

ORIGINAL

**UNITED STATES OF AMERICA**  
**NUCLEAR REGULATORY COMMISSION**

**Title:** **MEETING WITH COMMONWEALTH EDISON**  
**Public Meeting**

**Location:** **Rockville, Maryland**

**Date:** **Tuesday, March 2, 1999**

**Pages:** **1 - 104**

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2 UNITED STATES OF AMERICA  
3 NUCLEAR REGULATORY COMMISSION

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5 OFFICE OF THE SECRETARY

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7 MEETING WITH COMMONWEALTH EDISON

8 \*\*\*

9 PUBLIC MEETING

10 \*\*\*

11 Nuclear Regulatory Commission  
12 Room 1F-16, Building 1  
13 One White Flint North  
14 11555 Rockville Pike  
15 Rockville, Maryland

16  
17 Tuesday, March 2, 1999

18 The Commission met in open session, pursuant to  
19 notice, at 9:33 a.m., the Honorable SHIRLEY A. JACKSON,  
20 Chairman of the Commission, presiding.  
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## NRC COMMISSIONERS PRESENT:

3

Nils J. Diaz, Commissioner

4

Greta J. Dicus, Commissioner

5

Jeffrey S. Merrifield, Commissioner

6

Edward McGaffigan, Jr. McGaffigan, Commissioner

7

8

## INDUSTRY ATTENDEES PRESENT:

9

Oliver Kingsley, Commonwealth Edison

10

Christopher Crane, Commonwealth Edison

11

H. Gene Stanley, Commonwealth Edison

12

David Helwig, Commonwealth Edison

13

John Rowe, Unicom

14

## NRC STAFF PRESENT:

15

William Travers, EDO

16

Roy Zimmerman, NRR

17

James Dyer, Region III

18

Geoffrey Grant, Division of Reactor Projects

19

20

## ALSO PRESENT:

21

Annette Vietti-Cook, Secretary of the Commission

22

Karen D. Cyr, General Counsel of the Commission

23

24

25

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

[9:33 a.m.]

CHAIRMAN JACKSON: Good morning, ladies and gentlemen.

The purpose of today's meeting between the Commission, among the Commission, Commonwealth Edison Company and the NRC Staff, is to discuss the results today of Com Ed's efforts to address the cyclic performance of its nuclear facilities. Good morning, gentlemen.

And this is the -- it's not the fourth meeting overall, but it's the fourth in a series of meetings the Commission has held with the company to discuss progress and results of their actions to improve performance and put an end to cyclic up-and-down performance.

In January 1997, the NRC issued a formal request for information pursuant to 10 CFR 50.54(f) requiring Com Ed to explain why the NRC should have confidence in the company's ability to operate its nuclear stations safely, while sustaining performance improvements at each site. And the letter also required the company to describe criteria which would be used to measure performance at all of its nuclear stations.

Com Ed responded to that letter in March 1997, describing a combination of actions which it said would meet the challenges before the company.

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1 In January 1998, the company transmitted to the  
2 NRC its strategic priorities and management processes; that  
3 is, strategic reform initiatives that were developed to  
4 improve the nuclear program. These initiatives were  
5 intended to support four overarching goals established by  
6 Com Ed: namely, operational and technical excellence;  
7 material condition; organizational alignment; and work force  
8 engagement and effective leadership and management.

9 The initiatives envelop the commitments made by  
10 Com Ed in their March 1997 response to the 50.54(f) letter.  
11 Com Ed recently provided the Commission with a brief  
12 assessment of the Quad Cities station.

13 During today's briefing, we hope to hear about  
14 those areas where actions taken under the auspices of the  
15 strategic reform initiatives have clearly addressed cyclic  
16 performance issues and how success has been measured in this  
17 area.

18 In addition, for areas where performance has not  
19 met established expectations, we would be interested in an  
20 honest discussion of the feedback mechanisms and management  
21 tools that will allow the efforts to be refocused.

22 After presentation by Com Ed, the NRC Staff will  
23 present its assessment of the performance of the company's  
24 nuclear plants, and I believe he is here -- we welcome Mr.  
25 Jim Dyer for his first Commission meeting, as regional

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1 administrator for Region III. I ran into him this morning.  
2 Anybody who would move to Chicago in the winter is a good  
3 man.

4 [Laughter.]

5 MR. KINGSLEY: That's right. Excuse me.

6 CHAIRMAN JACKSON: You know yourself.

7 So I understand that copies of the briefing  
8 materials are available at the entrances to the room, and I  
9 welcome the representatives of Commonwealth Edison this  
10 morning, and unless my colleagues have any additional  
11 comments, Mr. Rowe, happy to have you here, and you may  
12 proceed.

13 MR. ROWE: Thank you very much, Chairman Jackson,  
14 members of the Commission.

15 If Brother Kingsley's wife were present, she would  
16 say that any man who moves to Chicago in the middle of the  
17 winter must have a very tolerant and patient spouse, and  
18 were she here, she could say that for herself, but I  
19 wouldn't wish to leave her unrepresented. Or perhaps even  
20 my own.

21 We are pleased to be here again. This is my  
22 second in this series of meetings. Whereas in June we could  
23 say that we had a few buds of progress in meeting the  
24 challenges of our operation and the challenges set forth in  
25 your 50.54(f) letter, I believe we can now claim substantial

1 and tangible progress. Yet it is only a beginning, I think  
2 now a very real beginning, but only a beginning, and the  
3 first obligation that I have as CEO of the company is to  
4 make it clear that I understand, that my board understands  
5 what you know, that Oliver Kingsley and his team understand,  
6 and that is that this is a never-ending, continuous  
7 improvement effort. The first day we come in and tell you  
8 that we have whipped all of these challenges is the day that  
9 you will probably start finding a whole lot of new problems  
10 again. So we don't intend to let that day happen.

11 My own role in this -- and this is both as CEO and  
12 to some extent as a representative of the board of directors  
13 -- has been first to emphasize the need for consistency in  
14 our commitment to superior performance in our nuclear fleet.  
15 It is very clear that some of Com Ed's past woes came from  
16 inconsistency in management and direction, and we must make  
17 it very clear that we will operate these units in a superior  
18 fashion, by your standards, by NRC standards but, perhaps  
19 most importantly of all, in a spirit of continuous  
20 improvement in our own house. I am doing my best to convey  
21 that attitude, and my colleagues who are here today are even  
22 better at it.

23 The second thing I can do is to try to make  
24 certain that Oliver Kingsley is backed by a strong and  
25 developing management team which can inculcate the



1 commitment to excellence down into the roots of the company.  
2 We have a long way yet to go in that regard, but the  
3 progress is real, as you will see from the group of people  
4 who are here with Oliver today.

5 We are making the commitments to have good people  
6 in all jobs. We are continuing to make changes where we  
7 have to, but we are trying to do that with people who have  
8 been with us a while where we can, and we are constantly  
9 holding people deeper and deeper to a higher sense of  
10 clarity and consistency.

11 Finally, it is my job to make certain that the  
12 flow of resources, both financial and managerial, is  
13 consistent with the needs of the operation. I have tried to  
14 balance my economic responsibility for the company with this  
15 need for a commitment to operational excellence, by laying  
16 down a broad standard of economic performance, which is  
17 simply if the units cannot be operated in a superior fashion  
18 at going-forward costs which are consistent with the market  
19 value of their output, they will be shut down. I have made  
20 that statement in virtually every set of remarks I make with  
21 employees.

22 Now within that broad competitive umbrella, I have  
23 made it very clear that our nuclear generation group will  
24 get the resources it needs. They are making their budget  
25 recommendations to us, and my finance people and I are

1 accepting them. It is not going the other way around. They  
2 are making it kind of easy because they are committed to  
3 productivity in a way that is at least as skillful as anyone  
4 else in our shop. But the important thing is that we have  
5 learned the lesson that disrupting nuclear planning cycles  
6 for annual budget requirements doesn't save you money, it  
7 costs you money and, therefore, we are committed to  
8 consistency in the flow of resources.

9 I have attempted over the past year, and it is now  
10 something like 50 weeks since I started at Com Ed, to add  
11 what I can to the nuclear operation without getting in the  
12 way, and sometimes a CEO has to pay a little attention to  
13 the Hippocratic oath and know that your first duty is to try  
14 to do no harm, since CEOs are usually having an impact  
15 whether they like it or not.

16 I have visited each of our nuclear stations at  
17 least twice, some three or four times. When I do, I meet  
18 with both management and union employees. I have seen a  
19 number of things getting better, particularly the commitment  
20 to improving material condition, the commitment to  
21 increasing attention to the operability of safety systems,  
22 and the operability of all plant systems, and in the detail  
23 of professionalism in planning.

24 On the other hand, we still have a long way to go  
25 in getting every employee, management and union, to

1 understand the importance of rigor all of the time. Oliver  
2 is working on that.

3 Our performance in the past eight months includes  
4 very successful refueling outages at Braidwood, Quad Cities,  
5 Byron and Dresden. It includes the successful start-up of  
6 LaSalle 1 in August, and both Quad Cities units in late May  
7 and June. It includes significant improvements in the  
8 indicators used by INPO and significant improvements in most  
9 of the other tangible things we can look at, particularly  
10 capacity factors. One that I know will be addressed here  
11 today, because it properly troubled the Commission when we  
12 were here last June, is the reductions we have had in scrams  
13 and in half-scram conditions, and my colleagues will  
14 emphasize those.

15 It is very clear that meeting the challenge the  
16 Commission laid out in the 50.54(f) letter required nothing  
17 less than a complete change in the management structure at  
18 Com Ed. It required a CEO who would seek at most to do no  
19 harm, at best to help. It required a new chief nuclear  
20 officer, and Oliver Kingsley, who is here with me, has  
21 filled that role superbly and without doubt deserves the  
22 lion's share of the credit for the turnaround that I really  
23 believe is beginning and yet, of course, it requires a team  
24 that is much broader and deeper than any one person.

25 One of the things that Oliver hopes to show you



1 today is that we are building a management that shares his  
2 values, and that decreasingly this will be a one-man show.  
3 It is terribly important that we get breadth and depth in  
4 all of this, and we are working on both.

5 Oliver is here with me to my right, as is David  
6 Helwig, our senior vice president of nuclear services, who  
7 will discuss our 13 strategic performance initiatives.  
8 Chris Crane, our relatively new vice president for BWR  
9 operations, will review those units, and Gene Stanley, who  
10 has been with the company a substantially longer period,  
11 will discuss the PWR operations, and Oliver will close.

12 We also have with us today Steve Perry, Jeff  
13 Benjamin, Rod Critch and Jennie Brown, each of whom is a  
14 vice president on the nuclear team and will be available to  
15 answer questions where needed.

16 We are fortunate that Bill Starr, who is president  
17 of the union that represents something like 9000  
18 Commonwealth Edison employees, is here with us. Bill is  
19 willing to answer questions already.

20 CHAIRMAN JACKSON: Why don't you raise your hand?  
21 I think we know a number of people.

22 MR. ROWE: Bill is generally -- he's usually a  
23 little taller than most folks in the room. So it's one of  
24 his negotiating tactics, is to be very big.

25 CHAIRMAN JACKSON: I clearly failed then.

1 MR. ROWE: Me, too, but Bill is here to answer any  
2 questions you may have about the issues between labor and  
3 management in the company. Let me say that we do have  
4 issues, everyone does. We have more than some folks do.  
5 But Bill and his colleagues in the union leadership are  
6 keenly aware of the importance of high performance at the  
7 plants to the long-term jobs of their employees, and he and  
8 Oliver, and David Helwig, and Gene Stanley are working  
9 together more every month in an effort to find mutually  
10 beneficial ways of addressing them.

11 Finally, for my own part, I continue to be focused  
12 on setting high standards for sustained nuclear performance,  
13 for making it clear that the plants are economically  
14 accountable in the long run, but will not be jerked around  
15 on day-to-day or year-to-year basis, for providing the  
16 management talent that is needed, and for assuring stability  
17 in the flow of resources. With that, I will defer to Oliver  
18 unless the Commissioners have any questions of me at this  
19 time.

20 MR. KINGSLEY: Thank you, John. Good morning,  
21 Chairman Jackson, Commissioners.

22 May I have the first slide, please?

23 I want to share my perspective on what the ComEd  
24 team has accomplished since we were here last June. Let me  
25 start by saying that we are a significantly improved nuclear

1 program compared to performance of the past. We are going  
2 to show you a number of specific improvements that me  
3 measure throughout our presentation. This improvement has  
4 been achieved through focus on fundamentals and insistence  
5 on high performance standards.

6 But at the same time, I want to make sure that  
7 each of you clearly understands that we are not ready to  
8 declare victory, by no means finished. Much additional work  
9 remains to be done. We are going to outline this throughout  
10 our presentation, where improvements are needed and how  
11 these improvements are being made.

12 May I have the next slide?

13 COMMISSIONER MERRIFIELD: Chairman.

14 CHAIRMAN JACKSON: Yes, please.

15 COMMISSIONER MERRIFIELD: I have one question I  
16 would like to start off with. And I think you may want to  
17 follow through on this as you go through the presentation.

18 MR. KINGSLEY: Okay.

19 COMMISSIONER MERRIFIELD: You have a variety of  
20 plants, some of which are very good performers and some of  
21 which aren't. And one of the issues that you deal with,  
22 having that many plants, is making sure, as you say, to act  
23 as a team so that you won't have a series of nuclear  
24 islands. So, as you go through your discussion, I would be  
25 interested in learning about the communication and



1 cooperation that you have been able to develop throughout  
2 those plants, so that there is that cross-learning between  
3 the plants so that the lessons learned at your good  
4 performers are filtering down, as they should, to your --

5 MR. KINGSLEY: Let me just deal a little bit with  
6 that now. We have what we call peer teams, this would  
7 represent areas such as maintenance, operations, chemistry,  
8 rad con, work control, engineering, et cetera. There's  
9 around 15 of these and we have an executive sponsor. They  
10 meet monthly, they tackle issues.

11 We have a great deal of interactive communication  
12 with our plants on both a general basis. We have a 7:30  
13 morning call where we go through in some detail performance  
14 on the plants. One of the questions we always ask is  
15 whether, if it is an issue at Dresden, is it an issue at  
16 Quad? If it is an issue by Byron, what about Braidwood?

17 We also deal with specific issues, and we have had  
18 several events which we are not satisfied with, even though  
19 not major, programmatic backdowns, and then we critique  
20 those and take those across all five sites. And it is  
21 encouraging to see the sites start to take these issues, and  
22 without being prompted by Oliver Kingsley or David Helwig,  
23 start addressing -- well, the people at Quad say we have  
24 already checked into that, Mr. Kingsley, when Dresden has an  
25 issue.

1 And then we also have a very structured oversight  
2 process out of our corporate office, and this is not just  
3 nuclear oversight, it is all the functional areas that David  
4 has and the area of training that Steve Perry has, where we  
5 take these areas and the oversight insures consistency.

6 We are still working very hard on putting in a  
7 number of fundamentals, I am going to talk to you about  
8 that, where we take these fundamentals and, say, where they  
9 are missing at a plant like Quad Cities, and ensure that  
10 they are in place on Byron to Braidwood, but we spare no one  
11 in this. So we will weave this in through our presentation  
12 today.

