ORIGINAL

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

Title: MEETING WITH COMMONWEALTH EDISON ON RESPONSE TO 10 CFR 50.54 (F) LETTER -- PUBLIC MEETING

Location: Rockville, Maryland

Date: Friday, April 25, 1997

Pages: 1 - 123

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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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MEETING WITH COMMONWEALTH EDISON

ON RESPONSE TO 10 CFR 50.54 (F) LETTER

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PUBLIC MEETING

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Nuclear Regulatory Commission

One White Flint North

Rockville, Maryland

Friday, April 25, 1997

The Commission met in open session, pursuant to notice, at 10:00 a.m., Shirley A. Jackson, Chairman, presiding.

COMMISSIONERS PRESENT:

SHIRLEY A. JACKSON, Chairman of the Commission

KENNETH C. ROGERS, Commissioner

NILS J. DIAZ, Commissioner

EDWARD McGAFFIGAN, JR., Commissioner

STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

JOHN C. HOYLE, Secretary

KAREN D. CYR, General Counsel

JAMES O'CONNOR, Chairman and Chief Executive Officer, Commonwealth Edison

HAROLD KEISER, Vice President and Chief Nuclear Operations Officer, Commonwealth Edison

SAMUEL SKINNER, President, Commonwealth Edison

L. MULLIN, Vice Chiarman, Commonwealth Edison

THOMAS MAIMAN, Executive Vice President and Chief Nuclear Officer, Commonwealth Edison

JOSEPH CALLAN, EDO

BILL BEACH, Region III Administrator

MARC DAPAS, Branch Chief, Division of Reactor Projects, Region III

ROY ZIMMERMAN, Associate Director for Projects, NRR

FRANK MIRAGLIA, Deputy Director, NRR

P R O C E E D I N G S

[10:00 a.m.]

CHAIRMAN JACKSON: Good morning, ladies and gentlemen.

The purpose of today's meeting between the Commission and senior executives of the Commonwealth Edison company is to discuss Commonwealth Edison's response to the Commission's request for information pursuant to 10 CFR 50.54(f) pertaining to safety performance at Commonwealth Edison's nuclear stations.

The Commission also will be briefed by the staff regarding its assessment of the Commonwealth Edison response to the Commission's request for information.

The Commission remains concerned by the cyclic nature of performance at several Commonwealth Edison nuclear stations. At the January 1997 NRC senior management meeting, the Commission placed two of Commonwealth Edison's nuclear stations, LaSalle and Zion nuclear stations, back on the NRC watch list. This Commission action within the context of performance at other Commonwealth Edison nuclear stations, raised serious questions regarding Commonwealth Edison's ability to operate six nuclear stations while sustaining performance improvements at each of the sites.

In order to help address these questions, the Commission issued a formal request for information pursuant

to 10 CFR 50.54(f). This letter requested information that would explain why the NRC should have confidence in Commonwealth Edison's ability to operate its nuclear stations while sustaining performance improvements at each site and to explain criteria that Commonwealth Edison has established or plans to establish to measure performance in light of the identified concerns.

By letter dated March 28, 1997, Commonwealth Edison replied to the NRC's request for information. Supplemental information regarding performance criteria was submitted last week.

In order to conduct a thorough and timely review of the Commonwealth Edison response, the NRC staff established a multidisciplinary team consisting of senior executive service managers and staff from Region III, the Office of Nuclear Reactor Regulation, the Office for the Analysis and Evaluation of Operational Data, the Office of the General Counsel and the Office of the Executive Director for Operation.

The Commission recognizes that there is a significant range in performance among the Commonwealth Edison nuclear stations. Recent events and problems, for example, identified at the Zion and LaSalle facilities indicate that substantial improvement is still needed. However, the Commission also recognizes that performance at

other Commonwealth Edison facilities such as Byron currently is good and that Commonwealth Edison is taking actions to meet its current performance challenges. However, the challenge, which is to maintain the Commission's confidence in Commonwealth Edison's ability to operate six nuclear plants while sustaining performance improvements is substantial.

Given the cyclical nature of poor performance at some Commonwealth Edison nuclear stations and the apparent inability to effectively implement long-term corrective actions, it appears that one fundamental question needs to be answered: What is different this time?

The Commission looks forward to the discussion with Commonwealth Edison executives and with the staff, the NRC staff, regarding Commonwealth Edison's response to the 50.54(f) letter.

In particular, the Commission is interested in first understanding how the activities articulated in the 50.54(f) response will be implemented and integrated across sites to help ensure that poor performing plants improve and that good performing plants remain good performers. And, second, short-term and long-term actions that Commonwealth Edison and the NRC staff believe are necessary to preclude continued cyclic poor performance.

I understand that copies of the presentation are

available at the entrances to the meeting. Unless my fellow commissioners have any opening comments, Mr. O'Connor, please proceed.

MR. O'CONNOR: Good morning, Chairman Jackson and Members of the Commission. My colleagues and I appreciate the opportunity to appear before you and to respond to questions that were raised in your letter of January 27, 1997, and most notably the questions of why should you have confidence in our ability to operate six nuclear stations while sustaining performance at each of our sites, what criteria do we have to measure performance, and what actions will we take if those performance criteria are not met.

On March 28, as you mentioned, we did submit a detailed report that we believe is responsive to your request. We recognize that you've only recently received that report, and we'll try to capture the most important points in the time that we have available today.

We do have some backup information and are willing to discuss whatever level of detail you and the Commissioners might desire.

Joining me at the table and participating in the presentation this morning are Mr. Tom Maiman, executive vice-president and chief nuclear officer, and Mr. Harry Keiser, vice-president and chief nuclear operating officer. Also at the table are vice-chairman Leo Mullin and president

Sam Skinner. And among the Commonwealth Edison representatives who are here today also attending are our corporate vice-president and general counsel, Pamela Strobel, our corporate vice-president, Andrew Lynch, who has recently assumed the responsibility as chief financial officer for nuclear operations, corporate vice-president Jay Stephen Perry, who also serves as a site vice-president for Dresden Station, and the remainder of our nuclear executive team, which includes the five site vice-presidents other than Mr. Perry. Mr. William Starr, who is the president of Local 15 of the IBEW, is also with us today. He represents approximately 2,500 of our nuclear workers across our six sites, and he also represents the entire ComEd union work force in the State of Illinois.

The presence of these individuals reflects the company-wide support that we are providing and the seriousness that we place on our nuclear operations.

Your letter has had a profound impact on the company and resulted in a detailed, exhaustive, and self-critical review of all aspects of our nuclear operations. We've appeared before this Commission in the past, but what we will be discussing today is quite different. You're not going to hear much about plans or promises. We know how important implementation and execution are. This morning you'll hear about measurable

actions that we have taken, results that have been achieved, and what will be done if performance does not meet our standards.

Our written response that was submitted to you was intended to be as inclusive as possible in responding to your questions. Today I want to emphasize four central points, and these relate to the following: oversight, assessment, and monitoring; our focus on safe operations; the financial and human resources that we are applying; and how we are taking advantage of our size to raise the performance at all of our sites.

The first point I want to focus on is aggressive assessment, oversight, and monitoring that we are providing to our nuclear activities. The two individuals who are seated on either side of me, Mr. Maiman and Mr. Keiser, are charged with providing oversight in a consistent and effective manner across each of our stations. Mr. Maiman brings a wealth of experience in managing power production within ComEd and a detailed knowledge of our support systems. Mr. Keiser has substantial experience in managing multiple nuclear stations. They will each describe changes that we have made to ensure more aggressive oversight of our nuclear activities.

The recent assessments that we have conducted have been no-holds-barred initiatives designed to identify and

surface any weakness that might impact safety or performance. The independent self-assessment teams at both LaSalle and Zion were comprised of senior industry experts and augmented by the Institute of Nuclear Power Operations personnel along with our utility peers. The scope and critical intensity of these self-initiated evaluations are certainly different from anything that we've ever undertaken before at ComEd. We felt that they would deliver incisive and hard-hitting appraisals of what was needed to achieve sustained improvement at those two sites, and we share the results of the ISAT in a very public and open way.

The nuclear operations committee of our board has been strengthened and is deeply engaged in our nuclear activities. The committee now includes all of ComEd's senior officers, myself, along with Mr. Mullin, Mr. Skinner, as well as the former director of the Navy's nuclear propulsion program who had responsibility for over 100 nuclear-powered vessels, and he now serves as chairman of our committee. He is joined by three other nondirector members who bring a strong and independent perspective to the committee's deliberations.

The committee operates under a formal charter which establishes its independence and directs the committee to provide strong oversight of nuclear performance. The committee has its own office and a full-time engineer

assigned to it as a liaison to the Nuclear Division.

Our safety review boards operate under a common charter that directs them to keep the nuclear operations committee informed of significant plant activities or trends. Collectively I believe that these changes in committee membership and responsibility will provide effective oversight for the company's nuclear activities. The committee keeps our board fully informed on progress, and will ensure that line management is held accountable for meeting targeted performance levels.

You requested information about the criteria that we are using to measure performance. We selected a set of 25 indicators to track our progress. Seven of these indicators will allow us to compare the performance of our stations to those across the industry. We have an interim goal that by the year 2000 we'll operate each one of our stations better than the industry average, as determined by these seven industry-wide indicators. This goal represents an ambitious test of our ability to increase performance across the entire Nuclear Division, and we've established a range of actions to take in the event the trends indicate that we're not moving in the right direction to reach that goal. Mr. Keiser will discuss these indicators in more detail in just a few moments.

Second, we've placed an uncompromising focus on

safe nuclear operations. We recognize that operations, the control room, and our operators are the foundation for safety and reliability. Maintenance, engineering and training, and the many support functions are keys to assuring that our operators have a plant and processes which will enable them to succeed. The operator must have the knowledge, the skills, and the work environment to operate the plant in an error-free manner. We have successful models of safety and reliability at Byron and Braidwood, and we've demonstrated improvement in operations at Dresden and Quad Cities in recent years. The human performance of operations has been the principal area of focus in our turnaround efforts. Dresden and Quad Cities went through extensive efforts to upgrade operations and improve the standards. We simply took the time to do the job right, and we've begun to see improvements in operational performance at those two stations.

In August of 1994 we intensified our efforts at Dresden by performing a critical systematic review to determine the causes of Dresden performance problems and to identify the means to correct them. This resulted in the Dresden Plan, and this plan was implemented, begun in 1994 through late '96, and included actions to address the most significant weaknesses in five key areas: management and leadership, material condition, human performance,

performance monitoring, and radiation protection. The fact is safety performance has improved at Dresden. Indeed, the NRC ISI inspectors recently recognized that Dresden had improved, and that the control room operations are among the very best that they had observed.

Although we completed the Dresden Plan in 1996, we are continuing to pursue improvements through our annual operational plans. At Quad Cities we recruited a new site vice-president in 1994, an individual who had previously had successful turnaround experience. We acquired additional talent and set new standards, and Quad Cities began implementing a three-year course of action in 1994. Performance improvement has been achieved in many areas, as shown by several of the station's key performance indicators. For example, operator personnel, error-related LER's have steadily decreased from 11 in 1993 to zero in 1996, and there has been one thus far this year. The number of automatic scrams, while critical, has decreased from five in 1993 to zero in 1996, and we've had none thus far in 1997.

In recent years Quad Cities has also experienced a significant reduction in engineered safety feature actuations. I mention these improvements not to suggest that we've completed our work at Quad Cities or that we're satisfied with the status quo, because we're not. But they

do suggest, however, that we are on the right track and that the foundation has been laid for further progress. Today we are applying the lessons learned from Dresden and Quad Cities to LaSalle and Zion. As before, our primary focus is on improvement of plant operations. At Zion we implemented a process for assessing all operations department personnel in order to select those individuals who possess and demonstrate the requisite high standards of performance and professional behavior, that we are insisting upon in our control rooms.

But beyond the operator issues, I want to emphasize that the scope of our efforts is comprehensive and includes material condition improvements, procedure and process upgrades, and enhanced engineering activities.

Aggressive efforts are also underway at LaSalle. For example, functional performance reviews are being performed on systems that are important to safe operation to ensure that deficiencies are identified and corrected prior to start-up. Further, to reduce challenges to the operators, we're reducing the number of operator work-arounds, temporary alterations and control room deficiencies. We are simply going to do the job right, and we will not start LaSalle -- restart LaSalle or Zion until we have addressed the underlying performance problems.

Third, we substantially increased the resources

for our nuclear program. In early 1996, the board increased the original budget of $802 million by more than $70 million, and by late last year, we increased spending an additional $54 million, for a total of $926 million for the year.

In fiscal 1997, we expanded the support to reach a billion twenty-eight-million-dollar budget, a 28 percent increase over the original budgets for 1996.

We developed this budget using a process that included industry benchmarks and detailed reviews of the activities at each one of our sites to determine the resources that were needed to make the necessary improvements. We believe that these committed dollars will permit us to achieve improved performance at each of the sites and we intend to apply a comparable level of resources in 1998.

Resources include more than just dollars, they encompass both the way that we are spending the dollars and the personnel to ensure that we are using our resources wisely.

As Mr. Maiman will discuss, we have assembled a strong and experienced nuclear management team. For example, one of the more significant changes in the staffing of our nuclear stations in recent years has occurred in the engineering area. Three years ago, we hired an experienced

executive to take charge of our engineering, one who had significant expertise in managing large-scale projects in the commercial nuclear power industry. Under his leadership, we substantially changed the way we perform engineering activities at ComEd. The nuclear division is directly providing engineering and design for our nuclear plant rather than relying primarily on architectural engineering firms as we have in the past.

In addition, we recruited a number of people with strong reputations in their respective fields for the nuclear organization. The position of chief financial officer for nuclear operations was created to assist the division by effectively monitoring spending. Our new CFO has outstanding credentials and reports directly to Mr. Maiman.

About a year ago, we assigned the top person in our labor relations organization to work in the nuclear division and she reports directly to Mr. Maiman on human resource issues.

We've taken our company's chief security administrator and made him directly responsible for nuclear security, reporting to Mr. Keiser.

A number of specialists in supply management have also been assigned to each of our sites to assure that the right parts to go the right place at the right time.

Quite simply, the message had gone out throughout the organization that each area must recognize the importance of nuclear operations and do whatever is necessary to support it.

Finally, it is important to point out the efforts we have taken to build a stronger relationship with our union. Mr. Starr, who became the president of IBEW Local 15 within the last two years, has extensive experience at our Byron station in the area of mechanical maintenance. He has personally devoted a great deal of time, energy and effort toward understanding the changes that all of us must make to reach superior levels of performance at each of our sites.

Fourth, ComEd is fortunate to be the largest nuclear utility in the United States. We can bring significant resources to bear to increase the performance of our nuclear stations. We can learn from the experiences and challenges that we have overcome within our system and apply these lessons learned to our improving stations.

We have experienced personnel, and we can take advantages of the practices that have proved successful at our successful stations, most notably Byron and Braidwood, and these internal resources can provide us with a significant advantage in reaching our corporate performance goals.

It's very clear to us that ComEd will not be

judged only by our best performing plant, but also by our weakest. At the same time, simply upgrading the performance of the weakest plant, if it in any way disadvantages the performance of our other plants, would be a disservice to the company and to the industry. We have learned from Dresden and Quad Cities. In recent years, we've established at those two sites strong senior management teams and insisted on high standards, with a focus on superior operations.

