. It isn't going to work if it entirely boils down to the decision that you have to make the night before one of these meetings about what you're going to say.

MR. DENTON: Thank you for your comments. It was -- I don't want to appear argumentative. It is an effort to integrate all of the offices of the Commission. And that's why we have -- region -- and we had OI involved heavily so that we wouldn't appear unccordinated, so that we could get everybody involved in determining whether this plant needs some Commission's regulations or not, not just the people.

MS. GUARD: I hope it works.

UNIDENTIFIED SPEAKER: Any other --

MR. COLLINS: Letme say something with regards to enforcement. All of the findings of the -- of the inquiry team, task force, those will all be viewed in terms of potential enforcement actions along with the -- findings, along with the fire protection, protection inspection and along with continuing routine inspections. They'll all be viewed for potential enforcement actions.

Yes. So, I think -- pretty closely establish

policy, the staff doing an internal review. Do the safety review first and then decide what to do from an enforcement stand.

MR. DENTON: And there will be a detailed safety evaluation written that describes the actions of the review time. Would you like to have the last word --

MR. LEDDICK: Yes. I appreciate the professional efforts of the people around the site. They were very thorough, and I think that they did the best job they could possibly do.

The -- assure I give you the absolute assurance. I am trying to deal with some of these questions. I don't want to leave the impression that we don't take you seriously because we certainly do. Probably take you absolutely seriously. We must get a license and we must do it right. We have to do it right.

One of my problems is I cannot deal with the past other than to correct anything that needs correcting. There are two aspects of the past. One is did the plant get built properly and, two, are the records proper that support it? Both of those have to be looked at.

The point that Mr. Eisenhut is making,

though, is extremely important, and I, I think he already knows some of the things that we've -- deal with and that is the future operating with an operating license has to be done primarily by appointed staff to -- supporting cast and we have gone out of our way to assemble an experienced staff. We've gone out of our way to put together a good training program. We've gone out of our way to be thorough about dealing with our tech specs, our FSAR, our as-built condition of the plant, the procedures that we have to use to operate the -- that really worked -- and I think that we've got a lot to be proud of.

There are -- the way we do business in dealing with the problems is fairly standard and they've been looked at by a lot of people so far. We intend to excel that, that whole thing.

And once again, I can only deal with the present and the future. I untend to do that vigorously but we do take you seriously. No question about that.

MR. CRUTCHFIELD: Well, I think that will be all. Thank you very much for coming.

(Whereupon, the meeting was adjourned).

CERTIFICATE OF PROCEEDINGS

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

In the matter of:

Waterford Steam Electric Station

Date of Proceeding: June 8, 1984

Place of Proceeding: Bethesda, Maryland

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

Tom Berry
Official Reporter - Typed

Tom Berry 6/9/84
Official Reporter - Signature