13 MR. ROWE: Oliver, if I could just add something.  
14 One of the kind of root cause issues that has haunted the  
15 ComEd nuclear program in the past has been that successes  
16 and good results have been largely the result of initiatives  
17 at individual stations which were inconsistent.

18 MR. KINGSLEY: Right.

19 MR. ROWE: And there was not a sense of respect  
20 for the nuclear generation group leadership and its  
21 contribution that allowed successes at one station to be  
22 generalized, or, indeed, problems at one station to be  
23 generalized and dealt with on an across the board basis.

24 It is very clear to everyone now that the center  
25 of gravity in the nuclear management is the NGG group

1 leadership, Oliver, David Helwig, Gene Stanley, Chris Crane,  
2 Steve Perry, and because these people have the standards and  
3 the commitment to excellence and the personal force, both  
4 through corporate authority and through genuine strength of  
5 character themselves, you know, we are slowly making NGG a  
6 real value added group in generalizing from these  
7 experiences instead of corporate seagulls, or whatever those  
8 kind of expressions are.

9 MR. KINGSLEY: Yeah, there are some more things  
10 with common staff meetings, we have monthly, we have  
11 quarterly business plan reviews. We have a common set of  
12 metrics now in all the plants that I brought, where we track  
13 the performance, so there are a number of things we are  
14 doing, because it is quite important, the question you  
15 asked.

16 I would like to have the next slide, please. And  
17 review with you -- it is also in your handout, it is a  
18 little difficult to see, the tangible results that we have  
19 achieved since we were here in June. These are four of the  
20 high level indicators that we track among many others. I  
21 mentioned the overall performance tracking we do. Our  
22 capacity factor is up to 71.2 percent, that is a full 22  
23 percentage point improvement over 1997, a much higher  
24 percent than that.

25 Our average INPO index, and you can remember that



1 being released in the notes that INPO released, is not  
2 approximately '82. That is a weighted average of a number  
3 of indicators, whether it be a capacity factor, unplanned  
4 capability loss that track plant operations, safety system  
5 reliability, personnel and radiation safety, and is a common  
6 metric used on all the plants. We are at our best ever,  
7 first time over 80 on these plants.

8 I am going to show you later, in fact, you can see  
9 it on there, where the top quartile performance is on all of  
10 these, and the median.

11 CHAIRMAN JACKSON: Well, do you know, Mr.  
12 Kingsley, what is holding you back, what is going to get you  
13 that last?

14 MR. KINGSLEY: Oh, we got it, it is coming up  
15 right here in the -- we have got gap analysis. We are going  
16 to show you what the gaps are. I am going to take one  
17 example and then we will deal with that later in the  
18 presentation, Chairman Jackson.

19 CHAIRMAN JACKSON: Okay. And do you believe that  
20 improvements in material condition have led to your -- are  
21 linked to your improvements in capacity factor?

22 MR. KINGSLEY: Yes, absolutely.

23 CHAIRMAN JACKSON: Okay.

24 MR. KINGSLEY: A big improvement, particularly in  
25 the forced outage rate, which is on this chart. Unplanned

1 scrams, we talked about that at our last briefing. All of  
2 you know the 1998 total, particularly in the first half of  
3 the year, was not satisfactory. We have been actively  
4 implementing scram reduction initiatives on all five of our  
5 sites. We were behind the curve, but you can see that this  
6 work has proven to be fruitful and the results are bearing  
7 out. We have had one scram here in the last eight months.

8 COMMISSIONER McGAFFIGAN: Madame Chairman.

9 CHAIRMAN JACKSON: Yes, please.

10 COMMISSIONER McGAFFIGAN: Have you had manual  
11 scrams during this period? Because, I mean as you probably  
12 are aware, the performance indicator, the staff is  
13 recommending it --

14 MR. KINGSLEY: We had one manual scram on LaSalle  
15 Unit 1 during the startup test program. It involved a  
16 feedwater event, one that we are in the checkout process.  
17 The operators did exactly the right thing, and then we took  
18 a number of corrective actions, particularly with  
19 indication. But that is the only other scram that I am  
20 familiar with during that period of time.

21 COMMISSIONER McGAFFIGAN: Okay.

22 MR. KINGSLEY: Our forced outage rate that  
23 Chairman Jackson mentioned is down considerably, 1.7  
24 percent. That is below the median of the industry, below  
25 the average. It is a result of material condition

1 improvements, and a number of improvements we made in  
2 general operating practices also, which has led to some of  
3 this.

4 Behind all this, we made specific improvements at  
5 each site. Each station surpassed its capacity factor  
6 goals. We completed the outages that John mentioned, and  
7 did a very good job with that. And we made a number of  
8 general improvements at each site.

9 And we are going to talk to you in detail about  
10 the plants. May I have the next slide?

11 Our assessment of the root causes of ComEd's  
12 cyclic performance show clearly that focusing on the  
13 fundamentals was essential and this was the basis of the  
14 SRIs. In addition, our management team was weak. We  
15 strengthened that management team and I am going to talk to  
16 you about that. We put a lot more talent in place.

17 Since I have come aboard we have hired in addition  
18 to myself some 29 new managers -- 11 senior managers. Each  
19 one has turn-around experience, which is important. We  
20 brought in 18 high level middle managers, the vast majority  
21 of whom have turn-around experience. Overall we have added  
22 well over 100 key people. This has resulted in much  
23 stronger, more cohesive leadership being demonstrated, both  
24 at the corporate office and even more importantly at the  
25 sites.

1           We are clearly focused on problem resolution and  
2 to resolve those problems we made a number of operating  
3 practice improvements which was missing. We made  
4 improvements in material condition. We have upgraded  
5 engineering and other essential programs. We have worked  
6 very hard on event investigation and associated corrective  
7 action. The strategic performance initiatives have helped  
8 us establish the fundamentals by defining standards and  
9 expectations. It's also put a rigor in the organization of  
10 having milestones -- we have to have this done by a certain  
11 time -- and it has helped us put in these "how tos." Dave  
12 is going to talk about that when he speaks later.

13           We have also worked very hard on standardizing  
14 programs and processes. This was missing. It was one thing  
15 at one plant, one at another. We did not have a best  
16 practice system and we have made considerable progress on  
17 that.

18           Common themes in all these improvements are clear.  
19 We defined standards and we set expectations with those  
20 standards. Results -- we focus on results. We monitor  
21 performance. We check it very carefully. We have  
22 accountability for results. I clearly tell the people well,  
23 it's good, it's one thing to work hard but you have got to  
24 get results. You have got to get to the bottom line here.

25           We have got strong leadership. Our corporate

1 office now provides support, helps the plants solve  
2 problems, and we have got correct oversight.

3 Collectively these actions effectively address the  
4 issues that led to our previous cyclic performance and we  
5 will continue to support sustained performance going  
6 forward.

7 May I have the next slide?

8 COMMISSIONER MERRIFIELD: Madam Chairman?

9 CHAIRMAN JACKSON: Please.

10 COMMISSIONER MERRIFIELD: I am a new Commissioner  
11 but I know that ComEd has come in before the Commission a  
12 number of times and frequently has talked about -- going  
13 back to this slide -- more effective leadership, problem  
14 resolution, performing strategic initiatives, process  
15 improvements. I mean these are not new concepts that have  
16 been discussed by ComEd, so it would be useful for me to  
17 understand how what you are doing in 1998 is truly different  
18 and the extent to which we can be confident that you will be  
19 able to follow through on this as the years move forward.

20 MR. KINGSLEY: Would you like me to talk about  
21 that now?

22 CHAIRMAN JACKSON: I think it would be better to  
23 allow them to talk about the results, because in the end  
24 that is where the confidence has to lie.

25 MR. KINGSLEY: Right.

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1 CHAIRMAN JACKSON: And you know that I believe  
2 that management is as management does.

3 MR. KINGSLEY: That's right, and if we don't  
4 produce, all the talk in the world is not worth anything.

5 CHAIRMAN JACKSON: Absolutely.

6 COMMISSIONER MERRIFIELD: I would be happy to  
7 withhold that but I would like you to address it later on.

8 MR. KINGSLEY: All right, we will.

9 MR. HELWIG: It will come up in my remarks as  
10 well.

11 MR. KINGSLEY: It is different and we would like  
12 to explain that to you. The fact that we are talking about  
13 improvement does not imply that we think we are there. We  
14 are not close to declaring victory. We are not complacent  
15 with our achievements. We are just simply not there.

16 We have to achieve and sustain long-lasting  
17 improvement in many areas to reach top performance. One of  
18 our top responsibilities has been for ComEd to take  
19 responsibility for its own performance. We were not doing  
20 that.

21 We were not defining our own performance  
22 standards. In other words, we were relying on the Institute  
23 of Nuclear Power Operations and the NRC to kind of instill  
24 performance into an organization. That does not work.

25 We have discussed this with you many times before.

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1 We talked about it. I can remember vividly at the November  
2 4, 1997 meeting I had to talk about this in some detail, but  
3 I am now able to report specific progress on how we are  
4 putting action into this utility responsibility or ComEd  
5 responsibility.

6 We are focused on the rate of improvement. We  
7 call this Delta X and Delta T. Commissioner Merrifield, you  
8 weren't here -- that's just a rate -- and we are also  
9 focusing on closing the performance gap.

10 CHAIRMAN JACKSON: Delta X -- and Delta X?

11 MR. KINGSLEY: That's right. That's that Delta X.

12 We are working hard on continuing this positive  
13 route and we also have a definitive plan that we want to  
14 talk to you about where we are going to meet and surpass  
15 industry standards.

16 We continue to work on instilling standards  
17 throughout the organization. We are doing this in a number  
18 of ways -- through management oversight and support that I  
19 have talked about, so we are making our first-line  
20 supervisors more effective; through coaching and teaching at  
21 all levels; through accountability for performance; through  
22 more effective communication with employees, and I am quite  
23 proud of what we have been able to do here.

24 Bill Starr is here. We have worked very hard on  
25 improving the relationship with the International



1 Brotherhood of Electrical Workers and we are making  
2 progress, forging an effective partnership with the IBEW and  
3 achieving high performance. We cannot do it without having  
4 a good partnership.

5 CHAIRMAN JACKSON: Are you going to talk a little  
6 more about that, and are there site-to-site variations in  
7 terms of union relationships?

8 MR. KINGSLEY: Yes, there are.

9 CHAIRMAN JACKSON: And are there any particular  
10 hard spots?

11 MR. KINGSLEY: No, I don't know of any big hard  
12 spots we've had lack of consistency. We had I'd say a huge  
13 issue with lack of trust. We'd say one thing and do  
14 another. We've had -- I mentioned consistency, which bodes  
15 for problems. We'd do it one way at Dresden, we'd do  
16 another at Quad Cities. We're working very hard right now  
17 on an operations package that we're still negotiating of  
18 putting some consistency in and having this be a win-win.  
19 We have done an in-depth review of grievances, you know,  
20 what's behind those. We've settled a number of grievances  
21 such as at our Dresden plant. So we've put a number of  
22 issues behind us, but we still have work to do here.

23 CHAIRMAN JACKSON: You know, there have been  
24 reports in the trade press about, you know, there have been  
25 complaints of high overtime usage --

1 MR. KINGSLEY: Right.

2 CHAIRMAN JACKSON: And contentions --

3 MR. KINGSLEY: Um-hum.

4 CHAIRMAN JACKSON: That this impacts the  
5 operator's ability to operate safely. I mean, is there  
6 anything in your collective bargaining agreement that you'd  
7 be looking at that relative to whether it's forcing some --  
8 number of hours?

9 MR. KINGSLEY: We are looking at it, and Gene  
10 Stanley is going to talk about it in detail. We are  
11 addressing some issues in the collective bargaining  
12 agreement. However, overall high overtime is down from  
13 '98 -- from '97. We don't see that as a big issue, but  
14 we're going to talk to you in detail about that.

15 CHAIRMAN JACKSON: But the real question I have is  
16 do your employees appreciate that fatigue impacts fitness  
17 for duty and that they can be excused if they're unfit due  
18 to fatigue?

19 MR. KINGSLEY: I think they do.

20 CHAIRMAN JACKSON: Okay.

21 MR. KINGSLEY: Just a little bit on priorities  
22 going forward. We're going to work -- continue to work on  
23 institutionalizing the fundamentals throughout the work  
24 force. We've got work to do, make these improved practices  
25 a way of life, continue to identify and correct problems and

1 take each of our sites to the next level of performance.

2 May I have the next slide.

3 This is also in your handout. As I stated  
4 earlier, we've got a lot of work to do, but we also know  
5 what this work is. And let me explain our workdown process.

6 This slide is fairly busy, and I want to talk to  
7 it in detail. There are some important concepts in it.  
8 First is we have defined annual performance targets for  
9 1999, 2000, and 2001 in our business plan. And we do have a  
10 good business plan now. Each target has detailed action  
11 plans for each year in this business plan. We will be at  
12 top quartile performance or better by the year 2001. And I  
13 want to talk to you about how we're going to achieve that.

14 First step we've done is to benchmark ourselves  
15 against top industry performance, gap analysis. And the  
16 slide gives a specific example in one area. This is what  
17 we -- how we figure out what delta x is. We've talked about  
18 that. You wanted us to come back and show you that.

19 We've got this against the very best top quartile.  
20 We've done it in all areas, capacity factor. We've broken  
21 it down. INPO index, each nine elements. Cost, outage  
22 performance, and it goes on. So we've done some very good  
23 work there, but more importantly we've got action plans in  
24 place to close these gaps, action plans, and we do follow up  
25 and we do hold people accountable for implementing these

1 action plans.

2 CHAIRMAN JACKSON: Let me -- may I ask you a  
3 question? Let me ask you a question. By source-term  
4 reduction, do you mean contamination cleanup or cleanup from  
5 previous spills --

6 MR. KINGSLEY: Primarily in source term it's in  
7 decontamination, hot spots --

8 CHAIRMAN JACKSON: Right.

9 MR. KINGSLEY: In piping, hot spots in the  
10 reactor.

11 CHAIRMAN JACKSON: Right.

12 MR. KINGSLEY: We've got details today. We can  
13 talk about that.

14 CHAIRMAN JACKSON: Um-hum.

15 MR. KINGSLEY: And we've also done a great deal  
16 with kind of recovering the plant. I think at one time Quad  
17 Cities had 22 percent contaminated floor space. That means  
18 you just can't hardly go in areas. And we've got that down  
19 to less than 2 percent. In fact, I believe it's less than 1  
20 right now. That's also in our indicators that we track.

21 CHAIRMAN JACKSON: Yes, because I remember once I  
22 guess it was visiting Dresden, you know, I don't often get,  
23 you know, a net dose from visiting nuclear plants.

24 MR. KINGSLEY: Um-hum.

25 CHAIRMAN JACKSON: And I did --

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1 MR. KINGSLEY: Um-hum.

2 CHAIRMAN JACKSON: Visiting Dresden.

3 MR. KINGSLEY: Um-hum.

4 CHAIRMAN JACKSON: And so it's been a particular  
5 issue of mine with ComEd.

6 MR. KINGSLEY: Well, we've been an outlier.

7 CHAIRMAN JACKSON: Right.

8 MR. KINGSLEY: The bottom of the barrel. We are  
9 making big improvements.

10 CHAIRMAN JACKSON: And let me ask you one last  
11 question. Have you explored what a risk-informed in-service  
12 inspection might mean to collective radiation exposure for  
13 your plants?