Now it is not enough simply to turn our attention to LaSalle and Zion to bring about better performance; it is equally important that we continue to maintain and improve the performance of Byron and Braidwood while continuing the trends that we have seen at Dresden and Quad Cities in the last couple of years. The same high standards must be embraced by all sites. Indeed, these high standards are at the heart of our efforts to eliminate cyclical performance.

The nuclear division must be treated as an enterprise where the entire division contributes to improvement of the weakest station, and that will come about through a combination of taking advantage of lessons learned to be applied from one site to the others, through peer reviews, and from acceptance of uniformly high standards across the entire division.

Mr. Maiman and Mr. Keiser will now discuss the

details of the actions we are taking to assure sustained good performance at all of our plants.

CHAIRMAN JACKSON: Let me ask you a couple of questions for a moment.

MR. O'CONNOR: Please.

CHAIRMAN JACKSON: And if it is more appropriate for one of those two gentlemen to answer, that will be fine.

Given what you learned when you had the -- let's call it assisted self-assessments done at LaSalle and Zion, you mentioned strengthened oversight from your Board of Directors.

Do you have plans to use independent or outside organizations in addition to provide challenging assessments of your nuclear operations -- a continuing plan for the long-run?

MR. O'CONNOR: Yes, we do have at each of our sites a management review board which is comprised of people with expertise from around the industry or from academia who bring great value in that area.

We presently do not have a plan to do an ISAT as such at either Byron or Braidwood, but certainly in the event that we saw an indication that the sort of problems that we suspected were at Zion or LaSalle, we would not hesitate to do the same sort of thing at any one of our other plants.

CHAIRMAN JACKSON: Okay, so it would be done on a basis that would be triggered by assessment --

MR. O'CONNOR: That's correct.

CHAIRMAN JACKSON: -- that you had already made.

In your response to the 5054(f) letter, you indicate that you'll also monitor qualitative indicators such as employee concerns and allegations.

Have you put into place a methodology for monitoring, evaluation, and determining the appropriate corporate response to the qualitative indicators?

MR. O'CONNOR: We have in a way, because as I mentioned, Chairman Jackson, we are putting as much emphasis on attitude as we are on technical skills, particularly in the operations area. As a consequence of that in the last several months, as you are aware, several licenses have been taken away from individuals who we felt might have had the technical skills but did not have the sort of attitude that would help us in the area of teamwork and what we felt was required in the control room and in the operating group.

Culture is the toughest challenge we face, as we mentioned to you last year when we appeared before you. It is happening, however. I think there is a belief that it is essential that everybody be part of the team, and that is in the qualitative area, if you will, but beyond that I will let Tom or Harry chip in and comment.

MR. MAIMAN: We have an employee concerns program which we call the Quality First Program. We did a survey several months ago and determined that although that program was in place and reasonably effective, it wasn't well-known, and partly because of the name, so we have changed the name to Employees Concerns, are heightening the awareness among the employee group.

Part of what the survey showed however was that for the most part, and there is always an outlier, that people feel that they are able to communicate directly with their supervisors and they do get a response.

MR. KEISER: Part of the new corrective action program we are putting in place has a component of it where we spend time assessing the culture at each of the organizations and try to define our strengths and weaknesses, and we are spending a considerable amount of time, like Mr. O'Connor had mentioned, developing our supervisors, making them more sensitive to the cultural aspects of the business.

CHAIRMAN JACKSON: You mentioned the focus on safe operations and applying lessons learned by Byron, Braidwood, and what you have been doing at Dresden and Quad Cities to LaSalle and Zion, and this is more of a background question that I would like you to address as you go along and that is how you would characterize the recent events at Zion and the

operator performance issues at LaSalle within the context of a focus on safe operations. Tell us how you see that.

MR. MAIMAN: I will address that in my presentation.

CHAIRMAN JACKSON: Okay, and you mentioned having a CFO-4 in the Nuclear Operations area. You put that into place to ensure that all of the nuclear sites and supporting organizations have the necessary resources to sustain improvement?

MR. O'CONNOR: That is correct -- that, as well as to make certain that they are spent efficiently -- so it is a combination of both.

CHAIRMAN JACKSON: You mentioned the people, the human resources, particularly in Engineering. How many vacancies -- or do you have vacancies at the present time in the corporate as well as the site engineering?

MR. O'CONNOR: We have about 100 vacancies that we will be filling but they are mainly to substitute for contractors that we have on the property at the present time, and they will be replacing the contractors.

CHAIRMAN JACKSON: Okay, so you are getting -- you are moving out, what are they? -- seconded contractors?

MR. O'CONNOR: That's correct.

CHAIRMAN JACKSON: And putting in your own people.

MR. O'CONNOR: Yes.

CHAIRMAN JACKSON: Are there developments in your state or region with respect to utility deregulation and competition or movements on the part of -- what is it, the Illinois Commerce --

MR. O'CONNOR: Illinois Commerce Commission, yes.

CHAIRMAN JACKSON: -- that will impact your ability to carry out your plans?

MR. O'CONNOR: Not in my judgment.

There are definitely initiatives underway in Illinois and it is likely that there will be a bill passed this Spring session that will provide for a transition to a deregulated environment, but notwithstanding that, we are not going to be distracted in the operations of our nuclear plants and we'll have the commitment to resource whatever plants we wind up operating.

That is not to guarantee that we will always operate 12 plants. We don't know that at this point in time, but it is to suggest very firmly that whatever plants we do operate will be fully resourced and will be operated safely.

CHAIRMAN JACKSON: Will you have to go to your Commerce Commission in the current context to get approval for any of the initiatives or for any kind of relief?

MR. O'CONNOR: In the current context we would, yes. In the future, depending on what the legislation is

that is passed, that remains to be seen how it would be set up, but we suspect that we would not then have to go to the Commerce Commission.

CHAIRMAN JACKSON: And at this point there's been no difficulty in that regard in terms of getting the approvals you need or any rate relief that you might need in order to have the resources to focus on any of these areas that you have been outlining?

MR. O'CONNOR: In the present context that is correct.

We have a rate freeze in effect in Illinois right now that went in in January of 1996 and that will go for a five year period, so our activity on rates is very modest at the present time before the Commission and we don't anticipate that we would be returning to them, but we also feel that, as I mentioned, our level of resources applied this year at the billion-plus level, which we plan again to have in 1998, is an indication of our willingness to devote the resources that are required for safe operations.

CHAIRMAN JACKSON: Now I realize that I believe there is a ISO proposal being put forth within the Midwest Regional context that I believe involves Commonwealth Edison.

MR. O'CONNOR: It does.

CHAIRMAN JACKSON: And that would involve

essentially then a disaggregation of the generation facilities from the transmission, is that correct?

MR. O'CONNOR: Not necessarily. It might. In fact, there was a meeting on this yesterday in Cincinnati and a discussion involving a number of utilities and they are still the formative stages of putting together an organization that would provide overall monitoring and oversight to how the transmission network would operate in the Middle West, but it doesn't necessarily require at this juncture the disaggregation.

In many respects it would function primarily as a traffic cop, somebody who would kind of model in many instances and then make certain that people don't do something that they shouldn't in the way power is transmitted across the region.

CHAIRMAN JACKSON: As things stand today, what fraction of your net electrical generation is provided by your nuclear facilities --

MR. O'CONNOR: 50 --

CHAIRMAN JACKSON: -- versus fossil facilities that you have?

MR. O'CONNOR: Well, the capacity on our system is 50 percent fossil and 50 percent nuclear, but the output historically has been between 65 and 75 percent from our nuclear plants, because they are our base load plants.

CHAIRMAN JACKSON: And are any of the current plans relative to industry restructuring oriented to having the nuclear units being other than base-loaded?

MR. O'CONNOR: No.

CHAIRMAN JACKSON: They would still be, under any of the scenarios currently --

MR. O'CONNOR: That is correct, that we would have no intention of having them other than base-loaded.

CHAIRMAN JACKSON: Okay.

MR. O'CONNOR: Thank you.

MR. MAIMAN: Thank you.

My purpose is to tell you about how we are managing our entire nuclear enterprise. I will discuss what we've already done, what we are now doing and -- to assure performance across all six sites.

CHAIRMAN JACKSON: Excuse me, Mr. Maiman.

MR. MAIMAN: Yes.

CHAIRMAN JACKSON: Let me ask Mr. O'Connor one last question.

MR. O'CONNOR: Please.

CHAIRMAN JACKSON: You mentioned taking advantage of your size and managing as a single enterprise, and it turns out that one would argue that communication and information are critical parts of an ability to do that.

Do you have a senior corporate manager designated

with responsibility in those areas with respect to information technology and information management for either the nuclear operations as a whole or is it a corporate-wide --

MR. O'CONNOR: No, it's both. We have an active information technology part of our nuclear operations, and the best part of that is that it works very well with the corporate IS function, Mr. Orloff, and that's been getting an awful lot of attention from all of us seated across the side of the table, including Messrs. Skinner and Mullin. We have a series of meetings where we address five key support functions for nuclear operations, and IS is one of them.

The second point on communications, they do have an individual assigned to the nuclear operations, Mr. Ken Ross, who is responsible for communications, and they have communications people at each of the sites to work with them to provide a coordinated and centralized communications effort.

CHAIRMAN JACKSON: Could you reiterate what those five key support functions are?

MR. O'CONNOR: Yes. The key support functions that we've been meeting primarily on in recent months are finance, information technology, security, human resources, and supply management.

CHAIRMAN JACKSON: Supply management?

MR. O'CONNOR: Yes.

CHAIRMAN JACKSON: Now, by that, you mean --

MR. O'CONNOR: Supplies and materials.

CHAIRMAN JACKSON: Materials --

MR. O'CONNOR: Correct.

CHAIRMAN JACKSON: -- across the board.

MR. O'CONNOR: Parts.

CHAIRMAN JACKSON: Okay. Very good. Thank you.

MR. O'CONNOR: Thank you, Chairman.

CHAIRMAN JACKSON: Thank you.

MR. MAIMAN: In my comments, I would like to put the emphasis on action and results and what's different. My discussions will follow the four areas that Mr. O'Connor addressed: oversight and assessment, safe operations, resources, and taking advantage of size.

Let me begin with oversight and assessment, and I would like to focus on those tools that help us predict and detect adverse performance and then provide the opportunity to take action. They include the indicators that Mr. Keiser will be discussing next.

We believe that consistent use of the oversight and assessment tools does help to raise standards of human performance and accountability across the sites.

First of these tools is the management team. As Mr. O'Connor indicated, from CEO and board of directors

through the nuclear division management, we have intensified our senior management involvement in managing our large nuclear enterprise.

Senior management is actively engaged in overseeing and directing improvement. I have in place among the best talent from both outside and within ComEd. This team has high standards and turn-around experience. What is different today is that the leadership team knows what sustained improvement looks like, how to get there, and how to intervene when adverse trends develop. We are taking advantage of their collective experience across the entire division. The team is in place, it is stable, and it will, wherever possible, remain there to assure sustained performance and continued improvement.

Next is nuclear oversight. As a result of a division-wide assessment conducted of the oversight function, I have increased resources and realigned the organization. The team systematically collects, analyzes performance data, and then provides monthly performance trends. The division oversight team in turn assesses trends across all sites and serves as a check and balance on the site analysis. The results are reported to senior management for review and action. As a result of these actions, we have a much higher confidence in our ability to detect degrading performance.

CHAIRMAN JACKSON: Let me ask you a question in terms of oversight, and it relates to what you talked about, Mr. O'Connor.

How does the board's oversight committee interface with what Mr. Maiman is describing, and then how does that play into the decisions that you make at the board level and as the CEO, and in particular how does it influence these key support areas?

MR. O'CONNOR: I think it's fair to say that the nuclear oversight committee in recent months has become very challenging, very intrusive, very present, both at the sites and at the nuclear division headquarters, very demanding, and really quite intolerant of shortcomings in performance. And they have been there a lot of the time, a couple of days a week, sometimes three days a week, and they have been extremely effective --

CHAIRMAN JACKSON: What do they have the authority to do or not do?

MR. O'CONNOR: They have the authority to just about do anything with respect to nuclear operations, and yet they will be the first to tell you they don't want to manage the operations, they don't feel that that's their role, and nor do we. But they do have vast authority in their charter to advise, counsel and, where appropriate, to direct.

The role that they play with our board, of course, is to keep our board informed on their views of nuclear performance, and I must tell you it's done in a very candid way.

CHAIRMAN JACKSON: Do they have a specific interface with the oversight organizations that Mr. Maiman is describing?

MR. O'CONNOR: Yes. And Tom, you might --

MR. MAIMAN: Yes. They have a full-time representative in our office who is the interface with them when they're not there, of course, and also with Ron Muldinger, who is my oversight manager for the division.

MR. KEISER: And they're tied to the SRBs.

MR. MAIMAN: Yes.

MR. O'CONNOR: As Mr. Keiser just said, they have a very close tie and have recently proposed, which has been accepted, a common charter of operations which has been adopted by the safety review boards at each of the sites. So they are in regular communication with them as well.

CHAIRMAN JACKSON: So the safety review boards at each site have a common charter; is that the message here?

MR. O'CONNOR: Yes.

MR. MAIMAN: And that common charter was put together through the board committee.

CHAIRMAN JACKSON: Okay. Thank you.

MR. MAIMAN: Next I would like to talk about assessments. We are continuing an open and critical approach to self-assessments like those conducted at LaSalle and Zion. For example, we recently completed a critical evaluation of the operational event that took place at Zion and have shared the results with the NRC.

To make our assessments rigorous, we often compare our performance against the best performing plants in the industry. Identified site problems receive the necessary visibility to ensure effective correction at all sites.

Next is the event-free clock. All sites have adopted use of an indicator called the event-free clock. Although it is not one of the selected division performance indicators, we consider it quite useful. It tells us how well we are doing in preventing events involving deficient human performance. The number of event-free days is measured and the results are conspicuously posted. Trending helps to make it a predictive indicator and to keep us focused on the importance of human performance in achieving safe and reliable operation.

CHAIRMAN JACKSON: Mr. Maiman, why is it not a division indicator?

MR. MAIMAN: We use this as a lower level, real time indicator that's available to personnel as they enter the station. So it's a living -- it tends to be more of a

short-term thing.

CHAIRMAN JACKSON: Okay.

MR. MAIMAN: But over time, it certainly can be of benefit in correcting the human performance deficiencies.

MR. KEISER: We track the event-free clock on a division-wide total daily, so we know what the total consecutive days without an event has been at -- if you total up the entire ComEd system.

CHAIRMAN JACKSON: Now are these focusing on events that are strictly rooted in human performance?

MR. MAIMAN: Yes.

CHAIRMAN JACKSON: Okay.

MR. MAIMAN: Yes.

COMMISSIONER ROGERS: Just before you leave this slide, I wonder if you could just mention what you have in place to review root cause analyses, not root cause analyses themselves but what do you have in place to review whatever root cause analyses have already been done, because it has been my experience in the past that very often it takes time to really get at the real root cause of some of the problems that have already been assessed on a root cause basis, particularly for an LER and I wonder what you have to really try to go over those reviews, those analyses and review them to make sure you are really comfortable with having gotten at the real root cause or causes.

MR. MAIMAN: Yes, that is a difficult situation. I will address that in a few minutes in our corrective action program. But, in fact, we are doing that.

CHAIRMAN JACKSON: Why don't we wait for that.