14 MR. HELWIG: Yes, ma'am, we have. We've been  
15 following the pilots done on that at the other plants, and  
16 we'll be pursuing that subject in our business plans here in  
17 the next couple of years.

18 CHAIRMAN JACKSON: Okay. All right. Thank you.

19 MR. KINGSLEY: I'd like to illustrate on this  
20 chart real quickly. We just pick the INPO index. It is  
21 charted. On the left-hand side it shows the end of year  
22 1998, and then it shows our target for the year 2001. This  
23 is above the top quartile in the industry. We've got the  
24 gaps broken down. And on the right-hand side we've picked  
25 an example. Sounds like we picked the right one in

1 radiation exposure for Quad Cities. It's an outlier.

2 We've broken this down into every aspect above the  
3 top quartile, and then we've got specific plans in place  
4 both on an annual basis, both on a refueling basis, both on  
5 a mid-cycle source-term reduction. Refueling outage  
6 duration. ISI program. And I won't go into all of those,  
7 but it's in there. And the sites are held accountable.

8 So I wanted to leave you with a message. We've  
9 got specific plans in place, and we are going to take these  
10 sites to the next level.

11 Now I'd like to have David Helwig, subject to any  
12 questions, move on and talk about the strategic reform  
13 initiatives.

14 David?

15 MR. HELWIG: Thank you very much.

16 As the Chairman and Oliver mentioned, the 13 SRIs  
17 were formulated to focus our efforts on breaking our  
18 historic pattern of cyclical performance. They also proved  
19 to provide an effective mechanism to communicate with our  
20 work force and other constituencies about what our focus is  
21 and what our priorities are.

22 Collectively the 13 SRIs were designed to arrest  
23 this cyclical performance by providing a focus on  
24 performance and results throughout the entire organization;  
25 by defining clear expectations and standards; by putting in

1 place the basic processes and fundamentals essential for  
2 improved performance; by establishing clear roles and  
3 responsibilities throughout all facets of the organization,  
4 and, lastly, ensuring more effective oversight.

5 The implementation of each specific action set  
6 forth under these SRIs has now been completed, but in truth  
7 we're really never done. These are really areas of  
8 management focus, and we have really just merely succeeded  
9 in laying the foundation for continuous improvement.

10 Next slide, please.

11 MR. KINGSLEY: This is one of the differences of  
12 what was not there and what's now in place that Commissioner  
13 Merrifield asked about.

14 MR. HELWIG: Could I have the next slide, please?

15 Upon completion of the action plans under each of  
16 these strategic reform initiatives, we have conducted what I  
17 call targeted and focused effectiveness reviews. The SRI  
18 owners, such as myself, were responsible to arrange for an  
19 assessment of what had been accomplished, given the  
20 variation in the topics that these SRIs covered, the means  
21 of performing the effectiveness reviews varied accordingly,  
22 but each represents a thorough self-assessment of what's  
23 been accomplished and what remains to be accomplished.

24 In each case, we validated that the original  
25 purpose of the SRI had been satisfied. In other words, the



1 fundamental processes were defined, were put in place, and  
2 were in use. We also identified areas requiring further  
3 improvement through these self-assessments.

4 CHAIRMAN JACKSON: What are some of the major  
5 areas for improvement that have been identified common to  
6 all the sites? Can you --

7 MR. HELWIG: Yes, ma'am, I've chosen two examples  
8 that I'll use in the next several slides --

9 CHAIRMAN JACKSON: Oh, okay. Then I'll wait.  
10 Fine.

11 MR. HELWIG: To illustrate that.

12 CHAIRMAN JACKSON: Fine. Um-hum.

13 MR. HELWIG: In addition to these targeted reviews  
14 for each of the specific SRIs, we will be performing an  
15 overall effectiveness review. We've now prepared an  
16 assessment plan for that. We've assembled four teams, and  
17 we'll be conducting this overall effectiveness review  
18 starting the end of March, latter part of March, and  
19 concluding in mid-April. Following the conclusion of that  
20 review, the findings will be presented to our senior  
21 management team and we'll disposition all those findings as  
22 input to our continuous improvement processes.

23 Can I have the next slide, please?

24 CHAIRMAN JACKSON: Where are your outside experts?

25 MR. HEWLING: They've been drawn from our nuclear

1 safety review boards that include outside participation --  
2 Mr. Cain, Sylvia, Isanhan and Townsend -- all of whom are  
3 outside members of our nuclear safety review boards, which  
4 gives them intimate familiarity with our issues, our  
5 performance, and the areas that require attention.

6 Other team members have substantial experience,  
7 evaluation type experience, through assignments at the  
8 Institute of Nuclear Power Operations and assignments like  
9 that, experiences such as that. So we have a diverse  
10 background of people from within the organization, from the  
11 sites, from our corporate organization and from outside of  
12 the company.

13 I have selected two of what I consider to be the  
14 most important and fundamental of the SRIs to illustrate the  
15 results of our internal effectiveness reviews.

16 NGG-1 was our initiative to strengthen performance  
17 monitoring and management. Of course, it's absolutely  
18 fundamental to have the right measures in place and to pay  
19 attention to them as a management team and use them  
20 effectively.

21 Beginning with the accomplishments, out of our  
22 effectiveness review, we verified and validated that in fact  
23 we had established a set of comprehensive, consistent and  
24 integrated top-level and supporting performance measures.  
25 There are about 50 top-level performance indicators that we

1 use for all of the plants and compile them for an overall  
2 view of performance across all the sites within the NGG, and  
3 about 120 additional lower level and supporting indicators  
4 that are compiled behind this on a monthly basis for each  
5 and every one of the sites. I didn't bother to bring all  
6 five of those books -- it makes quite a volume of material  
7 when you line them up -- but it's a very valuable tool for  
8 us.

9 One of the things that I think has been  
10 exceptional about what we have accomplished here compared to  
11 what I've been able to be involved with elsewhere and  
12 accomplish is that all of these performance measures are  
13 lined up with our goals and the gap analysis and improvement  
14 initiatives that Oliver was describing that are imbedded in  
15 our business plan. So it's an integrated set of measures,  
16 goals, improvement initiatives to get us to the performance  
17 levels that we intend to get to over the next couple of  
18 years.

19 In fact, having set up our performance measures in  
20 this way, we do not need to have a separate management  
21 process for their use and implementation. They're inherent  
22 in the way we manage. As a result, we've got an integrated  
23 process where these are used for our day-to-day management,  
24 in our monthly review meetings, in our staff meetings, in  
25 our business plan performance review meetings to keep us

1 constantly focused on what our actual performance is and  
2 what progress we're making along our improvement initiatives  
3 in each and every area.

4 In this example of this SRI, the remaining focus  
5 area that we identified -- we called it focus area -- that  
6 means where we're supposed to continue to improve -- we  
7 identified that we were not as effective yet as we need to  
8 be in the use of this information for trending and analysis,  
9 requires at the moment -- it varies a bit from site to site,  
10 but I would characterize it requires a great deal of  
11 discussion to pursue the insights behind any measure that  
12 you want to understand its trend. That is the key area that  
13 we identified for further improvement. I personally believe  
14 that's a maturing process as we learn how to use these and  
15 install that throughout the organization.

16 The second example I've chosen for discussion is  
17 NGG-3, ensuring excellence in plant material condition, as  
18 you asked about earlier. I believe that our improvements in  
19 this area have most definitely contributed to the improved  
20 performance that we've been able to demonstrate within the  
21 past year.

22 This material condition issue is absolutely  
23 fundamental to plant reliability and, of course, to the  
24 degree of challenge that the operators face during  
25 day-to-day operations or when faced with a transient.

1 In terms of accomplishments here, we have, number  
2 one, adopted industry best practices for work planning and  
3 management. To your point, Commissioner Merrifield, there  
4 was very little done in terms of standardization across all  
5 of the sites. This is an area where we have done extensive  
6 work in identifying best practices from elsewhere, bringing  
7 them into the company and standardizing them across all of  
8 the plants.

9 We've also put in place a coherent system for  
10 measuring the health of our systems or the condition of our  
11 station systems. This includes but is not limited to  
12 maintenance rule considerations.

13 We have also developed a comprehensive model of  
14 the processes that support material condition improvement  
15 and have a complementary set of performance measures for all  
16 the important aspects of those processes. This again has  
17 been accomplished across all of the organization in a very  
18 highly organized and standard way.

19 Finally, we have established standard methods for  
20 reporting and communicating on our material condition and  
21 our progress on material condition improvements at each and  
22 every one of the sites.

23 To your question earlier on teamwork and  
24 cooperation amongst the sites directly related to material  
25 condition issues, as a matter of fact, on this morning's

1 conference call amongst all the sites going over issues and  
2 comparing notes, our Dresden plant indicated that they were  
3 having a problem with the feedwater heater level controls on  
4 a couple of feedwater heaters, and unprompted, the  
5 management from our LaSalle plant indicated that they would  
6 send over some of their engineers to that plant who had  
7 recent experience troubleshooting and solving problems with  
8 that very equipment.

9           So I believe it is noteworthy and we are  
10 definitely seeing on a day-to-day basis, as Oliver  
11 indicated, unprompted -- much more frequently unprompted  
12 than it was even six months ago -- help and cooperation and  
13 teamwork on solving plant performance and material condition  
14 issues.

15           To your historic question, Commissioner  
16 Merrifield, I would say that although there had been lots of  
17 general talk about teamwork and cooperation amongst the  
18 sites, in my observation, very little had actually been  
19 accomplished before in putting in place the standards, the  
20 consistent processes and then establishing the dialogue for  
21 cooperation.

22           Turning to the focus areas under material  
23 condition or the areas for improvement, we identified that  
24 we do need to improve the effectiveness of our work  
25 management process. Now, this is a very complicated

1 process. It's really the means by which you focus the  
2 entire organization, organize the whole site on what is  
3 being done in what order at what time and with what  
4 priority. So under any circumstances, it requires  
5 continuous management attention.

6 For us, we're still growing into this, and in  
7 fact, our sites are at I guess what I would call varying  
8 degrees of proficiency at the management of their work  
9 activities. There's a great deal of sharing amongst the  
10 sites in this regard that is going on. In fact, we held a  
11 workshop almost all day on Saturday bringing together the  
12 key site management from each of the sites and from Downers  
13 Grove, comparing notes, experiences, and techniques to  
14 improve in this area.

15 We've been holding a number of -- this was the  
16 second in a series of planned workshops, and I think this  
17 was quite effective by way of sharing. In fact, we had the  
18 different sites present different segments of the work  
19 management program to be the catalyst for discussion and the  
20 sharing of experiences.

21 The second item that we identified for further  
22 improvement here was that we do need to refine our  
23 long-term, multi-cycle improvement plans. These are the  
24 plans that identify which major undertakings we intend to  
25 accomplish over upcoming outages in upcoming years on the



1 plants. We did manage to put what would what would --  
2 beyond rudimentary -- a pretty good long-term material  
3 condition plan in place this year but we believe it needs to  
4 be taken to a lower level of detail to further refine it.

5 Lastly, we also identified that we could use our  
6 system health program, what we call our SHIP program --  
7 SHIP, System Health Indicator Program, more effectively as a  
8 leading indicator of conditions which warrant attention in  
9 order to anticipate areas that need attention before they  
10 consequentially reveal themselves.

11 CHAIRMAN JACKSON: Let me ask the gentleman from  
12 the region -- I mean from the union if he would answer this  
13 question. Do you agree that these accomplishments have been  
14 made and that these are the right focus areas and do you  
15 agree that having the work control planning process and the  
16 System Health Indicator Program actually helps you to do a  
17 better job in accomplishing the work and improving the plant  
18 material condition? You can go to the microphone, please.

19 MR. STARR: Madam Chairman, while I am hardly an  
20 expert on these subjects, or could I be expected to be, I  
21 can tell you that I think there's a much more positive  
22 attitude. I think there is a lot more confidence in Mr.  
23 Kingsley as the leader of the Nuclear Division. I believe  
24 that has shown through in recent times, but to speak to  
25 those subjects I would have a difficult time, so that's kind

1 of where we're at.

2 CHAIRMAN JACKSON: Okay.

3 COMMISSIONER McGAFFIGAN: Madam Chairman?

4 CHAIRMAN JACKSON: Please.

5 COMMISSIONER McGAFFIGAN: One area that I think  
6 you had performance indicators in, and I don't want you to  
7 unveil the whole book, but --

8 [Laughter.]

9 COMMISSIONER McGAFFIGAN: -- but this had to do  
10 with willingness of employees to raise safety issues and  
11 timeliness in resolving issues.

12 How has that been going in recent months? Aren't  
13 those indicators that are in your package of indicators?

14 MR. HELWIG: Yes. They are a little hard to  
15 measure, but we do have -- we call them "workforce measures"  
16 covering our training programs, covering what we call a  
17 human resource activity index, which encompasses many of  
18 those --

19 COMMISSIONER McGAFFIGAN: I have in mind more  
20 the -- other licensees come in and talk about just employees  
21 writing up slips in the plants and how many of those they  
22 use as an indicator.

23 MR. HELWIG: You are talking about our Problem  
24 Identification Forms --

25 COMMISSIONER McGAFFIGAN: How many of those --

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1 self-identification?

2 MR. HELWIG: Yes.

3 COMMISSIONER MCGAFFIGAN: And then the timeliness  
4 in resolving anything that gets self-identified by  
5 employees. Are those indicators you use or not?

6 MR. HELWIG: Yes, we do have measures of both the  
7 identification of problems and self-identification. That's  
8 a hard one to measure effectiveness on an absolute scale. I  
9 believe in every instance at every plant our percentage of  
10 self-identification has increased over the past year.

11 MR. KINGSLEY: The backlogs and the -- we call  
12 them Problem Identification Forms has decreased markedly.  
13 We made a number of changes in how top management is  
14 involved in this process. We have simplified this process.  
15 It had become quite bureaucratic. It is now much more  
16 workable.

17 COMMISSIONER MCGAFFIGAN: It is a way, as I  
18 understand it from other plants, of building confidence with  
19 the workforce --

20 MR. KINGSLEY: Right.

21 COMMISSIONER MCGAFFIGAN: -- and communicating  
22 between the workforce that you take the issues they find  
23 seriously and you encourage them to raise them.

24 MR. KINGSLEY: Right.

25 MR. HELWIG: If we act on them in a timely manner.

1 That's Oliver's point, that there was a great deal of  
2 process simplification to be done here. We have made  
3 progress there and have more to do.

4 CHAIRMAN JACKSON: I would just make a  
5 parenthetical remark, that an ultimate metric would be that  
6 if you have a work control planning process and a system  
7 health indicator program and a process model with reporting  
8 that is meant to improve how the work actually gets done  
9 that a metric is the extent to which someone who works in  
10 the plant is aware that such a thing exists.

11 MR. HELWIG: Yes, ma'am.

12 CHAIRMAN JACKSON: And that it actually has an  
13 impact on his or her work, and so that is why I asked the  
14 gentleman -- not to put him on the spot, but until and  
15 unless there is evidence that people understand this and  
16 that it affects them where they live, then one could argue  
17 that you haven't completely succeeded.

18 MR. HELWIG: Your point is well-taken. I think  
19 given the breadth of Bill's responsibilities across the  
20 entire corporation, he doesn't have the opportunity to be as  
21 exposed to this as someone from the plant would be.

22 At each of our plants the health indicators on the  
23 system performance are very well known and very broadly  
24 published as are the productivity numbers on what work is  
25 being accomplished against the plan.

1 CHAIRMAN JACKSON: Okay. I accept that, so then  
2 it would be helpful then to hear that from someone who  
3 actually works in the plant.

4 MR. HELWIG: Yes, ma'am. I think one of the real  
5 tangible measures of the benefit of everything we have done  
6 in the material condition process areas is the amount of  
7 work that we are able to do with the same workforce or  
8 actually a reduced workforce, which is much less dependent  
9 upon contractors, within a period of time, whether it is a  
10 week or a month, and our productivity in that regard is up  
11 substantially and maps directly to the material condition  
12 and plant reliability.

13 CHAIRMAN JACKSON: Okay.

14 MR. HELWIG: On a going-forward basis, I would  
15 like to reiterate that through our SRI efforts we have in  
16 fact been able to achieve tangible performance in each of  
17 these areas. However, we do recognize that in order to  
18 improve our -- to continue our improvement trend and  
19 ultimately to sustain the desired level of performance,  
20 those require continued vigilance on our part. Nothing  
21 works on automatic.

22 The SRIs have managed to serve as focuses for the  
23 key areas of performance that we need to be continually  
24 attentive to. We recognize that to ultimately be successful  
25 the standards defined in these SRIs need to be embraced

1 throughout the organization, just as you have indicated and  
2 that we need to involve the whole team in the process of  
3 continuous improvement.

4 We have made a major step in this direction just  
5 within the last several months by establishing an incentive  
6 program that includes all NGG employees -- management and  
7 hourly workforce -- in an incentive-based program based on  
8 the accomplishments of our improvement goals and the  
9 improvements in performance that we actually will achieve.

10 That is a significant accomplishment, we believe.  
11 Nevertheless, we do recognize that there's much more to do.

12 We understand that workforce engagement and  
13 continuous improvement must be a way of life, and we are  
14 committed to making that happen.

15 COMMISSIONER DIAZ: Madam Chair?

16 CHAIRMAN JACKSON: Please.

17 COMMISSIONER DIAZ: Yes. In the last briefing you  
18 commented that in the recent years in reality you have been  
19 trying to use or living up to NRC performance standards and  
20 that you intended to take this activity and make it  
21 Commonwealth Edison's.

22 MR. HELWIG: Right.

23 COMMISSIONER DIAZ: To what degree have you  
24 succeeded in -- because I think this is a good performance  
25 indicator -- you stand on your own feet and do it.

1 MR. HELWIG: Right. It's a difficult one to  
2 actually measure but a very fundamental issue.

3 I personally believe that we have made a  
4 substantial shift there. I think just the discussions that  
5 we have with our management team -- I can't think of  
6 occasions recently where issues are discussed in terms of  
7 satisfying the NRC instead of satisfying us. If we have an  
8 incident, if we have something that needs to be  
9 investigated, it is prompted by us. It is in fact pursued I  
10 think pretty effectively at this point in terms of the  
11 learning opportunity that it represents for us to learn the  
12 fundamental issues that underlie a problem that we encounter  
13 and then share it across the sites, so I really believe that  
14 the feel of how things are conducted has changed  
15 substantially in that regard.

16 I think we are setting the standards.

17 MR. KINGSLEY: Let me give you an example. We  
18 have has some radiation protection deficiencies at LaSalle  
19 County. We identified that. Our corporate oversight plan  
20 identified the issues and I was talking to the Regional  
21 Administrator and he pointed that out. NRC also identified  
22 it. We had already asked for a meeting with the NRC to come  
23 in and explain what we were doing without being prompted in  
24 that area, so I think it is taking hold.

25 It still needs more work but we have made

1 substantial progress in taking accountability for what these  
2 standards are and actually saying that they are ours versus  
3 what someone else is imposing upon us, Commissioner Diaz.

4 COMMISSIONER DIAZ: So you are more in control of  
5 your destiny, is that how you --

6 MR. KINGSLEY: Yes, yes.

7 COMMISSIONER DIAZ: Thank you.

8 CHAIRMAN JACKSON: Please.

9 MR. HELWIG: I will now turn the presentation over  
10 to Chris Crane, who will discuss the BWRs.

11 MR. CRANE: Thank you, David. Good morning. I am  
12 Chris Crane, the Vice President responsible for the BWRs and  
13 I will be reviewing their accomplishments and current  
14 performance.

15 Each of the BWRs has taken significant steps  
16 forward in their performance but we do have a clear  
17 recognition that there is more work to be performed to reach  
18 that top quartile performance.

19 First, I will start with Quad Cities. Throughout  
20 1998 and into 1999 Quad Cities continues to be engaged in  
21 systematic improvement efforts. We have addressed  
22 long-standing material condition issues and we are also  
23 improving work practices in raising the performance  
24 standards.

25 The results have been measurable in the current



1 performance improvements in comparison to the past station  
2 performance.

3 Overall we believe that the decline in performance  
4 at Quad Cities has been arrested and the performance  
5 continues to improve. However, we do have challenges  
6 remaining and our attention is on sustaining this improving  
7 trend.

8 These charts that are up right now provide the  
9 high level Quad Cities performance indicators. Since the  
10 units restarted in June of '98, the capacity factor has been  
11 at 87.2 percent. The INPO performance indicator has been  
12 remaining steadily the same. Some of those are related to  
13 the long-term shutdown. As it works off the two year  
14 average the performance indicators will improve.

15 Clearly the number of automatic scrams is still  
16 high. This reflects three scrams that occurred soon after  
17 restart between June and September of '98. Like I  
18 mentioned, they were soon after restart. We have since  
19 implemented scram reduction efforts. These efforts have  
20 been effective and we are expanding their scope.

21 Finally, the last -- on the bottom of the chart --  
22 is the forced outage rate, which has steadily decreased in  
23 an improving direction.

24 CHAIRMAN JACKSON: Let me ask you two questions.  
25 Can you speak a little bit to the more recent draindown

1 event, inadvertent draindown?

2 MR. CRANE: Yes. I was going to talk to that. We  
3 were last week performing a nine-day surveillance outage at  
4 Quad Cities. In the evolution of the outage we did have a  
5 lapse of performance in the operations area which is below  
6 our standards, and it is below what we have seen in past  
7 performance from Quad Cities. We took the opportunity to  
8 capitalize on the event. We assembled from Downers Grove,  
9 from the corporate organization, an event team that went in.  
10 We had our support vice president, operations support. We  
11 had other members from the corporate organization. And we  
12 also took an SRO shift manager and event analysis  
13 individuals from the other stations, and went in to start to  
14 do the root cause analysis.

15 At this point, the final root cause analysis is  
16 still underway and we expect that to be complete by Friday,  
17 but some of the preliminary indicators and some of the  
18 interim actions that we have taken are directly focused in  
19 the execution and work management oversight in the  
20 operations area. Some coordination of in control room and  
21 in remote location field communications are needing to be  
22 strengthened to avoid these lapses. So we will continue to  
23 evaluate the event and also be spreading these lessons  
24 learned out to the other stations through the shift  
25 supervisors and the other team members that were evaluating

1 the event.

2 CHAIRMAN JACKSON: And what did you learn from the  
3 December issue related to assessing the risk significance of  
4 the lack of availability of the station blackout diesel  
5 generator?

6 MR. CRANE: Again, it ties into work management  
7 and oversight. We are rolling the September scram from Quad  
8 Cities in with the station blackout event, the diesel that  
9 was taken out of service, in this recent event, and doing an  
10 analysis on the aggregate. That specific event, we had the  
11 programs and processes in place to perform the risk analysis  
12 to take out multiple fire protection detection in tending  
13 equipment systems.

14 There was a change in the scheduling process.  
15 There was not the proper impact evaluation of that work  
16 management window after the change had taken place.  
17 Previously analyzed, understood what was going to come out  
18 of service, was by the matrix, and allowed to be performed.  
19 Emergent work came in and was not properly impact-reviewed  
20 by the shift personnel.

21 CHAIRMAN JACKSON: Well, the question then for me  
22 becomes if I go back to the earlier slides, which were more  
23 generic, having to do with work control process, what does  
24 this tell you in that regard?

25 MR. CRANE: It's in the process of peeling back

1 the onion. First there was a process, a very good process  
2 put in place that controls the activities. There are cycle  
3 plans that tell us what we have to do over the year; there's  
4 12-week rolling windows that tell us what we are doing.  
5 There are divisionalized or train set-up so we would not be  
6 taking out redundant equipment at the same time. Each part  
7 of that process or phase is being trained on and each of the  
8 -- as we get into this event evaluation, we are finding that  
9 we need to strengthen the operations interface and  
10 oversight, not in the pre-planning, but in the execution and  
11 in some potential changes that can occur during the  
12 execution. So it is continuing to drive down on the focus  
13 on the implementation.

14 CHAIRMAN JACKSON: Okay. Yes.

15 COMMISSIONER McGAFFIGAN: Madam Chairman. The  
16 event that you are talking about, the station blackout  
17 diesel generator being out, one problem was that we found,  
18 as I understand it, it was our inspector in the, you know,  
19 the significant reactor finding that was written up about it  
20 says initial licensee corrective actions were poor, problem  
21 identification form was first closed as a data point without  
22 identification of where the on-line risk assessment process  
23 broke down, et cetera. It took a while, a couple days, as I  
24 understand it, before the issue was finally understood, and  
25 so there's -- it was an inspector from the NRC finally,

1 which I am sure Mr. Kingsley does encourage, and then not  
2 promptly figuring out that there was a significant risk  
3 situation, that the inspector was basically right. And so I  
4 don't know whether you want to comment about the slowness of  
5 corrective action in that case -- or not -- of figuring out  
6 what state you were in.

7 CHAIRMAN JACKSON: It raises two issues. One has  
8 to do with work control, and the actual execution, and the  
9 other has to do with having an overall, you know, effective  
10 corrective action that's predicated on the awareness of the  
11 risk significance of -- and since where we are going in our  
12 regulatory program will give increased emphasis, you know,  
13 to these kinds of things, it is a significant issue from  
14 that point of view.

15 MR. CRANE: We are continuing to evaluate, as I  
16 said, in the aggregate some of the immediate recognition or  
17 the immediate recognition that we have on this is there was  
18 a new planning process put in place, risk planning for the  
19 Appendix R and the fire protection issues. There was not  
20 the sensitivity to that through self-identification or the  
21 immediate evaluation, and there was prompting, which is well  
22 below our standards. That is not acceptable. What I can  
23 tell you is we have capitalized on the event, used it to  
24 train and emphasize that there is some significance, and  
25 this is the process that you follow.

1           The initial review was as it was identified, we  
2 need to have some barriers in place to not let this happen.  
3 The answer was very shallow, the barriers are in place and,  
4 as I said, it is below our standards and we did learn from  
5 the event.

6           MR. HELWIG: If I could add a comment or two on  
7 this. We do have the standard methodology in use at all of  
8 the sites to consider risk during on-line activities. The  
9 only thing that is unique at Quad Cities is there are some  
10 special considerations that have been put in place limiting  
11 fire protection equipment. That standard methodology has  
12 been serving us quite well at all of the sites, including  
13 Com Ed -- including Quad Cities. In fact, we have received  
14 recognition of the strengths of that program in evaluations  
15 at LaSalle performed both by the NRC Staff and by INPO in  
16 just recent months.

17           So the basic process, we believe, is quite strong,  
18 is quite robust, is as good as any in the industry. As I  
19 indicated, there was this uniqueness at Quad Cities and, as  
20 Chris indicated, the recognition of the deficiency in  
21 implementation and its import to us was below our  
22 expectations.

23           CHAIRMAN JACKSON: And ours.

24           MR. HELWIG: Yes, ma'am.

25           MR. CRANE: I understand.

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1 Since the restart in June '98, the station has  
2 accomplished sustained dual unit operation. The station did  
3 complete a well executed 28-day refueling outage on unit 1  
4 with no significant events, and an improved material  
5 condition of the plant.

6 As mentioned, we completed a short surveillance  
7 outage on unit 2 last week. Over the weekend we brought the  
8 unit back up, taking the opportunity to again improve the  
9 material condition while we are performing the required  
10 surveillances.

11 The oversight function performed by the onsite and  
12 the corporate organizations has been significantly  
13 strengthened. The station has implemented improvements to  
14 enhance the quality of the engineering products, including  
15 the calculations, plant modifications in the 50.59  
16 evaluation, safety evaluations.

17 Engineering support of operations in technical  
18 programs has continued to improve. The backlog of our  
19 engineering requests has been reduced by more than half.

20 Next slide, please.

21 As I mentioned a moment ago, we are correcting  
22 longstanding equipment issues at Quad Cities. A number of  
23 longstanding material condition issues were corrected in the  
24 refueling outages and the shutdown in '97, '98. For  
25 example, there's the feedwater heater level control system

1 and the standby liquid control system. The operator  
2 challenges have been reduced. For example, operator  
3 work-arounds have been reduced by about half, and control  
4 room distractions have been reduced by more than a half. We  
5 lowered the non-corrective maintenance backlog by about 65  
6 percent.

7 Other accomplishments and results include the fire  
8 protection program improvements. We are making -- we made  
9 our commitments and we are meeting our dates. The  
10 fire-related core damage frequency has been better defined  
11 to be in line with other BWRs, and we have specific plans  
12 for further improvements.

13 Significant human error events decreased by 88  
14 percent from the first half of 1998 to the second half of  
15 1998. Operator errors related to out-of-service has  
16 improved, but we still continue to use that as a focus area  
17 in the operations department.

18 The chemistry performance index is within the  
19 industry's top quartile.

20 CHAIRMAN JACKSON: Let me ask you one question,  
21 this is going back to the Unit 2 reactor vessel drain down  
22 event. Is that considered a significant event vis-a-vis  
23 INPO significant events?

24 MR. CRANE: We have not heard from the evaluation  
25 of the screening from INPO. We were in contact with INPO



1 over the event. We actually had an INPO assist individual  
2 that came up and worked on our event investigation team. I  
3 think it would be premature to judge that. Other instances  
4 similar to this that we have reviewed as we are doing our  
5 OPEX or operating experience through the INPO database where  
6 depicted as noteworthy, which is one threshold lower, but  
7 they were not significant events. But that will be up to  
8 INPO, and we will be watching to see that come out.

9 CHAIRMAN JACKSON: Right, because the Quad Cities  
10 performance assessment that you sent to us said there were  
11 no INPO significant events for 1998.

12 MR. CRANE: Right.

13 CHAIRMAN JACKSON: And this occurred this year,  
14 and I was just curious as to whether this would cross the  
15 threshold of an INPO significant event. I mean it went down  
16 by 40 inches and 6,000 gallons, right?

17 MR. CRANE: Right. In the OPEX database there are  
18 more significant drain downs that would relate to  
19 noteworthy.

20 CHAIRMAN JACKSON: Right. Okay.

21 MR. CRANE: Our focus areas, as I mentioned, the  
22 declining trend in Quad Cities performance has been arrested  
23 and performance is improving overall. Continued efforts in  
24 a number of areas are necessary to achieve the top level of  
25 performance. We have set our goals, specifically,

1 operations, to continue in the ascension in the leadership  
2 role. We will continue to focus on improving the human  
3 performance, attaining the highest level of control room  
4 performance standards and eliminating these configuration  
5 control errors.