MR. MAIMAN: Turning now to safe operations, we are placing strong emphasis on strengthening control of operations and improving human performance across all the sites and I would like to highlight some of the major actions we have taken to accelerate the pace of improvement.

First, a nuclear operations information display center has been established in the division office. The center provides a structured and formal presentation of up-to-date information to senior division management and to the office of the nuclear committee of the board. Current information is displayed on performance measures, plant status, LCO entries and other data. We use this information in the timely oversight command and management of the nuclear enterprise.

Next is control room monitoring. I have directed the site vice presidents and selected division vice presidents, nine in all, to spend time each month performing cross-site control room monitoring. This is one way that we are using senior management experience across all the sites. It also gives each site vice president a first hand opportunity to judge his own control room's performance

against the others. They go to a different site each month and use standard check lists covering such matters as command and control, procedure use, three-way communications and shift turnovers. A monthly reporting cycle has been established and results trending will follow. I will be immediately notified of important adverse findings or trends.

The operations peer group will also review this information and take action as appropriate. These actions serve to reinforce the importance of formality and strict adherence to command and control principles in the control room.

CHAIRMAN JACKSON: Now, will you talk to the Commission about the Zion events and the operator performance at LaSalle within the context of what you have done and how you -- why you feel that what you are describing speaks to what those events and those situations show?

MR. MAIMAN: I will do that next.

CHAIRMAN JACKSON: Okay.

MR. MAIMAN: Next is oversight plant evolutions. To do this, we are using the operations center and the other oversight mechanisms, such as Mr. Keiser's six-site monthly management review meetings. A leading example would be the restart readiness plans for both LaSalle and Zion.

In that regard, we have slowed the rate of restart plan implementation at both sites and are extending the schedule for return to service of these units. This change does effect some of the actions described in our 50.54(f) response relating to LaSalle and we will provide updated information. Our new schedules will allow us to, one, more carefully and deliberately manage work activities; two, to structure the application of our resources and; three, take the time to do it right.

We would have been trying to crowd a lot of work into a very short time. The senior management team and I will make sure that we have strong human performance and are, indeed, ready for safe, reliable operations. Additionally, I will have a formal restart readiness assessment conducted at each site. As the responsible officer, I will not authorize a site vice president to restart unless I have the confidence that the plant is ready to proceed with a safe, deliberate and disciplined startup.

Next is the operations standards which you asked about.

Following the LaSalle and Zion events, we performed special assessments of the operations at the other four sites. This confirmed the need to formalize common standards across all the sites. I have issued new operations directives that define practices for approaching

LCOs, withdrawing rods, supervisory oversight and other essential practices for disciplined control room operations.

For example, I have directed that operators may withdraw rods only in the immediate presence and with the specific direction of the unit supervisor. I have directed that each license holder have a face-to-face discussion with the site vice president, the plant manager or the operations manager to specifically review the Zion reactivity event and the newly issued operations directives.

This action is intended to test operator understanding and enhance control room formality and discipline. Additionally and in direct response to the Zion and LaSalle events, specific training has been implemented to improve operator performance in areas of apparent and demonstrated weakness.

Does that answer your question, or would you like --

CHAIRMAN JACKSON: Well, it would just be easier if you just said these events shows us these problems, and this is what we're doing and why we think it's addressing the problem.

MR. MAIMAN: These events did show some pretty clear problems. At LaSalle it was our work control process, and I will address that in a few minutes. At Zion it was command and control. At LaSalle it was command and control.

At Zion it was ineffective corrective action. And at both plants it in fact was operator skills and knowledge to some degree.

What we have done -- I talked about the things to improve command and control in the control room. We have instituted aggressive training specifically for the knowledge and skills and for the corrective action program, I will talk about what we're doing in that in just a minute.

Let me now address resources. Mr. O'Connor noted that we have substantially increased the applied resources. Equally important are the steps taken to ensure that the increased resources get results. We have put in place an improved business planning process tied to the budget process. The resulting plans defined the improvement actions to be implemented in the coming year. These plans also include specific schedules and goals to help gauge progress and measure resource effectiveness.

This is a simple concept, but indeed it has been difficult to effectively put in place across our six sites.

We are beginning monthly line-item spending reviews for each site. The review meetings include the site vice-president, the site financial controller, Mr. Keiser, the chief nuclear operating officer, Mr. Lynch, our new chief nuclear financial officer, and myself. This process provides a further mechanism for senior management to

measure resource effectiveness and sufficiency. The extended schedules for restarts of the LaSalle and Zion units are examples of the kinds of actions we are taking to ensure that resources are adequately and effectively applied. Each site does have adequate resources. However, the slower pace of the restart plans reflects a reasoned and reasonable decision regarding resource application.

I'd now like to address taking advantage of size. ComEd is a substantial company with opportunities for taking advantage of its size. We have the responsibility and the flexibility of 12 units, along with the ability to marshal resources. Used properly, this is a great strength. Taking advantage of size is both a business and a performance imperative. We are therefore acting to capitalize on this strength. As examples I would like to tell you about our peer groups. Peer groups are teams led by a site or corporate vice-president with members from each of the six sites and a seventh permanent member from the division. The teams were established in 1996. They are empowered to develop and assist in implementing across the sites the best practices that we can find within the division and the industry. The output of the peer groups provides the basis for setting division-wide policies, standards, and practices. Peer groups provide a powerful forcing function for raising standards and improving performance across the

sites. They are also a valuable resource for quickly receiving, defining, and disseminating lessons learned. Among the peer group initiatives are these. First, we have developed a division-wide standard corrective-action program. This program includes standard root-cause training for groups of individuals at each site and in the division offices. We have established common cause-coding systems for the whole division. The benefit is a much-strengthened ability to analyze problems consistently at all sites, to identify common problems and trends, and to fix what is broken. The new corrective-action process is currently in place at Byron and Dresden, and will be in use at all sites by year-end. Other peer-group efforts are under way to raise standards and develop best practices for work control, training, maintenance, and surveillance, configuration control, and operations. We know that the peer-group process is effective because it is a well-proven technique used in industry. We intend to have additional process improvements implemented by the end of this year. Two of these involve out-of-service and work control. A common out-of-service or tag-out process will, among other benefits, allow us to move people from site to site without retraining. This process, which is electronically tied into our work control system, has been developed and tested. It is scheduled to be implemented at five sites in June, and I

expect it to be in use at all sites by year-end.

A standard work-control process has been developed to ensure proper review and authorization of work items. This process will strengthen our ability to plan, schedule, and execute work in a controlled and efficient manner. The prototype process has been implemented at Braidwood and is now being tested. The finished product will be implemented at all sites this year. These and other peer-group efforts are under way. In all there are nine peer groups, and more than 30 initiatives. All are aimed at producing common site processes based on best practices and achieving performance benefits derived from ComEd Nuclear's large size.

I now turn to engineering. Engineering is clearly an area where our size can help. The movement of engineering capability in-house began in 1994. It is a major step on the road to technical self-sufficiency. We have established a common set of engineering initiatives applicable to all sites, and currently have over 800 ComEd engineers employed. As outlined in my November and January letters to the NRC, we have made major commitments to the conduct of functional inspections and design basis verifications at all sites.

A significant change that has strengthened the in-process quality of our engineering work is the establishment of engineering assurance groups at each site.

This effort takes time and requires more work, but it is also significantly enhancing the quality of the final engineering packages. It is the right thing to do.

To recap my remarks, let me emphasize that we are acting to bring around sustained improvement through markedly better human performance and personal accountability. We have a strong management team and the right mechanisms in place to help detect problems and provide the opportunity to take action. We have conducted critical assessments of our performance, and are placing heavy emphasis on control and oversight of operations. We have put in place a business planning process --

CHAIRMAN JACKSON: Let me stop you.

MR. MAIMAN: Yes.

CHAIRMAN JACKSON: Before you go. You mentioned the peer groups, and you have the number of areas outlined, including corrective action. As you know, I visited LaSalle last month, and at that time I was told and noted that there were failings in the corrective action program, and so much so that at that point as it was expressed to me that to some extent employees had lost confidence and were not identifying problems. And you've described various issues and things that you've put into place such as the division-wide standard corrective action program and common-cause coding. I guess the real question for me is,

can you give us a brief delineation of what the failings are or were in the corrective-action program, and how what you've described is meant to address those problems, and how you will know that you've been effective in doing so?

MR. MAIMAN: The failings of the implementation of past corrective action are many. They begin with, in some cases, ineffective root cause analysis, fixing the symptoms instead of really going after the root cause.

I think the other part of the corrective action program that has been difficult is each site did it somewhat differently. One of the values of the peer groups is to get the sites together with an empowered member who can make decisions for the site and then go back to the site with the consensus agreed-to new corrective action plan, and it does include root-cause-trained people, groups at each site, it does include this common cause coding, and it does include the consistent application of a proceduralized corrective action program that is the same across all sites.

CHAIRMAN JACKSON: Okay. But is proceduralization your metric for success?

MR. MAIMAN: No. It can't be, but you have to start with a plan, you have to start with a process, you have to start with --

CHAIRMAN JACKSON: That's how you go along the path.

MR. MAIMAN: Yes.

CHAIRMAN JACKSON: But what is your metric or what are your metrics for success? How will you judge that you've been effective?

MR. MAIMAN: We have several metrics. Just to repeat some of the items that Tom was talking about, some of the failings of the system were lack of accountability. So the process has built into it now accountability. There are metrics, that we can see it. We're looking at the metrics -- are they being written, in a sense who are they being written by, not by the individual, but is engineering writing them, is maintenance writing them, or are they not writing them? So our metrics allow identification of the utilization of this system by classification, if you will.

There was a lack of belief in the system on the employees' part which doubles back to the lack of training and understanding what is the corrective action program all about? Is it a punitive system or is it a system that's really put in place so we can significantly improve the performance of the system? And so these training programs we're putting on come at those particular issues.

To respond to Commissioner Rogers' question earlier, it's not so much the identification of the problem; now one must get to the root cause. So we're effecting a significant amount of training, common training across the

sites so that we get better root cause analysis, if you will.

Having come up with the root cause analysis, there's a presentation to management at each of the sites trying to align and make sure that the cause, if you will, is indicative of the event and not it's a training error or something like that. I mean, it is a challenging dialogue that takes place at the sites looking at the root cause evaluation, looking at the actions taken to prevent recurrence. Do they match what you said the root cause was, if you will.

Then we have indicators that deal with repeat events. That is to say, having implemented the root cause over a 24-month period of time, we're looking back and seeing do we have repeat events, and that's a measurement of the effectiveness, if you will, of the action taken, and then in the meantime, there are also effectiveness reviews by the what we refer to as our RSQV organization.

CHAIRMAN JACKSON: Okay. Because that's what I wanted to hear, because you can put the programs into place, but if you have repetitive problems, if you have equipment-induced transients or events, if you find that the fixes are only partial fixes and, therefore, that goes back to Commissioner Rogers' comments that you haven't done adequate root cause to understand what your problem is.

That's when I meant when I say a metric.

MR. MAIMAN: Sure.

CHAIRMAN JACKSON: What's your metric for knowing that you've fixed the problem. The metric is not -- and I know you're describing what you're doing --

MR. MAIMAN: Yes.

CHAIRMAN JACKSON: -- to fix the problem, but the issue is how do you know when you've fixed the problem.

MR. MAIMAN: And there are a number of metrics: failed surveillances, rework and repeat events.

CHAIRMAN JACKSON: Okay.

MR. MAIMAN: We have put in place a business planning process to assure continued spending at the right levels for the right things. We are taking advantage of size by capturing the best practices and processes from the sites in the industry and then applying them at all sites, and the peer group process, as we discussed, is a powerful forcing function to do this.

In sum, I am convinced that we have the right combination of people, resources, and actions to sustain performance at all sites. I do not want to leave the impression that any of us think that managing our twelve-unit enterprise is easy. It is not. We have a tough challenge ahead, but we can do the job and we will do it.

The last segment of our presentation will address

how we expect to measure performance, hold ourselves accountable, and take appropriate actions; and I will direct your attention to Mr. Keiser for that discussion.

MR. KEISER: Thank you.

Good morning. As Mr. Maiman noted, I am pleased to have the opportunity to discuss performance indicators and the central role they have in managing the nuclear division at each of our sites.

Performance indicators are fundamentally important to our improvement efforts. My personal belief is that in order to change performance, you must measure the performance, set a performance standard, and then hold people accountable to meet that performance standard.

Indicators are useful to both detect and anticipate where problems may be developing so that management can prioritize attention and resources to that area. There is an old saying that what management measures gets done, so it is very important that we measure the right parameters and use indicators carefully.

Obviously performance indicators are not new to Commonwealth Edison. What has changed is how we are using them to achieve accountability. We now have a formal management process for evaluating and responding to the indicators and a process to obtain uniform indicators across the six sites.

Last year, we initiated efforts to develop a better set of indicators and a process for using them. Your 50.54(f) letter has caused us to accelerate those efforts. The entire Commonwealth Edison senior management team has carefully reviewed and rethought our indicators to ensure that they provide us the information we need to successfully manage or nuclear program.

We have made many changes. Today, we are actively using indicators to achieve accountability. We are using consistent indicators to communicate from the lowest levels of the organization all the way up to the board of directors. This allows the whole nuclear organization to have a common understanding of standards of performance, expectations and what is important.

This common set of indicators we have selected is based upon industry experience and the experience of our management team. These indicators have been reviewed and agreed to by all our sites, the nuclear division and our corporate offices. Overall, they paint a picture of a good plan. That is to say if we meet our performance criteria for the indicators, we know we will have a safe, reliable, well running plant.

But performance indicators are just a tool and thus have limitations. Consequently, we are using them carefully in conjunction with analysis and our other

performance monitoring tools in order to determine our performance. There are several features of our indicated process that provide confidence that our indicators will help us sustain the performance improvements at all our sites.

First, the indicated parameters ought to be measured consistently across each site. We will compare apples to apples and not apples to oranges. Whether it is for a Department Manager or the Nuclear Committee of the Board, we'll be using and comparing consistent information.

This philosophy of consistency in all we do is something that Mr. Maiman and I are trying to implement throughout the Nuclear Division. We have struggled with this in the past. We are not consistent yet but these indicators are a giant step forward.

This approach of consistency allows our senior management and Board oversight to be much more meaningful.

Second, our indicators make clear how well we are doing compared to our peers and our goals. We have two subset of indicators. One utilizes existing standard NRC or standard WANO indicators and will allow us to compare our performance against that of the industry.

The second subset consists of Commonwealth Edison internally-developed indicators that we will use to compare our six nuclear stations against each other. The standard

NRC and WANO indicators will directly tell us whether we are on track to meet our overall goals. These indicators will not allow us to fool ourselves about how well we are really performing.

Third, we know that having indicators alone is not enough. To ensure good performance, they must be properly used. We have structured our management process to take maximum advantage of the information these indicators give us.

Senior Nuclear Division and site executives are directly involved in conducting a formal review and analysis of these indicators each month. In addition, the Nuclear Committee of the Board will receive these indicators.

This monthly review is done on both a division-wide and a site-wide basis. On a division-wide basis, the site vice presidents, the other vice presidents and I, hold a senior leadership meeting to assess both individual site performance and division performance. During these meetings we review our performance indicators in conjunction with review of events, violations and assessment results to identify early indications of declining performance.