6 Management is supporting the improvements in the  
7 work control process. The station plans and work schedules  
8 include specific material condition improvement plans to  
9 eliminate repetitive equipment failures, reduce operator  
10 challenges and also enhance the equipment reliability.

11 We are focusing on reducing a number of  
12 maintenance rule systems. We were at 60, we are currently  
13 down to 25 and, by the end of the year, our plans have us at  
14 eight. As Oliver previously described, we are taking  
15 actions in the area of radiation exposure.

16 Therefore, in summary, the decline in the  
17 performance has been arrested. The performance trend is  
18 improving and our goal is to sustain this improving trend.

19 CHAIRMAN JACKSON: Should capacity factor be  
20 relevant to us as regulators? What is the safety tie?

21 MR. CRANE: The capacity factor is an indicator of  
22 material condition and challenges to the operations  
23 department. It has its business connotations, but as far as  
24 our review in this context, it is how well the plan is  
25 maintained and operated.

1 Without anything else, I will move on to LaSalle.  
2 Since the last update, we have restarted LaSalle.

3 MR. ROWE: Excuse me. I would just like to add  
4 something to that response. Obviously, capacity factor  
5 cannot be a prime focus of the Commission's attention, we  
6 understand that. And, yet, it seems to me that,  
7 increasingly, operating, learning suggests that safety  
8 factors and productivity factors are more often part of a  
9 mutually reinforcing web than they are tradeoffs. We all  
10 worry about the situation where they can become a tradeoff.  
11 As you said on a number of occasions, you have no doubt  
12 about where your obligations are if that tradeoff exists.

13 But it seems to me that the chronic problems at  
14 ComEd, and I think this goes back a bit to Commissioner  
15 Merrifield's question, you know, have shown up both in  
16 performance under regulation and standards, they have shown  
17 up in capacity factors. They have also, strangely enough,  
18 shown up in the economics of the operation. And getting at  
19 them from both a material condition level and from an  
20 operating professionalism level turns out to be a unified  
21 effort. I wouldn't contend that to you capacity factor is  
22 anything more than a secondary indicator, but I don't think  
23 it is a meaningless one.

24 CHAIRMAN JACKSON: No, I ask because in each of  
25 the unit presentations, you lead with capacity factor. And,

1 of course, I have a background question for each of those  
2 viewgraphs, which is, -- how does that improvement relate to  
3 those things that are of significance to us as the  
4 regulators, and how do you tie the two together?

5 MR. HELWIG: In fact, as we have mapped out the  
6 material condition processes, we consider the capacity  
7 factor, scram frequency and unplanned capability loss factor  
8 top level indicators of overall plant performance, based on  
9 the theory that they could not be achieved without superior  
10 material condition. So we have mapped out the underlying  
11 processes, and we use that because it is overall  
12 representative of what we believe to be a number of  
13 supportive processes that need to be effective in order to  
14 achieve those outcomes. Your point is well taken, it is not  
15 everything.

16 CHAIRMAN JACKSON: Okay.

17 COMMISSIONER DIAZ: But, in fact, it is an  
18 integral factor.

19 MR. KINGSLEY: Absolutely.

20 COMMISSIONER DIAZ: It represents all of the  
21 things that are happening in the plant.

22 MR. KINGSLEY: It is also a very --

23 COMMISSIONER DIAZ: It might be a little gray or a  
24 little blah, but it is an integral factor.

25 MR. KINGSLEY: I totally agree, it is an indicator

1 of -- Are you doing it right? Do you put material  
2 condition? Do you have scrams, operating events while you  
3 are operating? Do you do your surveillances? Do you have  
4 your act together? So it is a clear indicator of nuclear  
5 safety to me. It is not the only one.

6 CHAIRMAN JACKSON: You have to lift the blanket to  
7 be sure you understand to what extent it is an indicator of  
8 nuclear safety, that is the only point I wanted to make.

9 MR. KINGSLEY: Absolutely. Yes, ma'am.

10 CHAIRMAN JACKSON: And if you don't lift the  
11 blanket --

12 MR. KINGSLEY: And not be a steamer, you know, and  
13 just operate your plant at all costs.

14 CHAIRMAN JACKSON: That is the point.

15 MR. KINGSLEY: We have told you -- right.

16 CHAIRMAN JACKSON: Because capacity factor can be  
17 high either way. And so if you don't life that blanket, you  
18 don't necessarily see that.

19 COMMISSIONER MERRIFIELD: Chairman?

20 CHAIRMAN JACKSON: Please.

21 COMMISSIONER MERRIFIELD: Following along that  
22 same line, and I am getting ahead of you, but if you look  
23 at, for LaSalle, the difference between the capacity  
24 factors, which are very high, and your average performance  
25 index, which is not where I think you want it to be, and

1 part of my problem in understanding this and being somewhat  
2 new, I am not really clear of the inputs that go into that  
3 performance index.

4 CHAIRMAN JACKSON: Right. And this is the  
5 furthest away from that meeting, that INPO standard of all  
6 the plants, and so that was --

7 MR. CRANE: I will be covering that.

8 MR. KINGSLEY: We are going to cover that. It is  
9 a two year average. It takes -- all the shutdown is figured  
10 in that, and so that is the reason those numbers are down.

11 COMMISSIONER MERRIFIELD: Okay.

12 MR. KINGSLEY: If it reinitialized when we  
13 restarted on Unit 1 --

14 CHAIRMAN JACKSON: Yes, it is a lagging indicator,  
15 is what you are saying.

16 MR. KINGSLEY: It is very lagging, right.

17 COMMISSIONER MERRIFIELD: It's two year. Okay.

18 MR. KINGSLEY: Chris.

19 MR. CRANE: Okay. The LaSalle Station, since the  
20 last update, we have restarted Unit 1 at LaSalle. Startup  
21 went very well. Subsequent operations have been solid. We  
22 are transferring the lessons learned from that startup into  
23 the recovery of Unit 2, and we expect Unit 2's restart to be  
24 much smoother.

25 Proactive involvement in oversight by the

1 corporate organization has helped in addressing the issues  
2 that came up during the Unit 1 startup. We expect the  
3 corporate organization to continue to help the Unit 2  
4 startup effort, but we now have a stronger team in place at  
5 the site.

6 Looking at the Unit 1 performance since restart,  
7 the capacity factor is 91.5 percent. The INPO index has  
8 steadily improved, but, as we discussed, the value will be  
9 held down by the long shutdown period till it rolls off.  
10 There have been no automatic scrams or forced outages since  
11 the retest program was completed.

12 And, finally, our mid-cycle outage was well  
13 planned and executed, event-free, and we took the  
14 opportunity to do some fine-tuning and calibrations on  
15 systems that were identified during the startup process.

16 Next slide, please.

17 COMMISSIONER MERRIFIELD: Let me -- Chairman, I  
18 don't want to focus too much on the average performance  
19 index, but just so I understand, do you think that will  
20 naturally without further changes reach the industry median,  
21 or are there additional changes that you will need to make  
22 from where that will naturally go to the point where you  
23 need to be? I mean, I guess that's -- I understand the  
24 issue of two-year averaging, but if we come back in two  
25 years, are you going to be at the median? And I guess

1 that's -- are you doing what is necessary to be there?

2 MR. CRANE: The goal is for top-level,  
3 top-quartile performance by 2001. If you look at the  
4 attributes of the index as mentioned there, lagging  
5 indicators, approximately 30 percent is based on if the  
6 unit's running or not. So there is a major penalty factor  
7 on that. Just operating a unit will take a jump in that  
8 performance.

9 The other is implementing the processes and the  
10 standards that are being incorporated at the other sites.  
11 Reduction of radiation exposure, the plans for that.  
12 Reduction of radwaste, the plans that are in place for that.  
13 The human performance issues also have a strong  
14 contribution. So there is a gap analysis that's laid out  
15 for each of the attributes within the index and there are  
16 plans in place to bring it to top-quartile performance.

17 MR. KINGSLEY: Yes. Let me -- I've got the direct  
18 indicator right here. And there's nine of these. On all  
19 the areas where we can count the data, and it's absent  
20 capacity factor and unplanned capability loss factor, which  
21 we get no points for those, we're a couple points off from  
22 the max values on those. So we're doing everything we can  
23 on LaSalle 1 right now under our control. Then we have to  
24 operate a little bit, and we're almost there on these. I  
25 said a couple points off. So absent the -- we're moving



1 this history, we're going to not only come to the industry  
2 meeting, we're going to surpass it.

3 COMMISSIONER MERRIFIELD: Thank you.

4 MR. CRANE: Okay. Accomplishments contributing to  
5 the performance results have included the maturity, and as I  
6 mentioned before, the strength of the management team that's  
7 in place. The team is working efficiently and effectively  
8 together.

9 Together with the site management team we're  
10 implementing the operating fundamentals within the site  
11 organization such as improved troubleshooting techniques and  
12 a heightened attention to critical and sensitive evolutions.

13 Since these accomplishments we've achieved  
14 significant results which include material condition  
15 improvements. The corrective maintenance backlog for Unit 1  
16 has been reduced by 40 percent since restart.

17 The engineering request backlog for Unit 1 has  
18 been reduced by 90 percent. All the backlogs are defined in  
19 their being tracked and trending in the correct direction.  
20 We also resolved a number of longstanding design issues  
21 including the control-room ventilation system and the  
22 feedwater heater drain system, allowing those systems to  
23 operate in auto and perform as designed.

24 Next slide, please.

25 On to the next steps. The LaSalle Unit 2 restart

1 is on track. Our time frame for fuel load is in April,  
2 scheduled for a May startup. But we are conducting all the  
3 necessary reviews and challenges as was done for Unit 1 to  
4 ensure the readiness for Unit 2 restart and successful  
5 dual-unit operation.

6 In this regard we have a thorough restart plan.  
7 The Unit 2 restart plan has been enhanced by the Unit 1  
8 lessons learned. For example, we have better defined the  
9 engineering work scope and completed the initial work scope  
10 prior to the field work starting.

11 CHAIRMAN JACKSON: Are there major license  
12 amendments that relate to that?

13 MR. CRANE: No, there are no major license -- I  
14 think we had a couple ISI that are still outstanding, and  
15 I'd have to go back to the project plan. We do review the  
16 project plan monthly, and there's no major issues  
17 outstanding right now.

18 MR. HELWIG: Actually I don't think there are any,  
19 Commissioner.

20 CHAIRMAN JACKSON: Okay.

21 MR. CRANE: In addition the restart work scope is  
22 defined and scheduled, the system readiness reviews have  
23 taken place in the system testing, and turnover schedules  
24 are being followed and are well under way.

25 Furthermore, in preparation for the dual-unit

1 organization we've merged the two units' resources into one  
2 site organization. We established a single outage control  
3 center and a single work control center. We've also put  
4 back in place the Unit 2 control room supervisor for  
5 overseeing the operations, and the crew training for  
6 operations for the restart is scheduled to be completed in  
7 April. We're in that training cycle currently.

8 Our readiness reviews and assessments are focused  
9 on dual-unit operation. The reviews involve assessments by  
10 all levels of management up to and including Mr. Kingsley,  
11 our chief nuclear officer, as well as our independent  
12 offsite safety review board.

13 Next slide, please.

14 On to our focus areas. In terms of continued  
15 improvement across the station, we're focused on work  
16 management, human performance, configuration control,  
17 chemistry, and radiation protection.

18 With respect to the radiation protection, we  
19 recognize we have issues to be addressed in this area. We  
20 have discussed as previously mentioned these steps with the  
21 regional personnel, and the corrective actions are well  
22 under way. We have, however, achieved some improvements in  
23 this area. For an example, we've reduced the contaminated  
24 square footage in the unit by 35,000 square feet. Currently  
25 we're at approximately 4 percent contaminated square footage

1 with the outage activities going on. That will improve as  
2 the Unit 2 is restarted.

3 In summary, we're working towards a solid, safe,  
4 dual-unit operation at LaSalle Station.

5 No other questions on that, I'll turn to the  
6 Dresden Station.

7 Dresden's a leader in many of our areas of  
8 improvement at ComEd. They include work management  
9 operation standards and outage management. The Dresden  
10 plant performance has been strong. The capacity factor in  
11 1998, 85.3 percent, was the best ever for the site. The  
12 INPO performance index has improved to 87.2. The number of  
13 automatic scrams is decreasing and the forced outage rates  
14 is improving.

15 We did set a site record for dual-unit run. It  
16 was 173 days, which ended when Unit 3 shut down in January  
17 for its refueling outage.

18 Finally, the Unit 3 refueling outage was  
19 completed, well executed, in a planned 26 days.

20 Next slide, please.

21 There are a number of factors contributing to this  
22 level of performance. As we told you in the last meeting,  
23 we have implemented a number of the scram-reduction  
24 initiatives, including some from the industry. We have  
25 reviewed 24 risk-significant systems identified,

1 prioritized, and are working through the plans. The actions  
2 are incorporated into our one and three-year material  
3 condition plans.

4 Some examples of the initiatives, the reduction of  
5 time in half-scrams at the Dresden station, we went from a  
6 previous 5 hours per month to 10 minutes per month, reducing  
7 the frequency of entering into the half-scrams from 200 to  
8 about 10 per month. Those same improvements have been  
9 incorporated also at Quad Cities and Dresden -- LaSalle and  
10 Dresden.

11 We also have substantially improved the site  
12 material condition, which is evident by the reduction in the  
13 backlogs. At Dresden the nonoutage corrective maintenance  
14 backlog has been reduced by 60 percent, and the engineering  
15 request backlog has been reduced by about 60 percent.

16 Operations also is better at Dresden. Not only  
17 has operations management assumed the leadership role, but  
18 the human performance has greatly improved. From the first  
19 half of 1998 to the second half of 1998, the operational  
20 human performance errors have been reduced by 55 percent.  
21 We've had significant improvement in the effectiveness of  
22 operations being supported by the engineering department.  
23 And finally, we've reduced the radiation exposure at Dresden  
24 by some 30 man-rem per person per unit.

25 CHAIRMAN JACKSON: Now late last year there seemed

1 to be some issues, minitrend anyway, with respect to  
2 operators not identifying applicable tech spec requirements.  
3 Where do things stand in that regard, since you've mentioned  
4 better operations?

5 MR. CRANE: In the latter part of the summer there  
6 were multiple cases of that that occurred. The steps were  
7 put in place. There was an assessment done, evaluation of  
8 what the gaps were. There needed to be some more training  
9 performed, a heightened awareness. We had some shift  
10 sponsors and mentors placed on shift with the operating  
11 staff to coach them through, and since that time we've had  
12 flawless performance. I believe it's on five months now  
13 without an issue.

14 Moving Dresden to the next level of performance  
15 we'll be continuing to focus on our material condition  
16 improvement plans, further human error reduction  
17 initiatives. We're also ongoing with our engineering  
18 program improvements. Finally, we'll continue to reduce our  
19 radiation exposure.

20 In summary, Dresden has had solid, event-free  
21 performance since we were last here. We've had a  
22 significant accomplishment, including the highest capacity  
23 factors ever, the longest dual-unit run, and a significant  
24 backlog reduction, and we're focused on sustaining these  
25 improvements.