We also assessed the indicators and performance as a whole to see if any broader trends are emerging. This forum allows the senior management team to identify emerging

weaknesses and common problems and to work on common solutions.

We also have a site-specific process. Each month I conduct formal management review meetings at each site. During these meetings we cover site performance measures, events, assessment results, accomplishments and plans.

Through these meetings I maintain strong oversight and direction of each nuclear station.

Finally, as I will discuss in a moment, we have established a formal process for responsive action in cases where our performance criteria are not met. This structure and formality ensures that when something significant develops it gets proper attention and prioritization. This is an important change for the organization.

The indicators are not just developed and monitored by the site, thus leaving the site to hold itself accountable for its performance. Senior Nuclear Division management is intrusive in challenging, helping, and improving the performance of the units.

In the 5054(f) letter you asked us to define the action we would propose to take in the event that our performance criteria are not met. We have established a formal process for this and our process is defined by a procedure we issued earlier this month and specifies the reporting evaluation and definition of actions that we will

undertake whenever we fail to meet a criterion.

Each of the site vice presidents currently provides me with a monthly letter identifying their issues of concern. Beginning in May this letter will be modified to also provide me with the status of the station's performance indicators including identifying and explaining performance variances from our established criteria. This would be Step One of the process.

Step Two of the process occurs at the site monthly management review meeting. Here the reason for the variance will be discussed along with the responsive action and future expectations for performance.

If the indicator continues in variance for a second month we enter Step Three. The site must submit a detailed action plan that will correct the performance trend. This plan will be reviewed at the site monthly management review meeting and discussed at the Division Senior Leadership Meeting.

If the variance continues for a third month, a team will be assembled consisting of personnel from the affected site as well as others. This team reporting directly to me will assess the causes and provide recommendations to correct performance.

Taken together, these steps ensure that problems are promptly reported and analyzed and we take strong and

prompt action whenever our indicators tell us that performance is moving in the wrong direction. This process will keep us on track to meet our performance goals.

In summary, as I told you at the start of my talk, my personal philosophy is that in order to change performance you must measure that performance, set performance standards, and then hold people accountable to meet those performance standards. The indicators and the management processes we are using are a cornerstone in our efforts to improve performance at all our nuclear plants.

Our indicators are consistent. They are carefully reviewed and formally responded to. They provide additional confidence that we will get results and we will safely operate our six nuclear units while sustaining performance improvements at each of the sites. Thank you.

CHAIRMAN JACKSON: Let me ask you a couple of questions. This has to do with your structure and use of indicators.

In your response you talk about performance criteria and you talk about goals. What is the difference?

MR. KEISER: We have established goals for each of the sites for each of the matrix performance we want to meet at the end of the year. They are challenging goals. That means that we may or may not meet all of them.

Our expectations aren't to meet all of them.

With respect to that goals, we have both monthly and yearly indicators we are looking at and if there is a variance that occurs, we want the variance described and explained to the organization.

Some of the goals may need to be changed because they weren't set properly or events unfold that would prevent us from meeting them.

CHAIRMAN JACKSON: I guess I am asking what is the difference between performance criteria and goals. They are one and the same in this context?

Let me give you an example. You had criteria for safety system performance. You have a criterion, "unavailability exceeds two times the industry goal for any system"

MR. KEISER: Right.

CHAIRMAN JACKSON: First of all, I am interested in what the rationale is in terms of how you went about establishing the various criteria.

Are these industry benchmarks? Are they what other nuclear organizations have used? How do you arrive at these?

MR. KEISER: We arrived at them using our collective judgments -- that is to say, the organizations, the site vice presidents, their quality organizations, et cetera, in looking at performance indicators they have found

useful in the past.

Each of the sites themselves had performance indicators before we embarked on this common set of indicators to measure Department performance, and so we collectively looked at what would be the best of each, right? -- and made a determination of what would a good performing plant look like.

That is why the parameters cover maintenance, engineering, operations, et cetera.

We set goals out, and you are quite correct, some of the goals are the industry goals for performance in the future and around that goal we established the performance criteria, which is to say we think that the parameter is trending in the wrong direction if it falls outside of our performance criteria.

That is just a flag to management to go take a further detailed look at what is going on. Obviously, when one sets the criteria for scrams of one automatic scram per year at a station, we, having 12 stations, I would anticipate having one scram a year if you will.

What we need to do is find out the reason for the scram and take prompt corrective action so that in some cases the goal meets the performance criteria that we expect to achieve.

CHAIRMAN JACKSON: I am interested in hearing a

little bit more about what you are doing with your people. You started with the assessment, assessments that you were doing at Zion. There are some activities at LaSalle. I think it is important that the Commission hear from you and understand it because, in the many ways, what you have talked about so far is a plan and you have kind of laid out some things up here, your performance indicators and all the new managers you brought in, et cetera.

I am sure you have seen and read enough about the way I tend to look at things that it is good that you have the right people at these high levels. But in the end it is your work force that is going to make or break what happens at these plants. And so I think it is important for the Commission to hear and understand more about what you are doing with the work force beginning with, you know, what you have been doing at Zion, what you are doing at LaSalle, what your plans are relative to your other stations, how this plays into what is going on.

I don't know, whoever would like to speak to this.

MR. MAIMAN: Let me start by just saying a lot of it is about changing culture and, as you can imagine, there is slightly different culture at each one of the plants and so there are different levels of intenseness in that culture change that we are dealing with.

This is not an easy thing to do and it generally

takes a long period of time to be truly effective in it. But we are, in fact, making progress. We have instituted some specific training courses such as the mark training, which --

CHAIRMAN JACKSON: I guess what I wanted to know, tell us about the assessment you are making of people at Zion. Give us a little more detail and then tell us what you are doing at LaSalle and tell us how this propagates across the other sites.

MR. MAIMAN: The assessments at Zion was a very aggressive move on our part that we informed Bill Starr and the local 15 people about what we were going to do. But after the event that took place up at Zion and given the longstanding history about concerns about control room demeanor and command and control and so forth, we undertook an assessment of all of our 180 operating personnel within the plant. Given that perhaps there are some of us in life that are just plain not meant to be operators and so forth and so on, but we also wanted to test the knowledge and skill level.

We went through this assessment. It was a very detailed assessment. We brought in an outside consulting HR, human resources firm to help us put this kind of assessment together. I had participated in this kind of assessment in the commercial division and also in our fossil

division and so I was familiar with this process.

We went through the assessment and made a judgment that a number of people were not fully prepared to perform their operating responsibilities. Fifteen of those people will be remediated. They are good, capable people and we are going to put them through mediation courses.

Four of those people, it was determined through the assessment, should not really be in the operating department, yet they were good employees. So they will be retrained and offered other positions within the plant.

Eight of those people it was determined should not be at Zion station, have been assigned elsewhere outside of the plant. This is a dramatic move for the company to undertake. It does violate some of the labor agreements that we have and although we do not have full agreement with our labor union as to what we are doing, we are talking and we are resolving the difficulties.

At LaSalle, we have taken a slightly different approach. We are, in fact, going through the operators in a testing way to find out where the deficiencies are and what we have to do and we are running some of the people through retraining programs and some will no longer be in the operating department. But, again, this is a very aggressive process that we have instituted this year and if it needs to be applied at the other sites, we will do that.

MR. KEISER: As a matter of fact, we need to raise the performance level, raise the performance standard for all 6,000 nuclear employees within the Commonwealth Edison system and we are setting out to put in place the development process to improve that performance. Part and parcel of it is the training department. We are strengthening the training departments at each of the sites and at corporate to raise the level of our mechanical skills and operator skills and managerial skills.

Each of our first line supervisors is being put through a management development process. We have done some assessments of our managers, identified common weaknesses, if you will, or areas where we want to focus --

CHAIRMAN JACKSON: This is across the nuclear enterprise?

MR. KEISER: This is across the nuclear enterprise.

We have identified what competencies we think are most important to us that we need to act upon and so we have developed two two-day sessions of training for all the supervisors. It may take us two years to get through it because there are over 600 supervisors involved. Part of the process is an assessment center on the individuals' competencies. We utilize that assessment center to feed back to the employee and the employees' supervisors, here

are your strengths, here are your weaknesses, put in place a development program.

It is possible that all of our supervisors may not want to be supervisors in the future, may not have those skills. That's fine. We've got a lot of work that needs to be done.

So we are out training the first line supervisors. Our initial first line supervisors, we have changed the selection process. It consists of a formal assessment center, consists of four weeks of training paced over time so you train, go to work, train, go to work, to implement some of the techniques. We have changed the selection process through our promotional sequence so it is referred to as a targeted selection interview process so there is more than one input to the selection of an individual for promotion.

So we are hard at work developing all of our employees and focusing on our managerial skills. We are changing the environment, developing reward and recognition programs so we reward individuals and teams for their superior performance. We have changed the compensation structure so, again, we can reward and recognize our highest performing individuals. So it is not -- the way we see it, LaSalle and Dresden are some quick action to, if you will, make a step change in performance in those areas. But we

are addressing the performance level across all the six sites uniformly.

CHAIRMAN JACKSON: Why not have step change assessments on the operational side or other parts of the organization at the other sites, particularly at Dresden and Quad Cities?

MR. MAIMAN: Dresden has --

MR. KEISER: They have done that. That has taken place. They have kind of shown us the way at the rest of the plants. I mean, in essence, that is the model of both Steve and Mr. Perry and Mr. Kraft in their turnaround at the Quad Cities and Dresden station, right, focus on operations and assessment of the capabilities. It is raising the performance standing but it is raising the training so the individuals can --

CHAIRMAN JACKSON: So you are basically saying you are taking that and propagating it across. It takes slightly different form depending on what you see at the different plants; is that what you are telling us?

MR. MAIMAN: Exactly. And it is really important to understand that the long term effort applies to all six but the short, aggressive efforts are focused actions.

MR. O'CONNOR: I just might add, there is a lot of communication between the senior management of nuclear and the leadership of the union. Mr. Keiser meets every other

week with Mr. Starr and his team and a joint leadership group. That communication has helped immensely, I think, in understanding what is required to get to the levels that we need to get to, has been very helpful.

CHAIRMAN JACKSON: Mr. O'Connor did you have some summary remarks?

MR. O'CONNOR: Yes, thank you, Chairman.

The fundamental purpose for us being here today is to provide you with the information that you have requested, information that hopefully will give you confidence in our ability to operate each of our sites with sustained performance improvement. Before you are representatives from across our entire corporation who are committed to restoring your confidence, as well as the confidence of our customers and our shareholders.

We do understand accountability and have strong reasons to believe that we are prepared to meet our obligations. First, we clearly know where our plants stand today. Byron and Braidwood by most measures have consistently demonstrated overall good performance. Dresden and Quad Cities have shown steady improvement over the last couple of years. We do understand the depth of the issues at both LaSalle and Zion as a result of the unprecedented independent self-assessments we conducted.

More than ever before, we know what our current

performance issues are and we have put in place standards that will be applied across all of our sites. As Mr. Maiman and Mr. Keiser have stated, we have established formal oversight structures that will provide us with the measurements needed for effective oversight and accountability.

Our performance tracking systems will give us early indications of weakness and we have a process that will trigger formal actions if we see any adverse trends surface.

The Nuclear Operations Committee and senior ComEd management are highly involved in the oversight of nuclear activities and there is a clearly defined process for the reporting and monitoring of performance indicators. We intend to continue to conduct aggressive self-assessments of our performance. Last, and this goes to a point that you mentioned and most important are our people. We are providing the best talent available for key positions of leadership for the division, whether they come from within the company or from outside. Our people are demonstrating a willingness and an ability to learn and to implement new approaches to managing our plants.

Throughout all levels of operations, we are focused on improving the work practices and the working environment so that our employees can concentrate on safe

operations and I am confident that our people at each one of our stations will perform at increasingly higher levels.

I would like to close, and Mr. Maiman has already mentioned this, that we are operating in a very demanding and challenging period. In the past, the pace and consistency of our improvement efforts has not always been what we intended or expected. No doubt that there will be more challenges as we move forward but we are determined to succeed.

Our entire industry is going through the greatest change that it has ever seen in its history. I can assure you that these changes will not distract us from the focus we have placed on safe nuclear operations.

As I sit before you today, I firmly believe that we are doing the right things to produce the results that we need and that you, we and the public expect.

Thank you very much.

CHAIRMAN JACKSON: Thank you, Mr. O'Connor. I have one follow-up question for you.

Can you tell the Commission a little about your recent decision with respect to the early closing of the Zion station? What impact that is having on your overall corporate planning, your resource expenditure at the site and on your work force, the impact on your work force?

MR. O'CONNOR: First, it was an economic decision

alone. We looked forward to determine whether or not by extending the life to the year 2013 there was an economic advantage to doing so and we decided that beyond the year 2005 that it was not there. And we have been very faithful, I believe, with our employees of pointing out to them that we would have to justify our assets going forward.

We had a similar situation with two of our fossil plants that we recently sold. So our employees clearly, you know, don't like the fact that we may be shortening the life of that plant but they, hopefully, are beginning to understand why we did what we did in canceling those steam generators.

The steam generators represented an expenditure of $400 million off into the future. It was not in the budget for this year, for that plant. So the only question was whether or not we would make the commitment going forward now which we had to do by April 30 to determine whether those steam generators should be completed. We decided that was kind of the drop dead date for us. We decided not to do that.

In talking to Mr. Muller who was the site vice president and to Mr. Maiman who did an all-hands review on four separate -- an all-day session with all the employees at Zion station, the mood is clearly very somber. People had expected that that plant would be there for a longer

period than it is going to be. But, in talking to Mr. Muller very recently, he indicates to me that the employees accept the fact that the life of that plant may be shortened and that they are going to do the very best that they can to operate it as well as they can. But, clearly, it was a shock to them.

CHAIRMAN JACKSON: In terms of your corporate planning and resource expenditure, is this changing any of your -- I mean, how does this affect what other capital improvements, material condition, changes, et cetera, that you might --

MR. O'CONNOR: Nothing. It will have at the present time no impact whatsoever on any of the other proposed capital expenditures that we have.

CHAIRMAN JACKSON: Commissioner Rogers.

COMMISSIONER ROGERS: I would like to just go back to the advantages-of-size slide, the two bullets on there having to do with peer groups and engineering. I have a couple of questions, maybe the engineering first.

How many engineers do you have at each site? You mentioned 800 engineers. How are they deployed, how many at corporate headquarters versus how many are onsite? And you have engineering assurance groups at each site, and how large are they?

MR. KEISER: First let me address the number at

each site. We're around 120 or so in the division, and the rest are spread almost equally among the sites.

I need to tell you, though, that our full complement of engineering people is about 1,500; 800 of those are Commonwealth Edison employees; we're going to about 900. The other 700 are brought in on temporary basis. Number 1, we have the design-basis effort that we're working on over the next couple of years. Number 2, we have these assurance groups that we put in place. Number 3, and this is a big one, we have the steam generator replacement effort for Byron and Braidwood. So those require short-term but large numbers of engineers.

COMMISSIONER ROGERS: The assurance groups at each site, how many engineers are there in each of those groups for those sites?

MR. MAIMAN: Do you know, Harry? It's about four?

MR. KEISER: About three.

COMMISSIONER ROGERS: About three people?

MR. MAIMAN: Right, full-time equivalent, yes.

COMMISSIONER ROGERS: The peer groups, I have a couple of questions there. You mentioned you have nine teams.

MR. MAIMAN: Yes.

COMMISSIONER ROGERS: What was the basis for defining those teams to be nine? I mean, what are they,

roughly? What do they cover.

MR. O'CONNOR: If we could have slide L-1, please?

MR. MAIMAN: Those are the peer groups that we have in place. The focus of the peer groups is to provide the common processes that we talked about. If we truly -- let me back up. I do have, I believe, the best people in the industry running these plants, and if I just sent them off, I have no doubt that they would be able to make each one of those plants perform very well. But if we're going to compete going forward, we've got to do better than just individual performance, and so we need to be able to share and use the best practices, standards, policies, processes. And that's what the peer groups are all about, to put together the best from each one of our sites, the best from across the country, wherever we get the best practice, and this is the division that we decided to break it up into so that we could focus on those processes.

MR. KEISER: The management administration, work management, equipment reliability, configuration control, and materials and services come from the advanced light water reactor program and in essence where the industry got together and defined these as the critical processes within the powerplant. So they are truly process-oriented. The other ones are activities upon which we want focus and step change and improvement. Thus it's outage performance, it's

operations and training. So we establish peer groups for process orientation and then for functionality orientation in addition to these peer groups we have approximately 55 peer groups within engineering that we're utilizing to set the standards seismic calculations, if you will, heat-transfer fluid flow, within a specific area, so there are technically oriented peer groups of the 55 engineering ones process oriented management administration, et cetera, and then function-oriented operations, outages.

COMMISSIONER ROGERS: Well, you mentioned that each one of these is led by a corporate vice-president level person.

MR. KEISER: As a sponsor; yes, sir.

COMMISSIONER ROGERS: Yes. Now what's the lowest level of person on any of the peer groups? In other words, for instance, do you have any people on a peer group that come from the union?

MR. KEISER: The peer groups spawn what we call win teams, and there can be union representation on the WIN teams. In addition to these peer-group efforts, we have an issue referred to as engage the work force. And those ares cross-functional multidiscipline teams, and at some of the sites they are led by our craft employees, particularly I want to mention the Quad Cities one that we're focusing on industrial safety. That is being led by an individual from

the craft.

COMMISSIONER ROGERS: There's a whole concept, the peer concept, it seems to me, has to in some way embrace everybody.

MR. KEISER: Absolutely correct.

MR. O'CONNOR: We would agree.

CHAIRMAN JACKSON: Commissioner Diaz.

COMMISSIONER DIAZ: I believe that you firmly believe that you're doing the right thing, and I believe you presented here your philosophy and some major details of a plan that you're trying to implement or are implementing, and you also provide a lots of information to the staff.

But I do have a problem, and the problem is that we are seeing each and every one of these things as major commitments, and I understand that, but I fail to see details, even at the level of the Commission, like Commissioner Rogers was just pointing out, you are doing some very good things trying to assemble a peer group. In the entire discussion we went -- repeated many things, and I believe that's a good philosophy. I think you have -- those are limits in there.

But I don't know whether it is my lack of capability is because it's Friday, but I am seeing the second level of details that would allow the Commission to really be satisfied that you're doing what you say that

you're doing. And I have the same problem with Millstone very recently. And I am concerned that maybe we're not asking the right questions. Maybe we should specifically say if you have a model in how you're going to do these things, present the model, give us the, you know, not the little, tiny details, but what is the model that we're using to make this change. And show in there, if you're using indicators, how indicators are being used. Show us an example of how that is being used. I think we need to know at what level are you penetrating the organization, at what level are you effecting these changes, and I am sorry, I'm not seeing that.

There's a lot of information in here, but at the Commission meeting I believe an additional level of information is needed beyond that what you presented, and I think it's very important to us. We want you to give us your views. We need to know what you think. We need to know what are you actually doing. And we go through this document and we can see all kinds of things going different ways. But you have the knowledge to put them together into models, charts, graphs, things that actually indicate what your trends are. If they are not completed, tell us they're not completed. If you get a preliminary indication, that's fine, but I need to see how they interact. Maybe it is the serious problem that I am, you know, an engineer, and I need

to see how these things function, but I am not seeing how they function. I am really totally baffled that we have this many philosophical statements and this many commitments, but I don't see where they fit, and I am disappointed in it.

MR. KEISER: We would appreciate the opportunity to either return to the Commission, meet with yourself --

CHAIRMAN JACKSON: You will have the opportunity to return.

MR. KEISER: There is a lot of detail. There is a lot of detail.

COMMISSIONER DIAZ: But I want to be clear, we don't need detail that you provide the staff, but we need, when you say we're making this major commitment and we're making a new model in how to do peer review, you presented in there a graph. We need to know how that is working. That is information that would allow us to know how you're impacting your human resources. If you're doing something in requalification training, okay, you'll say this is what we're doing, this is the emphasis that we're taking. If you're redoing your operator training, okay, I mean this is the concept, this is what we do. Very simple at policy level, but something that gives us something to hang our hat on. And I don't have it. I'm sorry. I've come out of today's meeting incomplete and baffled, and I don't think

that is right. I think you have the ability of providing that information, and I will respectfully request that you do so.

MR. O'CONNOR: Commissioner, we'll try to be as responsive as we can to that request. We had thought that in our submittal to you with the information that was contained in there that it formed a baseline that would give everyone an opportunity to judge, assess the performance, the trends of improvement that we expect to achieve. We thought that was here. As you noted, I am certain many of the performance indicators that we selected are not yet perfected because, as we indicated, we wanted some more trial and testing experience over the next few months to get them there. But we will provide for you more detail.

CHAIRMAN JACKSON: I think what we're talking about, Mr. O'Connor, is really a presentational issue. I don't think -- I mean, the real issue is, of course, that document is a compendium. The issue of course whenever you come to a public Commission meeting is what you choose to publicly present or not. I think what the Commissioner is saying is that there's an opportunity going forward to extract from the voluminous detail that may be in the document that's submitted through the formal channels some key information that should be presented in the public arena, and --

MR. O'CONNOR: We understand that.

CHAIRMAN JACKSON: And a lot of that has to do with some of the kinds of questions that I've been asking you, that Commissioner Rogers has asked, that Commissioner McGaffigan in about 30 seconds will have the opportunity to ask. But it is a lot easier and it allows for more coherent understanding if, in fact, you do that instead of our having to draw it out.

COMMISSIONER ROGERS: Excuse me. Could I just jump on that little bit?

CHAIRMAN JACKSON: Sure.

COMMISSIONER ROGERS: You already said the right words. You said, you know, what management measures, management gets. Well, you know, we're looking for the measures. You've said what the measures are, but you haven't said what the, you know, the data are that go along with those measures, what you're going to measure, and even in a preliminary way something that begins to show that there are quantitative determinations of some of these measures if they're available. And I think that's a bit what I'm --

CHAIRMAN JACKSON: Right. I'll just say, for instance, I think you missed an opportunity, for instance, to talk about in more detail what you're doing at Zion with the assessments, with the -- and LaSalle -- with the

intensified training, what that means, because we're faced with an issue having to do with operator actions relative to the reactivity -- I mean the criticality control, however you want to talk about it, movement of rods at Zion. That's an issue, that reveals problems.

What were these assessments? Why were you doing them? How is that going to allow us to understand that you, you know, clearly are focused on safe operations and that what you're doing is aimed to get at that? It's 11:47, so we're not going to redo it today, but that's the kind of thing I think the Commission would like to hear.

You know, each one of us may focus in different areas, but there's an opportunity to say what are the problems and show us that you've clearly understood them, this is what you're doing specifically and why you -- that -- what you're doing is meant to address, you know, and you think is going to address, and what metrics do you have to show that success or not? I mean, I think that's what we're talking about.

Do you have --

COMMISSIONER DIAZ: Yes, I have just a very brief thing. I know that you might be concerned that your things are not finished, but the fact that they are there and evolving is important.

Borrowing from the wisdom of Commissioner Rogers,

as he said, it is important that there be an error to control a process, and we know that. If you don't have an error, you don't have process variables that you can use. So, you know, even if your indicator is not perfect or is in error, at least it is trending, it is important.

CHAIRMAN JACKSON: Let's give Commissioner McGaffigan an opportunity.

COMMISSIONER McGAFFIGAN: On this issue of performance indicators, Mr. O'Connor, you said that your goal is to be above the industry average in the seven comparative indicators by the year 2000. An example of something -- if you have it, please tell me -- but an example of something that would be useful is to track that now and to tell us where you stand today at the twelve plants and on the seven indicators and then we could sort of track going forward how you're making progress. If you don't have that today, maybe that's something for next time.

MR. O'CONNOR: We will provide that.

COMMISSIONER McGAFFIGAN: Okay.

MR. O'CONNOR: That's a good suggestion.

COMMISSIONER McGAFFIGAN: One of the fundamental issues that it strikes me, you know -- and you do have the advantage or the disadvantage of being here the same week as Millstone, but Mr. Kenyon, when he testified to us in January and then again this week, he talked about inheriting

a dysfunctional organization, inheriting an -- and bringing in a lot of senior managers, as you have done, over the last couple of years, and discovering that people below them, the next level of management, really wasn't very good in some respects. I'm not going to put words in his mouth; we have the exact transcript.

What they instituted at that institution, feeling that they might have fundamental management problems, was a look bottom-up at their managers, not the union folks, but the managers one step or two steps below the folks here at the table and behind you, and in fairly brutal fashion, in January and two days ago, he described a process where, you know, the bottom 10 percent, a lot of them are no longer with Northeast Utilities.

So my question goes to, you know, do you have dysfunctional management below the senior level as he recognized and his senior folks he brought in recognized was the case at Northeast Utilities? And I haven't heard anything -- I heard stuff about the union folks and the operators and whatever, but I haven't heard -- what about, you know, the problem of getting the sort of expectations and performance out of the next level managers in our organization?

CHAIRMAN JACKSON: Well, I'm interested down to the first-level supervision.

COMMISSIONER McGAFFIGAN: Right.

CHAIRMAN JACKSON: Because that's where the rubber meets the road.

MR. MAIMAN: I think Mr. Keiser and I would like to talk about this a little bit. We've already done the 10 percent thing. We didn't perhaps publicize it as much as we should have, but that's behind us.

MR. O'CONNOR: Why don't you describe what that is.

MR. MAIMAN: Well, when we went through our ranking process -- no matter what kind of an organization, there's always the broad middle and there are some that are the top and some that are at the bottom, and those at the bottom were identified and some are no longer with us, others are in different locations and so forth.

But the process that Harry described also, Mr. Keiser described, about the assessments and the feedback and the opportunities to enhance efficient skills, if you will, is a longer term effort. I mean, you don't train people in just a few weeks where there are deficiencies in management skills and so forth.

So we are about that, and maybe we haven't publicized it as aggressively as we should have, but indeed we recognize that as an important adjunct to simply bringing in people from the outside who already possess those skills.

COMMISSIONER McGAFFIGAN: But are you doing -- his process is going to continue. They're going to have another round where employees -- is there any employee evaluation from the bottom up as to who's an effective manager and who isn't? Not that that's, you know, that that is, you know, everything; you may end up having a different judgment and you all have to use your judgment. But, I mean, they have an iterative process going at Millstone to try to fix what they thought was a dysfunctional management team, and the question for you all is is that continuous process necessary.

MR. KEISER: One major difference between Northeast Utilities and Commonwealth Edison is we are operating six different sites that have different levels of performance and different cultures within it. So it would not be fair to characterize Commonwealth Edison as a dysfunctional organization. The approach that Tom and I have been taking is to -- along with Mr. O'Connor and the rest of the team -- is to maximize our economies of scale. That's where our great strength is, that's what our hidden weapon is, if you will.

As I mentioned earlier, we've attempted to set out a program to change the culture of the organization, recognizing the importance of first-line supervisors; and so we did change the compensation system to one of pay for

performance to encourage superior performance on the part of individuals; did come out with reward and recognition programs, again to change the culture.

We did come out with a new performance appraisal process that entailed the ranking of the individuals, identification of our 15 top performers because we want to know who they are so we can advance them through the organization and provide them the development that's needed.

We also did have the opportunity to identify those non-performers and put them all on accelerated development programs so we could take the appropriate action as required. We did focus on the assessment centers, taking all of the first-line supervisors, and we're in the process of that, and putting them through an assessment center to find their strengths and weaknesses and who should or should not be a supervisor, if you will.

Part and parcel of that assessment center is an assessment document, I'll say a validated process for their supervisor to fill out an appraisal on the individual, the peers to fill out an appraisal on the individual and subordinates. So it's a true 360 form, if you will, to provide all this information back to the individual's supervisor and, of course, to the individual so we can develop their strengths and weaknesses and come up with programs. So I mean we just have a significant amount of

activities ongoing to change the culture, to change the performance of the first-line, second-line, third-line individuals.

One of the strengths of having a large organization is that we have a strong need for technical and staff work, so for those who are incompatible as first-line supervisors or supervisors of employees, we can move them off and use their, you know, technical expertise in staff work, et cetera.

So, I mean, I think we are utilizing all of the attributes that Mr. Kenyon will be utilizing at Northeast. He and I have had some conversations about it.

MR. O'CONNOR: Having said all that, we will take a look at what they do in their programs to see if it's applicable to any of our operations.

CHAIRMAN JACKSON: We're waiting for their results, too.

COMMISSIONER McGAFFIGAN: Yes, we're waiting for their results. But I'll tell you, the fundamental issue, when I have people from the industry in talking to me, they honestly think you have substantial management problems and, you know, I don't know quite how that gets conveyed to you all, but in the privacy of my office, just asking your peers, they still think you have substantial management problems as of the last few weeks. Now, they haven't read

your 50.54(f) report, but I just -- you know, I know it's important, and Mr. Maiman said earlier, we have the best people and it's important to motivate the work force, and I know from personal experience, having worked, you know, it's important to motivate the work force by rewarding those who are doing well and not necessarily rewarding or getting rid of the folks who aren't. So if there is a -- I would honestly suggest that you get some frank peer review. You shouldn't get it through me at the -- you know, just talk to your colleagues as to whether they think you're on track yet.

CHAIRMAN JACKSON: I think we need to move along and so I will thank you for now.

We will hear from the staff.

Last is not least but we want to try to be efficient.

MR. CALLAN: Yes, Chairman.

I will say at the outset during Commonwealth Edison's presentation, Bill Beach and I were steadily editing out material so you are going to get a pared down version. But we have a lot of backup material if you have questions.

With me at the table are Bill Beach, to my left, who is the regional administrator for Region III located just outside of Chicago.

To his left, a recent addition to the table, that's why he has a handwritten name tag, is Marc Dapas who is a branch chief in the Division of Reactor Projects in Region III and he has direct oversight responsibility for the Zion and LaSalle stations in Region III. And I made the decision to include him with us because of the pivotal role he plays in the agency's oversight of Commonwealth Edison.

To my right is Frank Miraglia who is the deputy director of the Office of Nuclear Reactor Regulation and then to his right is Roy Zimmerman who is the associate director for projects.

As you said, Chairman, in your opening remarks, our purpose this morning or this afternoon is to briefly provide our assessment of Commonwealth Edison's response to the 10 CFR 50.54(f) letter.