1 Without any other questions, I'll turn the  
2 presentation over to Gene Stanley.

3 MR. STANLEY: Thank you. Chris, I am Gene  
4 Stanley, the Vice President responsible for pressurized  
5 water reactors. We are bringing a new, more rigorous level  
6 of scrutiny to the PWR operations to ensure they maintain  
7 and improve their performance.

8 Specifically, we are comparing ourselves to the  
9 best industry performance. We have identified some  
10 low-level issues. As we do this, I am going to talk to you  
11 about them today as well as our accomplishments. Next  
12 slide, please.

13 Byron Station -- Byron plant performance when  
14 viewed by top-level measures has been good. The capacity  
15 factor of 85.6 percent -- this includes part of steam  
16 generator replacement outage and a Unit 2 refuelling outage.

17 The INPO performance index has continued to  
18 improve -- to 92.3 -- the highest ever for the station. The  
19 number of automatic scrams for the last 7000 hours critical  
20 is zero. The last scram was in October of 1997.

21 The forced outage rate for the year of 1998 and  
22 this year is zero.

23 This station has historically received high marks,  
24 both from INPO and from the NRC. Byron continues to do many  
25 things well. For example, the implementation of improved

1 tech specs, improvements in the out of service errors since  
2 June of last year. In general, they do a good job of  
3 problem-solving. They handle equipment problems well.

4 Overall Byron currently is at its highest level of  
5 performance. Even with this good performance, however, we  
6 have identified some low-level issues in need of improvement  
7 to reach top level performance. These issues have revealed  
8 themselves in the area of material condition, especially in  
9 condenser tube leaks, which affects many things including  
10 chemistry performance:

11 Radiation protection practices during the steam  
12 generator replacement outage as well as refueling outages  
13 were weak;

14 Human performance errors, some of which are  
15 related to configuration control events and procedural  
16 adherence issues;

17 Consistent application of the fundamentals needs  
18 greater emphasis by the management team at Byron Station.

19 These issues, identified as a result of management  
20 applying a higher level of rigor and intrusiveness, these  
21 are longstanding, not new issues, at Byron Station.

22 We also are addressing the issue of overtime at  
23 Byron Station. This has been a subject of management  
24 attention since last fall. We have had and continue to have  
25 adequate staffing. As far as the Operating Department is



1 concerned, from 1995 to 1998 the number of Operations  
2 personnel at Byron Station has increased from 152 to 172  
3 personnel. Therefore, this is not a resource issue.

4 With respect to the use of overtime, although we  
5 are continuing to review the issue, our preliminary results  
6 indicate that overtime is not being used excessively or  
7 routinely at Byron Station. Between 1997 and 1998 we  
8 reduced the use of overtime at Byron despite back-to-back  
9 outages, the completion of the steam generator replacement  
10 outage, and the refueling outage by some 16 percent.

11 Nevertheless, from our perspective the fact that  
12 this issue is being raised is very important to us. We are  
13 continuing to review the issue at all of our stations as  
14 well as Byron.

15 CHAIRMAN JACKSON: Mr. Stanley, given what you  
16 have said in terms of the actual statistics --

17 MR. STANLEY: Right --

18 CHAIRMAN JACKSON: -- what then from what you can  
19 discern is the genesis of the complaint?

20 MR. STANLEY: As probably Mr. Starr would tell  
21 you, we have people that want to work all the overtime that  
22 they can possibly get, and we have people that want to work  
23 no overtime, and we do work overtime at the stations to  
24 support refueling outages and on times when people are  
25 absent on vacation, et cetera.

1 I think there's a very small number of individuals  
2 that have a concern about the amount of overtime and we are  
3 concerned about the amount of overtime.

4 CHAIRMAN JACKSON: Well, I guess -- I mean I want  
5 to understand it because, you know, this is the kind of  
6 thing that down the line ends up becoming allegations --

7 MR. STANLEY: Yes.

8 CHAIRMAN JACKSON: -- coming to us, and so I need  
9 to really understand precisely how you are getting at the  
10 root of the issue.

11 MR. STANLEY: I understand. It is an issue that  
12 is in front of us now relative to allegation space.

13 CHAIRMAN JACKSON: So what more can you tell me?

14 MR. STANLEY: I think we need to make sure that  
15 when these issues are raised at the stations they are  
16 addressed and addressed responsively and doing that quickly  
17 back to the individual, so that the individual understands  
18 that we are concerned also and we are taking action.

19 COMMISSIONER MCGAFFIGAN: Madam Chairman, could I  
20 just get some factual data?

21 Overall overtime went down, but there are these  
22 tech spec limits that come out of TMI experience that are in  
23 everybody's tech specs and there are exceptional  
24 circumstances, exceptions, where you can go beyond those  
25 limits.

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1 Do you go beyond those limits and -- you know, the  
2 72 hours per week, the no more than, what is it, 12 hours or  
3 16 hours in a day -- I forget -- they are in the Dingell  
4 letter, but what are the, how often do you exceed these  
5 limits? Is it routine or is it very, very --

6 MR. STANLEY: There was in the Operations  
7 Department during 1998 there was 45 deviations from those  
8 limits filled out during the year, so we went outside of  
9 those limits 45 times.

10 The issue then becomes most of which of all of the  
11 deviations focus around outage time. During this timeframe  
12 we spent 105 days in outage during 1998.

13 COMMISSIONER MERRIFIELD: Just to clarify, when  
14 you say 45 deviations, do you mean that there were 45  
15 individuals whose hours deviated --

16 MR. STANLEY: No.

17 COMMISSIONER MERRIFIELD: Explain what -- does  
18 deviation --

19 MR. STANLEY: When you exceed any of the criteria  
20 that is identified in 82.12 then you are required to  
21 pre-approve in a deviation format. That occurred 45 times  
22 during 1998.

23 CHAIRMAN JACKSON: It doesn't necessarily track to  
24 number of individuals?

25 MR. STANLEY: Right.

1 CHAIRMAN JACKSON: It's instances.

2 MR. KINGSLEY: 45 times, 45 approvals of time  
3 prior to use is what it means. It doesn't necessarily tie  
4 to an individual. It is an individual occurrence against  
5 those --

6 COMMISSIONER McGAFFIGAN: So it could be multiple  
7 individuals on each recurrence?

8 CHAIRMAN JACKSON: Right.

9 MR. KINGSLEY: No. Not true at all.

10 COMMISSIONER McGAFFIGAN: No?

11 MR. STANLEY: That's what the --

12 COMMISSIONER McGAFFIGAN: -- my question was.

13 MR. STANLEY: -- the Commissioner's question was.  
14 No -- not.

15 MR. KINGSLEY: Single. Single occurrence.

16 COMMISSIONER MERRIFIELD: So it is per individual  
17 they're referring to.

18 CHAIRMAN JACKSON: It doesn't necessarily equal 45  
19 individuals --

20 MR. STANLEY: No.

21 CHAIRMAN JACKSON: It could be one individual more  
22 than once.

23 MR. STANLEY: Right.

24 MR. KINGSLEY: Absolutely.

25 COMMISSIONER MERRIFIELD: Okay. I was

1 inarticulate. I meant 45 individual exceedences. Okay, that  
2 explains it.

3 COMMISSIONER McGAFFIGAN: In some of the limits I  
4 have now in front of me from 82.12 the 16 hours in any 24  
5 hour period --

6 CHAIRMAN JACKSON: Right.

7 COMMISSIONER McGAFFIGAN: -- is one that -- 24  
8 hours in any 48 hour period and no more than 72 in a week --  
9 of all of those, the 72 in a week might be the one that  
10 raises the least safety concerns because a lot of people do  
11 that in their lives, but the not more than 16 in the 24-hour  
12 period, you know, that's sort of like the medical profession  
13 where they do that to themselves, but I'd hate to be treated  
14 in the 23rd hour of somebody's shift --

15 [Laughter.]

16 COMMISSIONER McGAFFIGAN: So of the 45, do you  
17 know how they broke down between the 72 hour limit --

18 MR. STANLEY: The majority were in the 72 hour  
19 limit.

20 COMMISSIONER McGAFFIGAN: Okay.

21 CHAIRMAN JACKSON: Does the gentleman from the  
22 union have any comment to make?

23 MR. STARR: Madam Chairman, I guess I would have  
24 to concur with what Mr. Stanley said. To my knowledge, my  
25 members have direct access to me through e-mail, all the

1 normal means. I have not been personally contacted by a  
2 represented member of Byron to complain directly about  
3 overtime. That's not to say that someone has not talked to  
4 the management in person.

5 CHAIRMAN JACKSON: Okay.

6 COMMISSIONER McGAFFIGAN: Just again, in '97 do  
7 you have the data --

8 CHAIRMAN JACKSON: Thank you.

9 COMMISSIONER McGAFFIGAN: -- as to how many of  
10 these exceptions were asked for?

11 MR. STANLEY: No.

12 COMMISSIONER McGAFFIGAN: You don't know? You  
13 will probably end up generating all that.

14 CHAIRMAN JACKSON: Right.

15 MR. STANLEY: We'll continue to investigate.

16 CHAIRMAN JACKSON: Okay.

17 MR. STANLEY: In addressing these low-level issues  
18 and the pre-existing situation that allowed them to persist,  
19 we are applying the same level of management intrusiveness  
20 to Byron as we are at all of our stations.

21 More intrusive management oversight includes  
22 weekly management meetings conducted by myself and the  
23 management team at Byron Station. We are holding site  
24 personnel to high standards across all levels.

25 We are holding the individuals accountable for the

1 results, instilling a more intense drive in the work force  
2 to meet the expectations. This is how we avoid cyclical  
3 performance.

4 In summary, Byron Station has performed very well,  
5 even though there is need to emphasize the fundamentals.  
6 Solid performance, when viewed at top level measures, we are  
7 correcting the low level issues. We are continuing to  
8 institutionalize the fundamentals. We are striving to move  
9 Byron Station to a higher level of performance.

10 Braidwood Station. Next slide, please.

11 Overall good sustained performance, the capacity  
12 factor of 89 and 1/2 percent, this is the best ever for the  
13 station.

14 The INPO performance index has continued to  
15 increase to 94.8. It is in the industry's top quartile, and  
16 the best ever for the station.

17 Braidwood had one scram in 1998, that was in  
18 January, on unit 2. The forced outage rate is 1.6 percent.  
19 The only contributors is the scram I mentioned and a  
20 three-day heater drain tank rupture disk repair. This was  
21 an embarrassing incident for Braidwood Station. We  
22 continued to learn from this incident, and we shared with  
23 the remaining four stations on the lessons learned.

24 Next slide, please.

25 Some key accomplishments and results achieved at

1 Braidwood. Material condition has improved. The non-outage  
2 corrective backlog was reduced by about 40 percent. A  
3 breaker-to-breaker operation of some 467 days for unit 1.  
4 Reduction in maintenance for A-1 systems and reduction in  
5 operator work-arounds from 42 to 5 during 1998.

6 Braidwood established a world record, 70-day steam  
7 generator replacement outage.

8 Engineering improvements include the engineering  
9 request backlog has been reduced by about 90 percent. We  
10 had an excellent architect-engineer and maintenance rule  
11 inspection by your agency.

12 The engineering work management process has been  
13 put in place and it's in its initial stages of  
14 implementation. However, we are self-critical and, as a  
15 result, have found that we still need to improve the  
16 standards to reach top level performance.

17 For example, we are working to further improve  
18 human performance and refine the work management process.  
19 We have the tools needed to detect any performance decline,  
20 and we will address any deficiencies identified.

21 In summary --

22 CHAIRMAN JACKSON: Please go ahead.

23 MR. STANLEY: Continue strong plant performance.  
24 Nevertheless, we continue to strive to achieve consistent  
25 high level performance across the board and to



1 institutionalize the fundamentals. We are applying the same  
2 level of intrusiveness to Braidwood as we do all of our  
3 plants, to ensure all potential issues are identified and  
4 corrected.

5 I will now turn the presentation back to Oliver.

6 MR. KINGSLEY: The Chairman has a question.

7 CHAIRMAN JACKSON: Before you go, tell me what  
8 long term and short term benefits you hope to derive from  
9 the conversion to the improved standard tech specs for Byron  
10 and Braidwood.

11 MR. STANLEY: I think in many situations it  
12 simplifies the tech specs in general. In the long term, it  
13 prevents you from doing I'll say unneeded or unnecessary  
14 surveillances. It's sort of like having a good PM program.  
15 It's constantly fed by the system itself and improves as you  
16 go on. And I believe the improved tech specs will help in  
17 both areas.

18 CHAIRMAN JACKSON: All right. Because, you know,  
19 in some sense you could argue that your operational  
20 performance is such that -- you know. So I'm just wondering  
21 from your point of view what you think the benefit is.

22 MR. STANLEY: In this time frame there was a  
23 tremendous number of tech spec requirements and  
24 surveillances that was put in place for this time frame  
25 units.

1 CHAIRMAN JACKSON: Okay.

2 MR. HELWIG: I might add that we are also very  
3 interested in pursuing some further improvements in the tech  
4 spec arena, making them risk-informed, if you will.

5 CHAIRMAN JACKSON: Sure. So am I.

6 [Laughter.]

7 MR. KINGSLEY: I'll tell you what else we got out  
8 of this, too. You asked about Dresden and some of the  
9 missed surveillances. We had implemented kind of a  
10 quasi-proof tech specs not very well. You go back on Quad  
11 Cities, we had done a very poor job -- this was at the nexus  
12 also, and we put an absolute process in that we are going to  
13 do this right, and so knock on wood, so far they have done  
14 an outstanding job with putting this in, and it took a lot  
15 more than everyone thought. We, in fact, even had to delay  
16 it to make sure we did it right. So we have gotten a lot  
17 out of this. Plus the LCO extensions that we did.

18 MR. HELWIG: It's been tremendous.

19 CHAIRMAN JACKSON: Okay.

20 MR. KINGSLEY: Thank you, Gene.

21 I'd like to have the last slide here and wrap up.

22 I am confident that the results we are achieving  
23 today clearly validate our improvement plan. We have not  
24 achieved the high performance we are targeting. We have set  
25 expectations for ourselves that far exceed regulatory

1 standards. Clearly our performance slope is moving in the  
2 right direction. However, we are not there.

3 We are systematically going about this  
4 improvement, and I hope we have answered your question,  
5 Commissioner Merrifield.

6 The strategic reform initiatives have defined our  
7 expectations and fundamental programs. We still have work  
8 to do to make sure they are in the fabric.

9 We do have in place metrics and systems to track  
10 performance at all levels, and we are using them. We are  
11 building a much stronger management team that's active,  
12 involved, supports the plants, both from a corporate  
13 standpoint and at the sites. You have to have that  
14 leadership support and oversight in order to be successful.

15 We are going to continue to be self-critical,  
16 aggressively addressing any performance shortfall or slip  
17 that we might have on the way, and we have talked to you  
18 about some of those today.

19 We are going to continue to follow through on  
20 every issue, both at that site and across the board, and  
21 I'll give you my word on that. These problems we have seen  
22 as on Quad Cities, where we had taken previous action, we  
23 are going to take more previous -- I mean more additional  
24 action to correct these problems and make sure people  
25 clearly understand how you handle critical sensitive

1 evolutions, how you monitor work control, et cetera.

2 We are going to work on involving the work force,  
3 making sure that they understand and buy into these  
4 standards, and explain the reason that we are doing this,  
5 and we are going to have to some more teaching, because  
6 these basics just weren't in place at Commonwealth Edison.