I think it is important to note before I turn the discussion over to Bill Beach that the agency has and continues to invest substantial inspection and oversight resources to the Commonwealth Edison sites. For example, in the 12-month period ending this week, Zion, Dresden and LaSalle stations have each received almost 10,000 hours of direct inspection time and that does not include time spent preparing for inspection or documenting. That is hours on site in the plant by inspectors. That is roughly twice the inspection effort that average two-unit facilities would be

receiving. We have every expectation to continue that level of expenditure and maybe even increase it as we go forward.

So the staff has a solid foundation for developing its own independent perspective on Commonwealth Edison's performance. And, with that, I will turn the discussion over to Bill Beach.

MR. BEACH: Good morning, Chairman, Commissioners. I am here today to present the Staff's assessment of the Commonwealth Edison response to our January 27, 1997, letter requesting information pursuant to 10 CFR Part 50.54(f) to determine what actions if any should be taken to assure Commonwealth Edison company can safely operate its six nuclear stations while sustaining improvement at each of the sites.

Next slide, please.

The Commission requested this information because of the historic and relatively recent cyclic performance of Commonwealth Edison's nuclear sites. As discussed in a previous Commission paper, SECY 92-228 dated June 25, 1992, Commonwealth Edison has developed many improvement programs over the years that have not been fully effective and much of that was discussed in their presentation this morning. I think the important point there is the failure to effectively deal with emerging problems and take lasting corrective actions resulted in cyclic performance.

This performance has been a function of, one, lack of effective management attention and application of resources, weak corporate oversight of nuclear operations, poor problem recognition and the failure to ensure lasting corrective actions, a lack of adequate engineering support and an inability or reluctance to learn from experiences within Commonwealth Edison and at other utilities.

Next slide, please.

CHAIRMAN JACKSON: Before you go, let me just ask you three questions. Given the cyclic performance and given that we are hearing from our own staff, can you discuss the effectiveness of the NRC inspection program and our enforcement policy in identifying and taking appropriate regulatory action concerning the cyclical performance of Commonwealth Edison? That is one question.

The related question is, can our process be improved relative to identifying and preventing cyclical or declining performance?

And then the third question which plays directly off of Mr. Callan's comments about the number of inspection hours, is it additional NRC resources that if focused on Commonwealth Edison any earlier or on a continuing basis have helped to mitigate or change the declining or cyclic performance? Because what we need to understand is both your assessment of where they are today but, since we are

coming off of a history, depending upon the given station one wants to focus on, of over a decade of a certain kind of weak performance, it does beg the question of the effectiveness of our inspection and enforcement policy in addressing these sorts of issues.

MR. CALLAN: Chairman, let me take a stab at that. Actually, it was that line of questioning that was the genesis, in my view, of the staff's decision to issue the 10 CFR 50.54(f) letter. I think if you look at the history of Commonwealth Edison and just look at specific plants, I would argue that the NRC inspection and enforcement programs worked reasonably well. In other words, as individual stations' performance declined to an unacceptable level, the NRC would focus resources, utilize enforcement and then that station's performance would, in fact, improve slightly. But at a cost, a cost of a corresponding decline at another station.

What our inspection and enforcement programs were not and are not equipped to do well is to step back and look at several stations simultaneously and look at a corporate performance and the issuance of this letter to Commonwealth is perhaps maybe the first time that we have systematically done that with the licensee, with a corporate entity.

CHAIRMAN JACKSON: Okay. Mr. Beach.

MR. BEACH: Where are we --

CHAIRMAN JACKSON: The second slide, Evaluation Process.

MR. BEACH: Good, that's the one I want to be on.

As the Chairman stated in the introduction this morning, a multidisciplinary team of senior managers and Staff was assembled to review the response.

The major point we wanted to make in this area, that plays off Joe's answer, is that prior to receiving the response the review team developed assessment criteria for reviewing the content and quality of the response and the assessment criteria were not used to make a pass-fail determination on the quality of the response but rather criteria were developed for those areas that the NRC would expect Commonwealth Edison to address based on the NRC's assessment of the past and current cyclic performance problems.

CHAIRMAN JACKSON: Are those criteria the review criteria for the Commonwealth Edison response available for public scrutiny?

MR. ZIMMERMAN: I can best answer that. That is the first phase. We'll be going over those items on the next slide.

CHAIRMAN JACKSON: Okay.

MR. ZIMMERMAN: In a tiered approach from there the Staff prior to receipt of the letter from Commonwealth

developed a significant number of sub-tier items from which they spun off with questions in each of those areas and I would be glad to talk about that more perhaps when we get to the next slide.

MR. MIRAGLIA: But I think the answer to your question, Madam Chairman, is the Staff's evaluation of the 5054 against the criteria used to come to that judgment, our plans were as indicated in the package we sent to you, which we sent along with a letter to Commonwealth.

CHAIRMAN JACKSON: Put it into the public record?

MR. MIRAGLIA: Put it into the public record.

CHAIRMAN JACKSON: Public record -- that is what I wanted to know.

MR. MIRAGLIA: This is what the Staff did, the criteria used --

CHAIRMAN JACKSON: Fine.

MR. MIRAGLIA: This is the basis for the judgment reflected in a proposed response --

CHAIRMAN JACKSON: Fine. I just want it on the record today.

MR. MIRAGLIA: Yes. Yes, ma'am.

CHAIRMAN JACKSON: Okay.

MR. BEACH: Next slide, please.

The Staff recognizes that the key to avoiding future cyclic performance at the nuclear stations is

effective implementation of sound programs designed to correct the fundamental root causes of performance problems.

Therefore, the Staff reviewed the response to determine if the Licensee, one, recognized and acknowledged the previous and recent cyclic performance weaknesses; two, evaluated the root causes of cyclic performance; three, developed programs or initiatives designed to correct those root causes; four, established goals and standards to measure operational performance; five, developed the self-assessment tools necessary to measure operational performance; and six, specified the actions needed if performance at each station did not meet established goals and standards.

CHAIRMAN JACKSON: And are you telling us there is a check-off on each of these areas?

MR. BEACH: Yes, ma'am.

CHAIRMAN JACKSON: Okay.

MR. BEACH: Next slide, please.

This morning Commonwealth Edison discussed a number of differences in its plans today versus previous plans.

The Staff sees three initiatives discussed in the response that are considered to be improvements over plans developed in the past.

First, the actions taken by the Board of Directors

of Commonwealth Edison, or Board, to increase independent oversight of the Nuclear Program and to increase the financial resources for improving initiatives is a difference.

As indicated in the Commonwealth presentation, the necessary resources were benchmarked against industry good performers and budgets were increased based upon the performance issues facing each plant and the identified needs of the sites for operating safely and sustaining performance improvement.

Second, also fully described in the earlier presentation, actions are being taken by Commonwealth Edison to enhance the oversight of its Nuclear Program at all levels of the organization.

Several specific actions are being taken at the corporate level, division level, and at the site level.

At the corporate level the Board has recently taken a much more direct and active role in ensuring performance improvement in the Nuclear Program and has strengthened the membership in and role of the Nuclear Operations Committee.

The Board has directed the committee to report on the results of its periodic independent assessments of the effectiveness of the improvement plans initiated by Commonwealth Edison management.

At the division level, the Nuclear Operations Division oversight staffing levels have been increased, and the assessment and audit programs are being formalized and expanded.

As Mr. Maiman indicated, the oversight and site quality verification organizations are establishing a division-wide standard analysis and reporting process that is very similar to our integrated performance assessment process, and finally at the site level safety or management review boards are being implemented at each site.

The third initiative considered to be an improvement from those improvement plans in the past involved the formal development of an integrated structure of performance measures and actions that will be taken if the measures are not met. This was discussed in detail by Mr. Keiser and I would point out a meeting is being scheduled for Commonwealth Edison to brief the Staff in more detail regarding these performance measures in the near future.

CHAIRMAN JACKSON: Before you go on, what improvements or activities are missing from the plan or should be further enhanced, from your perspective, and what areas will the Staff emphasize going forward in its monitoring, ongoing monitoring of Commonwealth?

MR. BEACH: I think overall we see very few things

in the response that we wouldn't have put in the response.

I think the problem, as you discussed in the previous presentation, they are at various levels of implementation and whether or not they will work if implemented, you know, is the question of whether or not they are the right ones.

CHAIRMAN JACKSON: Are there particular areas that the Staff is planning to itself emphasize?

MR. ZIMMERMAN: Perhaps there are a few areas that I can mention that came from the review team's efforts.

One of those had to do with the Engineering Assurance Group that was discussed with Commonwealth Edison in terms of understanding how that function will be integrated with the routine engineering efforts that are ongoing at the site and how it will strengthen safety performance.

In our review of their submittal, that was an area that we wanted to carry on additional dialogue with them on.

There was discussion also with CommEd about their communications with the industry at large and between their sites, but didn't see discussion between departments, and they have had some difficulties -- interdepartment dialogue between Operations and Maintenance or Operations and Engineering, and we wanted to discuss that as well.

The lead teams or the peer teams, in understanding

how they will work to get volume from the organization because of the importance of the role of individuals to carry out the work was another area that we wanted to explore.

The initiatives in the maintenance work control area, although there was substance to those, it wasn't clear to us how productivity was going to be improved, how they were going to be able to get more work done through their work control process. We wanted to understand that better as well.

They were silent in the area of improving licensing submittals. That is an area that has been developing recently, and we recognized that some of the areas where we feel there have been shortcomings in the area of licensing it is important for us to bring those forward and discuss that with Commonwealth. We have not done that much in the past but we will be doing it during that meeting as well.

CHAIRMAN JACKSON: You mentioned discussing it with a meeting, so do you anticipate requesting additional information pursuant to 5054?

MR. ZIMMERMAN: Not sure at this point --

CHAIRMAN JACKSON: Okay.

MR. ZIMMERMAN: -- whether that would be needed or not.

MR. MIRAGLIA: I think the characterization in the evaluation that was provided to the Commission, Madam Chairman, indicated that these are areas that the Staff wanted further dialogue, understanding, and discussion on, but I don't think it was characterized in the evaluation that this would constitute an unacceptable response.

This is information that we can get by meeting and having further understanding and then take appropriate actions following those kinds of discussions and dialogue.

CHAIRMAN JACKSON: Okay.

MR. BEACH: I'll get more into detail on that.

CHAIRMAN JACKSON: Okay, very good.

MR. BEACH: Next slide, please.

CHAIRMAN JACKSON: Yes, I'm sorry -- Commissioner McGaffigan?

COMMISSIONER McGAFFIGAN: On the last slide you skipped over one of the -- you know, you said there were three areas for improvement and then you didn't mention this benchmarking financial resources, et cetera, point.

Have you decided that is not an area of improvement, or why did you skip over it? Improvements over previous plans.

MR. BEACH: I did mention it.

COMMISSIONER McGAFFIGAN: Did you?

CHAIRMAN JACKSON: Okay.

MR. BEACH: Yes, sir.

COMMISSIONER McGAFFIGAN: That was part of one?

CHAIRMAN JACKSON: I thought he had talked about it.

MR. BEACH: I am now on the adequacy of response slide.

CHAIRMAN JACKSON: Yes.

MR. BEACH: The staff concluded that the response describes a broadly based and reasonable set of accents which, if effectively implemented, should enhance Commonwealth Edison's capability to operate, monitor and assess its six nuclear stations while sustaining performance improvement at each station. As such, the staff concludes that Commonwealth Edison satisfied the NRC's request for information pursuant to 10 CFR Part 50.54(f).

In reaching this conclusion, the staff determined that the response addressed each of the review objectives discussed earlier. Of particular importance is Commonwealth Edison's initiatives to establish a set of performance measures for assessing and monitoring performance at each station in its proposed actions if these measures are not met. The measures have been established in large part from Commonwealth Edison's assessment of the root causes for its failure to achieve sustained performance improvement that was discussed earlier.

The assessment considered the fundamental causes for performance problems identified in the independent self-assessment team evaluations conducted at LaSalle and Zion. The NRC's 50.54(f) letter requesting information pertaining to the maintenance of the plant engineering and design basis at all six of its sites and the Dresden independent safety inspection.

With respect to the independent self-assessment team evaluations, staff considered these evaluations to be a significant positive initiative because of the independence of these assessments and that they were performed by industry peers.

The staff also recognizes that many actions have already been implemented and other improvement programs and initiatives outlined in the response are new and in different stages of development as we were discussing. However, long-term success is highly dependent on the ability to effectively implement these improvement programs and initiatives.

CHAIRMAN JACKSON: Let me ask you a question about that.

What criteria will the staff use to assess whether the Commonwealth Edison plan is effectively implemented?

MR. MIRAGLIA: I think Bill was prepared to address that in a later slide but, basically, they have

specified criteria and action levels and actions that would be taken to determine the responsiveness of that. So that will -- we are monitoring their response in terms of the overall plan.

With respect to the individual sites, we will continue to monitor and inspect and evaluate each of the sites through our own processes, as we have in the past, as Mr. Callan and Bill have indicated that have been substantially augmented.

Bill might want to add to that.

CHAIRMAN JACKSON: Well, if you are going to speak to it later, we can wait.

MR. BEACH: I am not sure I have the detail you want but there is an opportunity to raise that question and also the current issues at the sites.

CHAIRMAN JACKSON: Okay, very good.

MR. BEACH: Next slide, please.

I would like to take a few moments to discuss the current assessment of performance, our assessment of performance at the six Commonwealth Edison nuclear stations. Obviously, there is a range in performance among the six Commonwealth Edison sites.

At Zion, performance was considered adequate prior to the recent reactivity management event. The event served to highlight the depth of the problems in operational

performance and indicated that improvement is still needed. At LaSalle, problems continue to exist in a number of areas, despite implementation of nearly half of the restart action plan.

Overall performance at Dresden continues to improve. Performance at Quad Cities has been improving over the last six months with both units at power operation for an extended period of time. Overall performance at Braidwood is considered good with noted improvements in material condition. Byron's overall improvement has been good to excellent but there are indications that performance in the areas of maintenance and engineering may have slightly declined, given a recent silting event where some design problems, untimely corrective actions and inadequate surveillance testing collectively may have resulted in a degraded ultimate heat sink under certain design conditions. There has been a consistent level of good performance in the area of operations.

At Zion, both units are currently shut down. In September 1996, Unit Two was shut down and in February of 1997, during a shutdown because of a containment spray pump problem, an operator attempted to return the reactor to a critical state by continuously withdrawing control rods contrary to procedural instructions.

An augmented inspection team identified a number

of human performance deficiencies involving both the operating crew and licensee management. The NRC issued a confirmatory action letter to formalize the licensee's corrective action commitments for the identified performance problems.

The licensee initiated a number of actions to address the identified operator performance problems that included restructuring of the operations department and the implementation of a training upgrade program for licensed operators. As part of the initiative to restructure the operations department, 141 of these employees were selected to undergo a three-week training program aimed at improving performance standards.

To facilitate improvement at Zion, the licensee established a new management team which has communicated goals and expectations to all levels of the organization. However, based on performance to date, it is not apparent that all levels of the organization have fully committed to the new expectations and standards.

We have recently revised the original confirmatory action letter to include specific commitments by the licensee to address the human performance problems and operations, some material condition issues affecting startup and weaknesses in engineering support to operations that have been identified by the NRC and the licensee.

At LaSalle, both units have been shut down since September 1996 to address a variety of human performance deficiencies and hardware problems. A comprehensive restart action plan has been developed. To date, nearly half of the actions in the plan have been completed, however problems involving operator performance, corrective actions and maintenance of the plant's design basis continue to surface.