7 This management method is not just for  
8 turn-around, but it is a good prescription for curing cyclic  
9 performance and ensuring long term success.

10 We told you what we did in '98. We did make  
11 tangible progress. It is taking hold, but it's not there.  
12 In 1999 and 2000 are the years we are going to work on  
13 continuing to institutionalize these fundamentals. We have  
14 got work to do.

15 We are going to work on sustaining this positive  
16 ramp and take each site up to the next level. We have not  
17 reached the high level, but we did outline very specifically  
18 the performance gaps or performance plans, and we do have  
19 them in place and they are a rigor, and we do follow up on  
20 that, from the reporting of monthly management meetings that  
21 we have, both at the sites and in corporate and the  
22 quarterly business plan reviews, where people are actually  
23 put on the spot and have to stand before us and explain what  
24 their performance shortfalls are and what they are actually  
25 doing about them, and where we can assist them from our

1 corporate office in Downers Grove.

2 Our plan for 2001 is very simple. It's to the  
3 best. Are we there? No, we are not. Are we moving in the  
4 right direction? Absolutely. Will there be bumps along the  
5 way? Certainly. We are going to be very candid with you,  
6 very open, call a spade a spade, and tell you where we need  
7 to improve. You won't have to call us to find out.

8 I think we have got the infrastructure in place to  
9 withstand these bumps and make these improvements. We are  
10 very proud of what we have done, but we are not satisfied.  
11 We are going to stay the course, we are making these  
12 improvements, we have had a good start, but we have got a  
13 lot of work to do.

14 This now concludes our presentation and we would  
15 be happy to answer any questions.

16 CHAIRMAN JACKSON: Thank you. Before we call the  
17 staff, I will just go down the line. Do you have any  
18 questions?

19 COMMISSIONER DICUS: Yes, I have a question, or  
20 maybe a comment. Illinois is clearly moving along with  
21 deregulation and you have long-range plans as well. Do  
22 Illinois' plans and your plans track pretty well, or do you  
23 see some problems that could impact where you want to go  
24 with the plants?

25 MR. KINGSLEY: Let me say just something before

1 the Chairman talks about the restructuring. I don't see any  
2 detrimental effect from the restructuring on how we operate  
3 these plants. We are going to set the standards. We have  
4 got sufficient money to operate the plants.

5 I do have a job to not let our people get  
6 mesmerized by what might happen out there, and that's why it  
7 is important to focus on dollars per megawatt hour, but it  
8 is more important to focus on material condition, having the  
9 right engineering programs in place, operating correctly,  
10 these operating practices. So I don't see any. Now, I  
11 would like to have John talk about the overall restructuring  
12 and how that is effecting the company, because there are  
13 some effects.

14 MR. ROWE: I think there are two questions in your  
15 point, Commissioner Dicus. The first is, you know, how do  
16 restructuring and competition generally effect the nuclear  
17 plant operation? In the long run, there is no doubt that in  
18 Illinois or any state where there is competition, it brings  
19 the requirement that the incremental or going forward costs  
20 of nuclear plants be below the market value of the power, or  
21 else the plants will be shut down. And what we have tried  
22 to do with that reality is simply to state it and restate  
23 it, and restate it again, because the employees need to know  
24 that the plants must be economical, again, on an incremental  
25 basis, or they cannot continue to be run.

1 But at the same time we have said, again and  
2 again, that they won't be economical, and they won't run  
3 unless they are run to higher standards of operating  
4 efficiency and NRC standards than they have been in the  
5 past. We have made that message equally unequivocal.

6 In the short run, there is a counter-intuitive  
7 benefit. What is going on is that restructuring imposes  
8 upon ComEd all of the costs of improving its nuclear fleet  
9 because there is no fuel clause and the like anymore, but at  
10 the same time it gives ComEd all of the economic benefit of  
11 improving its nuclear fleet. This is a change from a  
12 classical regulatory structure. And since the benefits of  
13 increased productivity are five or six times as large as the  
14 benefits of cost saving, the message is very clear, do what  
15 is necessary to run these things well. And, indeed, the  
16 short run, that is much the largest financial upside  
17 available to the company.

18 So, I think we have that square. The somewhat  
19 more amorphous aspect of your question is, how do the  
20 state's plans match or mingle with ComEd's plans? Well,  
21 that is very difficult because both the state's plans and  
22 our own are somewhat inchoate, but the essence of it is that  
23 Illinois' Restructuring Act is less ideologically concrete  
24 than are those in California or New England.

25 There is a general sense in the legislature and in

1 the Commission in Illinois that competition is a good thing  
2 and that rate reductions are a good thing, and the statute  
3 was designed to bring about those objectives with a minimum  
4 amount of specificity as to what the structures of the  
5 future would look like. This leaves ComEd, in some ways,  
6 more opportunities, but clearly more risk than might be the  
7 case in a state where the restructuring legislation was  
8 ideologically more rigid.

9 It also leaves us with the continuing task of  
10 working out where we go with the Illinois Commerce  
11 Commission. I think as time goes along, you will see  
12 Illinois restructuring look a little more like the Northeast  
13 or California than the Act may have looked at the outset.

14 But what it has done for ComEd's plans, it has  
15 caused us to look at our system as five business units,  
16 fossil generation, nuclear generation, transmission,  
17 distribution, and competitive or unregulated enterprises.  
18 We have decided to sell the fossil generation and have that  
19 underway. We have renewed our commitment to the nuclear  
20 fleet. We hope to run the four remaining business units  
21 successfully as a collective organization. But we have the  
22 obligation to succeed at all of them or, else, find a better  
23 structure. So we know where we want to go, but we will be  
24 learning like other folks where we can go as time goes on.

25 Again, though, I would come back to your first,



1 and the narrower part of your question, except that this  
2 imposes a clear overall economic obligation on the fleet, I  
3 think it increases our focus and commitment, rather than  
4 decreases it.

5 CHAIRMAN JACKSON: Commissioner Diaz.

6 COMMISSIONER DIAZ: No questions.

7 CHAIRMAN JACKSON: Commissioner McGaffigan.

8 COMMISSIONER MCGAFFIGAN: Just a question on the  
9 one plant that didn't come up today, Zion. Where are you in  
10 the decommissioning process? Have you decided on SAFSTOR  
11 versus decon, or is there a process for making that  
12 decision, if you haven't already made it?

13 MR. STANLEY: Yes, the decision has been made that  
14 we will go into a safe nuclear island, SAFSTOR nuclear  
15 island concept. That construction has actually started. It  
16 will be completed by the end of this year, and it will meet  
17 our dates, our original dates of the middle of 2000 that we  
18 committed.

19 COMMISSIONER MCGAFFIGAN: And the exemption  
20 processes for insurance, security, emergency planning, et  
21 cetera, those are underway or finished, or where are you?

22 MR. STANLEY: They are underway and they will be  
23 submitted by the end of the year as on schedule.

24 COMMISSIONER MCGAFFIGAN: Okay.

25 CHAIRMAN JACKSON: Commissioner Merrifield.

1 COMMISSIONER MERRIFIELD: I have a little  
2 different question. I am wondering whether, in retrospect,  
3 our oversight, performance oversight panel process has  
4 enhanced or detracted from the communication consistency and  
5 predictability in our regulatory process. I am asking  
6 somewhat of a criticism or justification, what we are doing.

7 MR. KINGSLEY: Let me answer that. It has helped.  
8 One, it has provided focus. It has provided opportunity for  
9 dialogue. It has provided a clear understanding of what the  
10 issues are. When I came there, we were absent basic  
11 process. We had some metrics, they were the wrong ones. In  
12 a lot of cases, we did put together the strategic reform  
13 initiatives. We did not have a business plan. We put that  
14 in place. So I think it has provided a great opportunity to  
15 have some face to face dialogue and let us go report  
16 performance and actual results to the NRC.

17 Now, long-term, I am not in favor of this, but it  
18 has provided significant help.

19 COMMISSIONER MERRIFIELD: Thank you.

20 CHAIRMAN JACKSON: Thank you very much. I  
21 appreciate it.

22 Let me hear from the NRC staff.

23 MR. TRAVERS: Good morning. As you know,  
24 Chairman, the NRC staff has been continuing its oversight of  
25 comments, safety performance and its initiatives to improve

1 its performance. Specifically, we have been continuing the  
2 Commonwealth Performance Oversight Panel that Commissioner  
3 Merrifield mentioned. That panel was established to provide  
4 an integrated NRC assessment of ComEd's nuclear safety  
5 performance, and to specifically identify any discrepancies  
6 between ComEd's assessment of its performance and our own.

7 In order to help me with the presentation today, I  
8 brought two good men from Chicago, --

9 CHAIRMAN JACKSON: Well, Jeff has been there, so,  
10 you know, we know he's insane. He's been in Chicago for a  
11 while.

12 [Laughter.]

13 MR. TRAVERS: Well, I thought I would give him a  
14 plug.

15 And one good man from Montgomery County, Maryland.  
16 Jim Dyer, as you pointed out is the Region 3 regional  
17 administrator, and Jeff Grant is the director of the  
18 Division of Reactor Projects, and of course, Roy Zimmerman  
19 is the deputy director of the Office of --

20 CHAIRMAN JACKSON: Oh, that's the Rockville --

21 MR. TRAVERS: That's right.

22 CHAIRMAN JACKSON: Okay. Not yourself.

23 MR. TRAVERS: No, I just -- I wouldn't give myself  
24 a plug.

25 CHAIRMAN JACKSON: All right.

1 MR. TRAVERS: But in any case, we would like to  
2 begin the briefing, and Jim is going to start us off.

3 CHAIRMAN JACKSON: Thank you.

4 MR. DYER: Good morning, Chairman, Commissioners.  
5 Today, we're here to brief you on the -- for the fourth  
6 time. This is my first. That's why I brought Jeff, so that  
7 there's a little historical context for the Commonwealth  
8 Edison Performance Oversight Panel reviews.

9 We plan to focus our review on the last six  
10 months' performance since you were last briefed on June  
11 30th, 1988.

12 Next slide, please.

13 As you heard from Commonwealth Edison, there's  
14 been a number of significant activities in our resultant  
15 inspections as have occurred at the ComEd site since this  
16 last meeting in June. Essentially, Dresden has operated  
17 well since removed from a watch list. Braidwood, Quad  
18 Cities and Dresden successfully conducted refueling outages  
19 with major work activities.

20 LaSalle Unit 1 successfully restarted and has  
21 operated well after their extended outage and completed a  
22 short maintenance outage. LaSalle Unit 2 appears to be  
23 ready to -- on schedule for their startup in May.

24 The NRC staff completed a review of the ComEd  
25 strategic reform initiatives and determined that the SRIs

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1 were responsive to the original 10 CFR 54F request for  
2 information. And we conducted three CPOP public meetings  
3 and three corresponding internal NRC meetings attended only  
4 by the NRC staff.

5 Next slide, please.

6 CHAIRMAN JACKSON: Let me ask you a question. One  
7 of the duties of the ComEd Oversight Panel was to assess  
8 allegations in the aggregate to determine if there were any  
9 broad-based concerns or issues.

10 Are there any conclusions? I mean, have you done  
11 that kind of aggregated look and is there any particular  
12 insight that you gleaned from that?

13 MR. DYER: Yes. I think, as part of the CPOP  
14 process, and again, Jeff can add more, but I participated in  
15 one meeting so far, is we review the allegations in  
16 aggregate, we get a briefing from our allegation coordinator  
17 on the nature and extent of the various allegations, both  
18 across ComEd sites as well as focused at the individual  
19 sites, and then we marry that up with other information from  
20 the inspection reports, from the ComEd performance  
21 indicators and any other information we may have on the  
22 performance in ComEd, and tie that to the feedback from our  
23 SRI inspections and then try to get it integrated together.

24 I think from the Agency allegation report, you  
25 know, Byron is identified as an outlier within ComEd in

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1 that, and we have taken some actions in that arena and we're  
2 still looking at it.

3 CHAIRMAN JACKSON: Okay.

4 MR. DYER: Let's see. Slide 3.

5 The regional NRR attention at the individual ComEd  
6 sites and the corporate offices have continued at elevated  
7 levels. The CPOP developed a strategy for the review and  
8 inspection of the SRI implementation, and region 3 has  
9 completed the inspections that were identified at all sites  
10 as well as two inspections at the corporate offices.

11 The feedback to ComEd -- feedback was provided to  
12 ComEd during the inspection activities as well as during the  
13 public CPOP meetings, and we had an exchange of where they  
14 were on the implementation.

15 Additionally, as directed by the PPR in the senior  
16 management meetings, we conducted enhanced inspections at  
17 all the sites significantly above the core program at the  
18 BWR sites and the Braidwood -- with and Braidwood steam  
19 generator replacement inspection.

20 We also continued our public oversight meetings at  
21 the three BWR facilities where we focused specifically on  
22 the BWR performance improvements at those sites, and as part  
23 of our normal PPR process, we had -- at the end of our  
24 individual site reviews, we conducted an integrated review  
25 of the ComEd sites, again looking for common issues or

1 outliers from the normal ComEd performance in that they  
2 would provide us an input to our CPOP process.

3 Next slide.

4 Yes.

5 CHAIRMAN JACKSON: You know, following the LaSalle  
6 Unit 1 restart, emergent -- or equipment problems led to two  
7 shutdowns and one reduction in power. Can you say what  
8 current indicators suggest about equipment problems today,  
9 you know, or over the --

10 MR. DYER: The equipment problems, I don't  
11 remember the details that caused the actual LaSalle  
12 shutdown. But during the extended outage, LaSalle I think  
13 conducted over 200 modifications. It was, you know --

14 CHAIRMAN JACKSON: Right, but these were post  
15 shutdown equipment problems.

16 MR. DYER: And coming out of an outage, we would  
17 expect to have some -- we wouldn't be surprised if there was  
18 some sort of material problem. I think Jeff --

19 MR. GRANT: I think given the fact that I think  
20 there's actually close to 300 modifications and thousands of  
21 work activities that were done during the two years that  
22 Unit 1 was shut down, there were a couple of hiccups, I  
23 guess, during the startup. One was a failed card in a  
24 feedwater control system that had been tested previously,  
25 and I forget exactly what component failed in the circuit

1 card, but that caused a feedwater transient that resulted in  
2 a manual scram being put in.

3 But looking at that and there were some problems  
4 with the RCSI system also, of course, both LaSalle and we  
5 would have liked to have seen a completely flawless startup  
6 and run, but given the amount of activities that had taken  
7 place for that two years, it looked very reasonable.

8 CHAIRMAN JACKSON: So nothing that was unusual,  
9 nothing that they should have not missed and nothing that  
10 was risk significant?

11 MR. GRANT: No.

12 CHAIRMAN JACKSON: Okay.

13 MR. DYER: Next slide, please.

14 The results of our CPOP efforts and based on our  
15 review of the activities now, we've concluded that ComEd has  
16 implemented their strategic reform initiative work plans as  
17 they committed to us in their February and January letters,  
18 and that the performance of the BWR facilities has continued  
19 to improve without the detriment to Braidwood and Byron  
20 stations.

21 Our assessment also is that these improvements to  
22 date have been driven by the ComEd management team, and with  
23 extremely large involvement by the corporate office and site  
24 executives.