Licensee has identified weaknesses in command and control, communications and control panel awareness problems exhibited by operators during evaluations of operator performance and simulator exercises.

Depending upon the specific performance deficiency exhibited by an operator, corrective actions consist of either short-term or long-term remediation and reevaluation. As with Zion, a new station management team appears to be providing the station staff with appropriate direction and both plan and corporate management have communicated goals and expectations to all levels of the organization in many different forms.

Although there currently appears to be considerably more commitment of the staff to these standards at LaSalle than at Zion, the licensee's organization still has not yet fully committed to these management expectations and standards. We have issued a confirmatory action letter at LaSalle also to formalize the licensee's corrective

action commitments for identified performance deficiencies addressed in the restart action plan.

Moving on to Dresden, overall performance continues to improve with a consistent level of performance observed in plant operations. Maintenance work activities of the past six months have generally been performed well. Over the last six months, the licensee has focused attention on a number of issues identified last fall during the independent safety inspection.

The NRC issued a confirmatory action letter on November 21, 1996, to confirm the actions the licensee has taken to address the engineering deficiencies identified during the ISI. These actions include the establishment of an engineering assurance group to provide oversight of engineering activities and validation of selected aspects of the design basis for the 12 most risk-significant systems.

At Quad Cities, overall performance over the last six months has been improving. In general, the conduct of operations has improved with relatively few operator errors. The reorganization of maintenance into a number of multi disciplined teams has enhanced teamwork and initiatives in work control have resulted in improving the quality and efficiency of the maintenance activities.

In engineering, the licensee is focused on efforts on improving resource tracking and use with root cause

training and problem identification and resolution. A recent problem with auxiliary switch contacts and 4 kV breakers was satisfactorily resolved with good engineering support to operations and communications between the engineering staffs both at Dresden and Quad Cities where the same problem had occurred.

At Braidwood, Braidwood continues to be viewed as good and has remained generally consistent with the SALP assessment conducted in September 1995. Improvements in a number of areas including a decrease in personnel errors by nonlicensed operators and plant material condition have been observed. Some problems with procedural compliance, particularly in the areas of operations and maintenance, however, are being identified.

Finally, at Byron, while overall performance has been good to excellent, some slight decline in performance has been noted relative to that observed during the last assessment which ended in August 1996. Performance in operations has remained good. Some problems with consistent operational practices between licensed and nonlicensed operators have existed. Operator performance during recent startups and shutdowns has been good.

And that is all I have with respect to the current status of the plants.

CHAIRMAN JACKSON: Let me ask you a couple of

questions, Mr. Beach.

How would you characterize Commonwealth Edison's response to the recent events at Zion and the operator performance issues at LaSalle within the context of this new plan?

MR. BEACH: I think the response to the issues at Zion have been rather aggressive. The actions taken are something that you wouldn't normally see a licensee make these kind of decisions, particularly in deciding to revocate licensed operators, licenses from operators.

The training at LaSalle issues, we have reviewed a number of tapes from when you were there. Many of those deficiencies that are being considered for remediation are management expectations and would not necessarily be things that we would consider failures with respect to an operator licensing examination. So the bottom line, I think, is that the actions that they are taking with respect to operations are aggressive and with fairly high expectations.

CHAIRMAN JACKSON: Can you give us a brief rundown of the status of the various confirmatory action letters that are still in effect that have been issued? You mentioned them. But in terms of where they are relative to the issues in those letters?

MR. BEACH: I am going to repeat them again. But they are at LaSalle, Zion and Dresden.

CHAIRMAN JACKSON: Okay, and can you give us some substance of the letters, you know, what they address and what the status is relative to --

MR. BEACH: Yes, Chairman.

The confirmatory action letter at LaSalle addresses the operator deficiencies, the material condition deficiencies and the engineering issues that aren't specific but are enumerated in the licensee's restart plan. Basically, the confirmatory action letter ties to the restart action plan.

At Zion, most of the commitments tie to the issues with respect to the operator and operator problems that were experienced as a result of the AIT. There are some material condition problems that need to be corrected prior to startup and there are some engineering issues, specifically tied to operability evaluations that need to be corrected prior to startup. That is not -- the CAL there is not as extensive as the one at LaSalle.

The confirmatory action letter at Dresden relates to the engineering issues that were brought up as a result of the independent safety inspection at Dresden and is tied specifically to engineering and also relates corporate wide as to the deficiencies that involve, may involve the potential of being a problem at all six sites.

CHAIRMAN JACKSON: You had a comment?

MR. DAPAS: I was just going to mention that one of the other areas that is addressed in the confirmatory action letter at Zion which we issued as a supplement to the original which we issued for the reactivity management event discusses the results of their training initiatives to address some of the operator performance deficiencies and it also elaborates on having periodic meetings with the NRC to discuss the results of their restart plan implementation so that we can monitor and assess that.

Then we are requesting them to discuss with us the basis for their conclusion that they are ready to restart one of the units at Zion.

CHAIRMAN JACKSON: Are you going to talk about your future actions.

MR. BEACH: Next slide.

Last slide, please.

Given this assessment of performance at each of the six Commonwealth Edison stations, the NRC Staff formulated plans to monitor current performance.

Regarding Zion and LaSalle, the Staff's plan for monitoring licensee performance consists of the following actions: one, Agency resources will continue to be used to augment the region-based inspection program as necessary to address performance issues; and two, the NRC will continue to monitor performance improvement at LaSalle and Zion

stations through the use of the joint Region III - NRR Oversight Panels.

Designated senior oversight managers from NRR and Region III will continue to provide leadership and direction for these multidiscipline panels. The panels will assess the restart action plans for both Zion and LaSalle and monitor Commonwealth Edison's implementation of those plans.

In performing this monitoring and assessment function, the panels will use resources from other NRC offices as necessary. The Staff is using Inspection Manual Chapter 0350, Staff Guidelines for Restart Approval, in its assessment efforts at these plants.

The panels will also monitor and assess Commonwealth Edison's corrective actions associated with commitments in the confirmatory action letters issued to each licensee.

Regarding Dresden, the NRC is continuing to validate and assess licensee corrective actions associated with commitments in the confirmatory action letter. This includes evaluating the effectiveness of the Engineering Assurance Group and the quality of the licensee's design basis validation effort.

We are currently conducting monthly meetings with the licensee to discuss progress on confirmatory action letter commitments.

In addition, an independent safety inspection follow-up outage maintenance team inspection comprised of inspectors from Region III, Region IV and NRR as well as the Illinois State Resident Inspector is scheduled for completion today.

This performance-based inspection focused on observing ongoing maintenance activities and evaluating the control of emergent work planning and radiation protection practices in connection with work activities.

Next week the team will convene to collectively assess the findings and will discuss the results with the licensee at an exit meeting scheduled for May 12th, 1997.

I would also like to point out that the Resident Inspection Program at Zion, LaSalle, and Dresden has been augmented with a full-time region-based Engineering Inspector including and additional region-based Inspector for the review of corporate engineering issues at Commonwealth.

The plans for monitoring Commonwealth Edison performance is centered around the premise that the Agency's inspection and assessment programs must monitor plant performance individually and collectively, such that improvement initiatives at each station can be evaluated and negative performance trends can be identified as early as possible.

In implementing plans, the Staff will assess whether the licensee's actions in response to plant events or issues at one facility are impacting performance at the other Commonwealth Edison sites.

The ability to manage improvement initiatives at one station and not reduce good performance at another station is critical to arresting the previous cyclic performance and the ability to sustain performance improvement. This sustained improvement may only be demonstrated after a significant time period.

Significant Staff and senior management resources continue to be committed to support the augmented inspection and assessment programs associated with Commonwealth Edison facilities. More communication and coordination between regional and headquarters staffs and effective use of Agency processes such as confirmatory action letters, Inspection Manual Chapter 0350, and the plant performance review process have and should continue to facilitate a more comprehensive assessment effort.

As I previously discussed in connection with Zion and LaSalle, the Staff's current strategy for monitoring Commonwealth Edison performance is composed of Agency resources that will continue to be used to augment the region-based inspection program as necessary to address emergent performance issues and the NRC will continue to

monitor performance improvement at LaSalle and Zion through the use of joint oversight panels.

These panels, chaired by senior managers, will assist implementation of the restart action plan and corrective actions associated with the confirmatory action letter commitments at each site.

In addition, Region III and the Office of Nuclear Reactor Regulation will continue to monitor and assess corrective actions associated with the confirmatory action letter issued to Dresden. Staff will also continue to evaluate and close out the independent safety inspection findings at Dresden as appropriate.

The plan performance review process will be used to integrate performance observations from each station to identify any common areas of marginal or unsatisfactory performance.

Quarterly management meetings will be conducted between NRC and Commonwealth Edison senior management to discuss performance at the plants and the effectiveness of corporate and site-specific corrective actions as described in the Licensee's response to the 5054(f) letter.

Further, the NRC will continue to provide increased senior management presence at the facilities to enhance the Agency's understanding of plant performance and provide valuable insights regarding the Staff's assessment

efforts.

Finally, the Staff will continue to keep the Commission informed about performance and will maintain a low threshold for Commission involvement should adverse performance trends be identified.

Consequently, the Staff concludes that Commonwealth Edison satisfied the NRC's request for information pursuant to 5054(f).

CHAIRMAN JACKSON: Let me just say the following. The Commission sent Commonwealth Edison the 50.54(f) letter and requested information, but it was requesting information pursuant to the following question, and that is why the NRC should have confidence in Commonwealth Edison's ability to operate its nuclear station while sustaining performance improvements at each site, and secondly to explain the criteria that Commonwealth Edison has established or plans to establish to measure performance in light of the identified concerns.

Now, it strikes me that in many ways, a lot of the focus of what we've talked about this morning relates in some sense to the second part of that question, namely to explain criteria that they've established or plan to establish to measure performance. But at a certain level, strung through all of this but not explicitly addressed is what is the answer to the first question, and that is why

the NRC should have confidence in Commonwealth Edison's ability to operate its nuclear stations while sustaining performance improvement at each site. And that's really the question I want you in sum to address for the Commission.

As I look over your plans for actions for future assessment of their -- of ComEd's performance, you mentioned various dedicated managers, et cetera; but it seems that our very processes are ones that are hinged on site by site looks, namely looking at restart action plan and how to implement it, looking at confirmatory action letters that have specified things in them relative to the given station to which they were issued, and third the manual chapter 0350 process is specifically station by station or reactor by reactor oriented.

So the real question is, how is the staff going to review and integrate the site-specific assessment finding to reach an overall conclusion as to whether Commonwealth Edison has effectively implemented its performance improvement plan but in a way where they sustain performance at all of the sites? Because that, in the end -- it's not the narrow issue of did they specifically address what they were asked to address in the 50.54(f) letter, and what you've told us is that yes, they have specifically addressed what they were asked to address in the 50.54(f) letter, but inherent in that is why the NRC should have confidence in

ComEd's ability to operate its nuclear stations while sustaining performance improvement at each site.

So I want you to tell me how the various things you've outlined, which seem very site specific, okay, is going to allow an assessment corporate-wide. That's number one. And number two, what is it today that's giving us confidence their ability to do that?

MR. CALLAN: Madam Chairman, I'm going to let NRR respond first, and then let the region follow up.

MR. MIRAGLIA: I think I'm going to answer that in two parts. In terms -- the individual assessments need to be done --

CHAIRMAN JACKSON: Absolutely. Absolutely.

MR. MIRAGLIA: What Bill indicated is that the collective management groups that are looking at those individual assessments are also going to look for commonality between performance issues at the plants to determine the linkage in an integrated type way, and perhaps he went over that too quickly.

So the teams that are looking at the individual sites are not only looking at the sites, but taking a step back and saying the issues at this site, how are they reflected and do they have some common trends to other site, number one; and number two, is the response to those kinds of activities or events changing and do we see a shift in

performance at the other site as a result of that? So that's an independent, based upon our own inspection program, getting that look.

In addition, we'll monitor the commitments and the overall trending that the utility has explained here today. I think the real proof is going to be in the pudding, so to speak, and I think this is the issue that the Commission, Chairman Jackson and Commission Diaz raised. We need to see the positive trends against those types of indicators. So I think it's a combination of those activities by which that's going to be --

CHAIRMAN JACKSON: Well, are you saying that Commonwealth Edison's response to the letter has given you confidence so that you want to give us confidence in Commonwealth Edison's ability to operate its nuclear station while sustaining performance improvement?

MR. MIRAGLIA: I think the answer to that is yes, we've said that they've established measures in a program which, if effectively implemented, will give us that basis to be able to have concrete evidence and indicators that demonstrate that, and I think the utility indicated today that its effectiveness is varied at each of the sites, and it has to be demonstrated across all of the sites. So it is in some respects a commitment and a promise for the future, and to have a plan and a program by which it can be

monitored. We have our own independent inspection findings that will overlay on that, that combination.

CHAIRMAN JACKSON: Remember, this goes back to my original question in terms of the question of the effectiveness of NRC's inspection program and enforcement policy and other regulatory actions in identifying and taking the appropriate regulatory action concerning the performance. You're going to monitor it, and you say you have a methodology to look at it and to integrate what you find, but presumably we've been, you know, monitoring on an overall basis all the time. So have you identified the thresholds for regulatory -- further regulatory action? I mean, I'm interested in, you know, where do we go from here?

MR. CALLAN: Well, Chairman, I think the regulatory thresholds are constant. We're not devising new ones for Commonwealth. We're not going to hesitate at all to apply our various processes.

One perspective, just to follow up with what Frank said, the types of things that the utility, Commonwealth Edison, is proposing, that they presented today and in their submittal, are variations on processes that have worked at other facilities over the years, and we've been associated, all of us at this table, with a fairly large number of facilities that have improved their performance, in some cases dramatically, using some similar types of programs.

So the programs, we have a relatively high confidence level that the programs themselves are solid. They have worked at other facilities. The issue, again, the issue that Bill in his slide underlined, is the implementation aspects of the program, and if we just go on history, then we shouldn't have much confidence, quite frankly. The performance of Commonwealth Edison over the years in implementing programs has been fairly dismal.

And so -- and I think, in their submittal, the licensee made that point themselves, that there is very little that they can point to themselves to give us confidence that this time, these programs that, as I said, that have worked elsewhere will work at Commonwealth. And I think the staff will go forward with a high level of skepticism, the same skepticism that you're reflecting, Chairman, in your questioning; but we have very little to find fault with in the programs because, as I said, they have worked, variations of them have worked elsewhere.

CHAIRMAN JACKSON: Is there a regulatory window within which they're operating that's going to close at any point?

MR. CALLAN: Chairman, could you please ask that again? I didn't understand.

CHAIRMAN JACKSON: Is there a regulatory window within which they are operating that will close at any given

point -- window of time?

MR. CALLAN: I'm still not sure I quite understand the question.

CHAIRMAN JACKSON: How long do they have to have, you know, before we expect to see sustained improvement?

MR. CALLAN: Well, if you'll be patient, I will answer it in the negative. If we see declining performance, we'll act promptly. As was said with the type of oversight we have, I would hope that we would be relatively quick in picking up declining performance, and we'll deal with that aggressively.

If we don't see the kind of sustained improvement that we would hope to see, that's a different issue, and I think before we would act in that instance we would want to interact with the Commission.

CHAIRMAN JACKSON: Okay.

MR. BEACH: I just want to add that these panels, one of the things that they give us the ability to do is rise above the day-to-day inspection issues, and I think one of the things that maybe has been done in the past is that the inspection, the routine inspection has also gotten focused in the improvement plan, and so we've all marched together.

We have to keep the inspection program focused on what it's supposed to be focused on, and hopefully that will

detect a declining trend, and if we have indicators that are different than what the indicators that they have developed, will be beneficial to both of us. What we can't do is fully believe their indicators at the expense of the inspection program.

CHAIRMAN JACKSON: Okay.

You mention augmented region-based inspection. Where are those resources coming from? Are you resource-strained?

MR. BEACH: If you're in a region, you're always resource-strained, but --

CHAIRMAN JACKSON: Don't pay any attention to the fact that --

[Laughter.]

MR. BEACH: We're to the point where we're cutting in on some of the initiatives that maybe we would have done at some of the other sites, but we're doing well at what we have to do right now.

MR. CALLAN: Chairman, let me provide more of an agency perspective. When we invest resources like we're investing at Commonwealth, and as we're investing at Millstone and some other places, there's not only the immediate cost to the region, but those resources come from resources that could be used looking at other facilities that maybe have declining trends that we haven't detected

yet. It's the unknown that as a regulator you worry about almost as much as the known. Our inspection programs are designed largely to ferret out the unknown, and that's where I think this resource expenditure is hurting us. We don't have the resources that I'd like to have to spread out over the other facilities in the country.

CHAIRMAN JACKSON: That actually relates, and it doesn't presuppose any decision, so let me just say that for the record, but that relates to the question I ask, namely -- well really there are two embedded questions. One could argue well, if they don't improve, then just shut them down under an order and they stay there will they get it together. The other has to do with how long do you continue in the mode of the quote unquote intensive inspection application when you do have other things that have to be done?

That's why it is not a -- it's a nontrivial question that I think we have to address, and I think the Commission has to think about, because in a certain sense if one is just kind of helping in coaching or pushing along or limping along, there's a question as to where, you know, there's a cutoff point just because of our own -- the finiteness of our own resources, and the fact that we have a wide range of other nuclear activities that we're responsible for.

Commissioner Rogers.

COMMISSIONER ROGERS: Well, just on that observation, I have to differ with you a little bit in that I think that it's not realistic to say that we shut them down until they get it --

CHAIRMAN JACKSON: I didn't say that.

COMMISSIONER ROGERS: No, no, no, no. I didn't --

CHAIRMAN JACKSON: I didn't say that. I didn't say that.

COMMISSIONER ROGERS: I'm just saying --

CHAIRMAN JACKSON: I'm saying to you the agency has finite resources.

COMMISSIONER ROGERS: I understand that, and if you just let me finish my point, please, that the notion that an option might be shut them down until they get it together does not allow you to not spend those resources to determine if they've got it together. So I don't think that one can simply couch that in quite that simple a term, that the kinds of resources that we need to apply to determine if they have got their act together is exactly what we're doing right now.

So I think that one has to think that at some point those resources are going to have to be directed to determine whether they in fact have gotten their act together. And it is going to take a lot. So I don't quite

see that, you know, a realistic option is -- or the consideration that you shut them down and they come up again. If you shut them down, they won't come up again.

CHAIRMAN JACKSON: The real point has to do with the licensee itself developing the appropriate sense of urgency relative to its own need to improve its performance, and that we ensure that we don't play into, as has been the case, an unduly dragging out sustained improvement in performance, so that things go on and on and on and on. That's what we're talking about here, and that's what we're talking about in terms of not only fairness to the licensee, but fairness to our own staff. And that's all we're really talking about.

Commissioner Diaz.

COMMISSIONER DIAZ: I just want to comment that I believe the staff did an excellent job in putting this part together and I want to congratulate you.

I think that we saw in the discussion it is important that the staff determines if not a threshold level, some level of indication in which it can provide assurance to the Commission that Commonwealth Edison has satisfied those requirements that meet adequate protection of health and safety.

CHAIRMAN JACKSON: Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: You heard Mr. O'Connor

say that one of his goals in the year 2000 is to have all 12 units above the industry average on these seven performance indicators and I don't expect you all to, as some of these are INPO indicators, to know where they are today but is -- where are they today in our indicators? How many of the plants would be in terms of SALP scores or whatever in the top half of the industry? You know, of the 12 at the moment, would Byron and Braidwood be in the top half?

MR. BEACH: I would think Byron and Braidwood would be in the top half. Quad Cities and Dresden are still lagging. They are at the 2.2 to 2.3 threshold but they are moving into the 2 --

COMMISSIONER McGAFFIGAN: You are talking SALP scores?

MR. BEACH: Right, SALP scores. But that would probably be in the lower half. And, of course, Zion and LaSalle are in the lower half.

COMMISSIONER McGAFFIGAN: I averaged the SALP scores and I got 2.21 across the -- for the latest period, knowing that it is hard to compare over time. Zion is actually better in the SALP because it is an older SALP than some of the others.

How many of their plants would be top quartile? Have Byron or Braidwood been in top quartile country at times in their existence?

MR. BEACH: Byron has. There are currently two 1's and two 2's and I am not sure that that is top quartile performance but it's close.

COMMISSIONER McGAFFIGAN: It's close.

Has there ever been a ComEd plant that is strait SALP 1?

MR. BEACH: Byron was. In the previous SALP it was also.

COMMISSIONER McGAFFIGAN: The reason I asked the question is, what is the right goal? You know, Turkey Point went from watch list to getting a superior performer letter this January in three-and-a-half years and I am, you know, it's really -- this discussion is really for ComEd but what is the right goal? Is it to get them all into the top half? Is it to get some into the truly, truly excellent and keep them there category? So does that help pull the others up?

It is the jack-in-the-box issue that the Chairman has been talking about. But sometimes it is good to get someone on a straight SALP 1. Then you really have a benchmark right there and, you know, you can get them all clearly into the top half in our regime and many of them in the top quartile.

It seems like to me that the utilities that succeed, a lot of them, are in this virtuous space where they are both low cost and high safety and everything

is -- all the engines are clicking and it would be delightful if ComEd someday were in that class with their enduring plants.

CHAIRMAN JACKSON: It depends on ComEd.

Are there any closing comments? If not, I would like to thank the Commonwealth Edison representatives for briefing the Commission regarding ongoing activities to improve safety performance at its nuclear stations and I would also like to thank the NRC staff for providing a good overall assessment, their assessment of the Commonwealth Edison response and its strategy for the assessment of Commonwealth Edison performance.

Commonwealth Edison's response to the Commission request for information was broadly based and the staff believes, as presented to us, provided a reasonable set of actions and satisfied the request for information contained in the 50.54(f) letter. And the strategy to improve performance that Commonwealth Edison has outlined appears to be sound.

However, as all of us have said, actions in the end will speak louder than words and one of the most important factors in maintaining the Commission's confidence in Commonwealth Edison's ability to operate the six nuclear sites will be in assuring the effective, as you have indicated, implementation of the actions and programs

described in their response and, as such, the Commission and the Staff will continue to maintain an active interest in Commonwealth Edison's activities and as such we would expect to hear from you on a regularized basis.

Unless there are any further comments, we are adjourned.

[Whereupon, at 12:55 p.m., the public meeting was concluded.]

CERTIFICATE

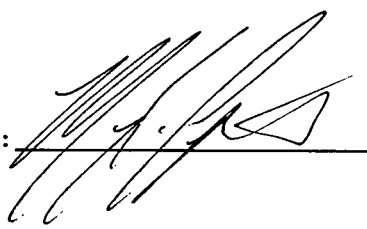
This is to certify that the attached description of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: MEETING WITH COMMONWEALTH EDISON ON RESPONSE TO 10 CFR 50.54 (F) LETTER -- PUBLIC MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Friday, April 25, 1997

was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company.

Transcriber: 

Reporter: Michael G. Paulus

AGENDA

INTRODUCTION AND KEY ACTIONS	J. J. O'CONNOR
NUCLEAR OPERATIONS DIVISION ACTIONS	T. J. MAIMAN
PERFORMANCE MEASURES	H. W. KEISER
CONCLUSIONS	J. J. O'CONNOR

J. J. O'CONNOR
CHAIRMAN OF THE BOARD &
CHIEF EXECUTIVE OFFICER

INTRODUCTION AND KEY ACTIONS

- OVERSIGHT, ASSESSMENT & MONITORING
- FOCUS ON SAFE OPERATIONS
- FINANCIAL AND HUMAN RESOURCES
- ADVANTAGES OF SIZE

OVERSIGHT, ASSESSMENT, AND MONITORING

- RECENT AGGRESSIVE SELF-ASSESSMENTS
- STRENGTHENED BOARD OF DIRECTORS OVERSIGHT
- PERFORMANCE INDICATORS

FOCUS ON SAFE OPERATIONS

- BYRON AND BRAIDWOOD
- DRESDEN AND QUAD CITIES
- APPLYING LESSONS LEARNED TO LASALLE AND ZION
- NO RESTART WITHOUT FULL CONFIDENCE

FINANCIAL AND HUMAN RESOURCES

- FINANCIAL
  - BUDGET INCREASES
  - BUDGET PROCESS
- PEOPLE
  - NOD MANAGEMENT TEAM
  - ENGINEERING
  - SUPPORT FUNCTIONS
  - ENGAGING THE WORKFORCE

ADVANTAGES OF SIZE

- LESSONS LEARNED
- RAISING STANDARDS DIVISION-WIDE
- MANAGING AS A SINGLE ENTERPRISE

T. J. MAIMAN
EXECUTIVE VICE PRESIDENT &
CHIEF NUCLEAR OFFICER

NUCLEAR OPERATIONS DIVISION (NOD) ACTIONS

OVERVIEW

- OVERSIGHT, ASSESSMENT AND MONITORING
- FOCUS ON SAFE OPERATIONS
- FINANCIAL AND HUMAN RESOURCES
- ADVANTAGES OF SIZE

OVERSIGHT, ASSESSMENT, AND MONITORING

- STRONG SENIOR MANAGEMENT
- STRENGTHENED NUCLEAR OVERSIGHT
- AGGRESSIVE ASSESSMENT
- EVENT-FREE CLOCK

FOCUS ON SAFE OPERATIONS

- NUCLEAR OPERATIONS INFORMATION CENTER
- CONTROL ROOM MONITORING
- OVERSIGHT OF MAJOR EVOLUTIONS
- OPERATIONS STANDARDS AND MEASURES

FINANCIAL AND HUMAN RESOURCES

- ENSURING RESOURCES GET RESULTS
- BUSINESS PLANNING PROCESS
- MONTHLY RESOURCE APPLICATION REVIEWS

ADVANTAGES OF SIZE

- PEER GROUPS
  - CORRECTIVE ACTION
  - OUT-OF-SERVICE
  - WORK CONTROL
  - OTHERS
- ENGINEERING

SUMMARY

- DETECT ADVERSE PERFORMANCE AND INTERVENE
- CRITICAL ASSESSMENTS
- SUFFICIENCY AND PRIORITY OF RESOURCES
- CAPTURE AND IMPLEMENT BEST PRACTICES
- SUSTAIN PERFORMANCE IMPROVEMENTS

H. W. KEISER
VICE PRESIDENT &
CHIEF NUCLEAR OPERATING OFFICER

PERFORMANCE MEASURES

- MEASUREMENT NECESSARY FOR IMPROVEMENT
- ENFORCING ACCOUNTABILITY
- ESTABLISHMENT OF COMMON INDICATORS
- PICTURE OF GOOD PLANT
- CAREFUL USE OF INDICATORS

STRUCTURE AND USE OF INDICATORS

- CONSISTENCY AND OVERSIGHT
- TRACKING PROGRESS TOWARD GOALS
- FORMAL REVIEW AND ANALYSIS
- REGULAR REPORTING INCLUDES THE NOC
- COLLECTIVE REVIEW
- FORMAL RESPONSE PROCESS

RESPONSE PROCESS

- STEP 1 - VARIANCE ANALYSIS
- STEP 2 - MANAGEMENT REVIEW MEETING
- STEP 3 - DETAILED ACTION PLAN
- STEP 4 - ANALYSIS/ACTION TEAM REPORTING TO CNOO

NRC STAFF'S ASSESSMENT OF COMMONWEALTH EDISON'S 10 CFR 50.54(F) RESPONSE

A. Bill Beach
Region III
April 25, 1997

BACKGROUND

- ComEd has developed many improvement programs over the years that have not been totally effective
- Past programs did not address the appropriate root causes or the programs were ineffectively implemented
- Tendency to develop new programs to address problems rather than focus on implementation of existing programs
- Narrowly focused corrective actions that addressed only symptoms due to failure to identify underlying root causes

EVALUATION PROCESS

- Assembled multidisciplinary team of managers and staff from several NRC offices
- Developed a set of assessment criteria for reviewing ComEd response
- Criteria based upon NRC assessment of past and current performance problems
- ComEd response contained sufficient information for NRC to reach conclusions regarding adequacy of response

OBJECTIVES OF REVIEW

- Key to avoiding cyclic performance - effective implementation of programs designed to correct fundamental root causes
- NRC staff reviewed ComEd response to determine if it:
  - Recognized and acknowledged performance weaknesses
  - Evaluated the root causes of cyclic performance
  - Developed programs or initiatives designed to correct root causes
  - Established performance goals and standards
  - Developed self-assessment tools to measure performance
  - Specified actions if performance did not meet established goals

IMPROVEMENTS OVER PREVIOUS PLANS

- Increased independent oversight of nuclear program by Board Of Directors
- Benchmarked financial resources to provide additional resources to Nuclear Operations Department for each site
- Enhanced oversight of nuclear program at all levels of organization
- Development of performance measures, criteria, and actions to be taken if performance criteria not met

ADEQUACY OF RESPONSE

- Response provides a broadly based and reasonable set of actions and satisfies the 50.54(f) letter
- ComEd has established a set of performance measures for its assessment and monitoring of performance and proposed actions if criteria are not met
- IF EFFECTIVELY IMPLEMENTED, actions should enhance capability to operate, monitor, and assess six nuclear stations and sustain improvement at each site

CURRENT PERFORMANCE

ZION/LASALLE

- Both units at each site shutdown
- Recent initiatives to address operator performance deficiencies and hardware problems
- Monitoring Restart Action Plan implementation
- Confirmatory Action Letters issued
- Inspection Manual Chapter 0350, "Staff Guidelines for Restart Approval" process implemented
- Designated SES oversight managers
- Augmented region-based inspection program
- Increased NRC senior management focus and presence

CURRENT PERFORMANCE

DRESDEN

- Continued performance improvement
- Confirmatory Action Letter issued following NRC Independent Safety Inspection

QUAD CITIES

- Improving overall performance during last six months

BRAIDWOOD/BYRON

- Overall good performance

NRC ACTIONS FOR FUTURE ASSESSMENT OF COMED'S PERFORMANCE

- As discussed:
  - Monitoring Restart Action Plan implementation
  - Confirmatory Action Letters issued
  - Inspection Manual Chapter 0350, "Staff Guidelines for Restart Approval" process implemented
  - Designated SES oversight managers
  - Augmented region-based inspection program
  - Increased NRC senior management focus and presence
- In addition:
  - Conduct periodic management meetings with ComEd management to assess performance of all 6 stations per 50.54(f) letter
  - Lower threshold for Commission involvement