25 The changes that occur -- have occurred so far



1 appear to be effective but are not institutionalized or, as  
2 Mr. Kingsley said, in the fabric of the organization to the  
3 extent that the senior management -- enhanced senior  
4 management oversight could be stopped.

5 There are also no --

6 CHAIRMAN JACKSON: So you're saying that your  
7 judgment is that you mean -- when you say senior management,  
8 you mean their senior management?

9 MR. DYER: Yes, ma'am. Yes. Their senior  
10 managers are intimately involved with a high level of detail  
11 going on at all the sites --

12 CHAIRMAN JACKSON: I see.

13 MR. DYER: -- and all the activities.

14 There also has been what I would call a  
15 significant turnover in the number of managers at the sites.  
16 Again, the CPOP -- as part of our CPOP charter, we are  
17 focused on management turnover at the department head level  
18 and greater at the sites or within the corporate office, and  
19 there has been a lot of movement among the various managers  
20 in that. And while this wouldn't be unexpected given  
21 ComEd's rapid pace of change as well as the rapid pace of  
22 change in the industry and other opportunities for some of  
23 the managers, we don't think it's conducive to preventing a  
24 cyclic performance. There's this high reliance on the  
25 individual senior managers still, and these managers are

1 changing, and so collectively, that does not lead us -- we  
2 have some concerns still about the cyclic performance until  
3 it does get into the fabric, if you would, as Mr. Kingsley  
4 said.

5 CHAIRMAN JACKSON: How will you know that, that  
6 it's in the fabric?

7 MR. DYER: Well, I think one of the things, as we  
8 go through it in our CPOP meetings and our overview  
9 meetings, is the amount of management involvement at the  
10 senior level for routine activities. You know, in the one  
11 at the Dresden, I was surprised at the Dresden oversight  
12 meeting that we had where they were talking about they were  
13 -- you know, operations were going on and online maintenance  
14 activities, and they were going well, but the operations  
15 manager was calling in from home to participate in pre-shift  
16 briefs.

17 That's the kind of ongoing activities that, you  
18 know, they decided they needed to have that level of  
19 oversight to ensure that they were done correctly. Ongoing,  
20 that just puts an awful strain on the managers within the  
21 organization.

22 MR. GRANT: I would just add one thing on that,  
23 that we recently had a LaSalle oversight meeting, and one of  
24 the issues there that I was pleased to see that they brought  
25 up was ensuring that the first-line supervisors, who I think

1 they've looked at and seen that the message, as Mr. Kingsley  
2 said, hasn't been inculcated yet, they understand the  
3 expectations, but it's not part of the fabric yet, it's not  
4 instinctive, and I believe that they understand that and the  
5 meetings that we have with ComEd and the individual sites,  
6 they bring these issues up. So it's clearly on their radar  
7 screen. I don't think there's a performance indicator,  
8 though, that will tell us, you know, when that transition  
9 has been made.

10 CHAIRMAN JACKSON: Okay.

11 MR. DYER: Okay. Lastly, we've also seen value  
12 added by the ComEd -- to ComEd safety performance by the  
13 corporate assessments in the oversight group, particularly  
14 in the diagnostic capability when responding to a  
15 performance indicator or after an event or an inspection  
16 finding, getting to the root cause and implementing the  
17 corrective actions has been a strength.

18 Now, this value added hasn't always been  
19 consistent at all the sites; it appears to be -- in our  
20 assessment, it's always thorough; it's a question of  
21 timeliness in that.

22 In some of the issues, the NRC is -- when we raise  
23 an issue, we find that the comment has been there before us,  
24 but it hasn't percolated up through the system for  
25 corrective actions in that. So I think it's more of a

1 timing issue than as far as thoroughness goes.

2 CHAIRMAN JACKSON: You indicated that you  
3 inspected selected Strategic Reform Initiatives. What are  
4 some of those?

5 MR. DYER: Well, what we did is the CPOP went  
6 through and did a review of the work plans for the 13 SRIs  
7 and we really targeted for efficiency. Part of the, I guess  
8 -- this actually happened before my time, but a lessons  
9 learned we have learned from the past is we have gotten  
10 wrapped up too close to the licensee's process, as opposed  
11 to reviewing the effectiveness of their process.

12 We chose just to observe the implementation, to  
13 target things that our normal inspection program could do in  
14 the conduct of business. So, for the most part, if it was a  
15 work control process being improved, we would review what  
16 the SRI -- have the inspector brief, you know, review what  
17 the SRI was and then go look at how it was being implemented  
18 in the field.

19 CHAIRMAN JACKSON: So when you have gotten too  
20 wrapped up in the licensee's processes in the past, as  
21 opposed to looking at what they accomplished, what do you  
22 mean by that?

23 MR. DYER: Well, in my previous jobs back in 1992,  
24 I was part of the design and review team and the Dresden  
25 oversight team when I worked for NRR, and we were almost

1 totally process oriented.

2 CHAIRMAN JACKSON: As opposed to results.

3 MR. DYER: And we didn't focus on the results.

4 CHAIRMAN JACKSON: I see. I understand. Okay.

5 MR. DYER: And our strategy, the CPOP strategy for  
6 implementation of the SRIs is, again, to do -- where we can,  
7 do the checks on implementation, but then, also, the second  
8 part is to review the effectiveness, and that is the part on  
9 our oversight program where we have the branch chiefs review  
10 us on inspection results that are ongoing and, say, you  
11 know, tie that performance, improved performance to -- are  
12 they meeting their SRI objectives? We do that through the  
13 CPOP process.

14 Additionally, the licensee was built into their  
15 SRI closure process an effectiveness review. And under  
16 CPOP, we hope to review with the licensee their  
17 effectiveness reviews for improvements.

18 Next slide, please.

19 Our future activities will largely be dictated by  
20 the senior management meeting process and that, which is  
21 where a lot of the oversight program originated. But for  
22 the near term, we expect to continue with our periodic  
23 meetings, again, focusing on SRI effectiveness as our  
24 implementation inspections are complete. And we were going  
25 to perform augmented coverage of the LaSalle Unit 2 startup

1 that is scheduled next -- or in a couple of months, and  
2 continue our plant inspections and periodic management  
3 meetings with the BWR facilities. That concludes my  
4 presentation.

5 CHAIRMAN JACKSON: Thank you. Geoff, do you have  
6 any additional comments you want to make?

7 MR. GRANT: No, ma'am.

8 CHAIRMAN JACKSON: Okay. Thank you.  
9 Commissioner.

10 COMMISSIONER DICUS: Do you have any criteria that  
11 you will use to make a decision on the recommendation when  
12 the CPOP can end?

13 MR. DYER: As part of the last CPOP meeting, the  
14 group came in and had worked out, I think, seven or eight  
15 criteria for doing it, and as the brand new Regional  
16 Administrator, they decided that my first decision wasn't  
17 going to be to try to end the program, I am trying to find  
18 out exactly what it is. But there have been -- we are  
19 developing criteria. It involves eight criteria, of which I  
20 think two have been completed so far.

21 CHAIRMAN JACKSON: Commissioner Diaz.

22 COMMISSIONER DIAZ: I am going to follow up on  
23 that part, but let me start on the last slide, continuing  
24 house inspections and periodic management. I understand  
25 that we have putting 13 to 14 FTEs every year additional to

1 what we normally would put, you know, for inspection and  
2 assessment. What is the level now?

3 MR. DYER: Can I have the -- I have a slide on  
4 that. Can I see backup slide 1, please? I hope they have  
5 it.

6 CHAIRMAN JACKSON: Do you have backup slide 1,  
7 please? There it is.

8 MR. DYER: This is -- I asked to get the run off  
9 of the inspection results that we have had for the last six,  
10 seven months, I believe. And as opposed -- Carl Paperiello  
11 did it last time, had an average inspection -- our  
12 inspection at the ComEd sites has significantly decreased.  
13 The numbers I think that Carl was showing last year was 7500  
14 hours per year. The numbers, the amount that we are looking  
15 at now is 5500 -- 5,000, and it is continually coming down.  
16 And so it is -- the specific inspections, we have had a lot  
17 of work at Quad Cities with the engineering and tech support  
18 inspection follow-up to the AE inspection and that.

19 But I don't have the -- Geoff, I don't know if you  
20 have the numbers. We just went through the PPR process and  
21 looking forward, but we considerably back from where we  
22 were.

23 COMMISSIONER DIAZ: Okay. Let me tie that to  
24 Commissioner Dicus' question. You know, you said, looking  
25 at the CPOP, and you are looking at some criteria, I hope

1 that the criteria will focus on the added health and safety  
2 benefits from the panel, I mean because that is really what  
3 the bottom line is. And so when you develop those criteria,  
4 the Commission will be knowing how -- what is the added  
5 value, from this point on. I think we need to look forward.  
6 I think we realize the value of the panels in the past. But  
7 from this point forward, what is the added and health and  
8 safety value of it?

9 MR. DYER: Okay.

10 CHAIRMAN JACKSON: I think you should probably tie  
11 that into what you were working off of relative to the  
12 5054(f) letter, since that is really what triggered this in  
13 the first place.

14 MR. DYER: Yes.

15 CHAIRMAN JACKSON: Commissioner McGaffigan.

16 COMMISSIONER MCGAFFIGAN: A general question about  
17 overtime. We have the letter in, you are going to answer  
18 it. But do our inspectors look at these exceptions to the  
19 Generic Letter 8202 tech spec limits as a routine thing when  
20 they are -- is it part of the resident core inspection  
21 program to just monitor how many deviations the licensee has  
22 approved? Do we regard as a useful indicator?

23 MR. DYER: I will defer to Geoff.

24 MR. GRANT: No, I don't believe it is part of the  
25 core. I mean you could envelope it under the core if you

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1 thought that there was an issue there, but it is not  
2 routinely looked at. However, they will look at it if it  
3 looks likes, to the inspector, that there is an issue  
4 brewing there.

5 COMMISSIONER MCGAFFIGAN: But it strikes me there  
6 is an indicator, I mean Mr. Stanley talked about it earlier,  
7 you know, he knows there are 45, he knows they are mostly on  
8 the 72 hour, et cetera, and it wouldn't -- I assume that  
9 date is available to us, so we would -- the way the  
10 inspector could find out whether there is an issue brewing  
11 is to know whether 45 is a big number or a small number  
12 compared to industry practice more broadly, and then,  
13 presumably, if it is a big number, they would pay to some  
14 attention to it. If it is a small number, they wouldn't. I  
15 am just trying to find out, is this a valuable indicator or  
16 not.

17 MR. TRAVERS: It has not been an issue, a  
18 significant issue in the past.

19 COMMISSIONER MCGAFFIGAN: Okay.

20 MR. TRAVERS: And, frankly, we are certainly  
21 looking at it as part of the allegation process. And we  
22 certainly won't comment on the details of any specific  
23 allegation here, but even -- the tech spec I think even  
24 allows for an administrative pre-approval in some instances  
25 for overtime. But we have not faced this issue in any

1 significant measure before.

2 COMMISSIONER McGAFFIGAN: Congress Dingell --

3 MR. TRAVERS: So it is not part of the routine  
4 inspection program.

5 CHAIRMAN JACKSON: It hasn't been enough of an  
6 issue that you thought that it needed to be routine  
7 examined.

8 MR. TRAVERS: But we are always at the ready to  
9 further evaluate issues.

10 COMMISSIONER McGAFFIGAN: But the data that they  
11 are requesting that this letter, you know, how many  
12 exceptions there were, for what purpose, et cetera, for  
13 across the fleet, is that readily available? No?

14 MR. ZIMMERMAN: I think licensees keep records  
15 like that. I don't recall this area being in the core  
16 inspection, but I know that from my time in the field at the  
17 sites, you gravitate toward the areas during the outages,  
18 when are talking to staff that are doing work, and you get a  
19 pretty good feel for whether they have a sense that there  
20 may be a problem with regard to the hours that they are  
21 working, and then go pull the records. We can look at those  
22 records at any time. But I think the residents do have a  
23 good feel.

24 MR. DYER: But we wouldn't generally have that  
25 data.

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1 COMMISSIONER MCGAFFIGAN: Okay.

2 CHAIRMAN JACKSON: Commissioner Merrifield.

3 COMMISSIONER MERRIFIELD: No further questions.

4 CHAIRMAN JACKSON: Well, I would like to thank  
5 both Commonwealth Edison and the NRC staff for a very  
6 informative meeting on the safety performance of the ComEd  
7 nuclear facilities, and the progress made to date in  
8 addressing and resolving cyclic performance issues.

9 The Strategic Reform Initiatives of ComEd appear  
10 to have contributed, and you say so, to the improved  
11 performance of the ComEd nuclear facilities, but through the  
12 heavy involvement of the ComEd management team.

13 Now, in the past Commission meetings with ComEd,  
14 we have called for results and sustained results, and it  
15 would appear that at least we are beginning to see them.  
16 And, as you have heard, there have been, and you have told  
17 us, challenges and events, and an integrated assessment of  
18 the ComEd facilities, -- such as that envisioned in the new  
19 NRC reactor, proposed reactor oversight process, and of  
20 which I would note that Quad Cities has been selected as a  
21 pilot plant, -- which could provide real world insight into  
22 their performance and foster more informed decision making  
23 in, first, the allocation of inspection resources on  
24 activities where the potential risks are greater. Secondly,  
25 applying greater regulatory attention to the facilities with

1 performance problems. Third, using objective measurements  
2 of performance. And, fourth, providing the nuclear industry  
3 and the public with timely and understandable assessments of  
4 plant performance.

5 But, for the time being, the NRC continues to rely  
6 upon existing mechanisms, including the plant performance  
7 review, and the senior management meeting processes, to  
8 evaluate the nuclear safety performance of the ComEd  
9 facilities and the under things under that umbrella, and  
10 determine when sufficient information exists to determine if  
11 that cyclic performance has been arrested in a sustained  
12 way.

13 And I would just encourage ComEd to continue to  
14 strive for continuing and sustained improvement at all of  
15 your installations, and to continue the healthy interactions  
16 and information sharing that you have been providing, and  
17 that you have had with the NRC staff.

18 So, unless there are any further questions or  
19 remarks, we are adjourned. We will have an affirmation  
20 session, however. Thanks.

21 [Whereupon, at 12:02 p.m., the meeting adjourned.]  
22  
23  
24  
25

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  
PUBLIC MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Tuesday, March 2, 1999

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: Martha Brazil

Reporter: Mark Mahoney

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# **NUCLEAR GENERATION GROUP (NGG) PERFORMANCE STATUS MEETING**

**MARCH 2, 1999**

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# **OPENING REMARKS**

**John W. Rowe**  
**Chief Executive Officer**

## **AGENDA**

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- |  |                            |
|--|----------------------------|
| • <b>Opening Remarks</b>                   | <b>J. W. Rowe</b>          |
| • <b>Nuclear Generation Group Overview</b> | <b>O. D. Kingsley, Jr.</b> |
| • <b>Strategic Reform Initiatives</b>      | <b>D. R. Helwig</b>        |
| • <b>BWR Performance</b>                   | <b>C. M. Crane</b>         |
| • <b>PWR Performance</b>                   | <b>H. G. Stanley</b>       |
| • <b>Closing Remarks</b>                   | <b>O. D. Kingsley, Jr.</b> |



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# **NUCLEAR GENERATION GROUP OVERVIEW**

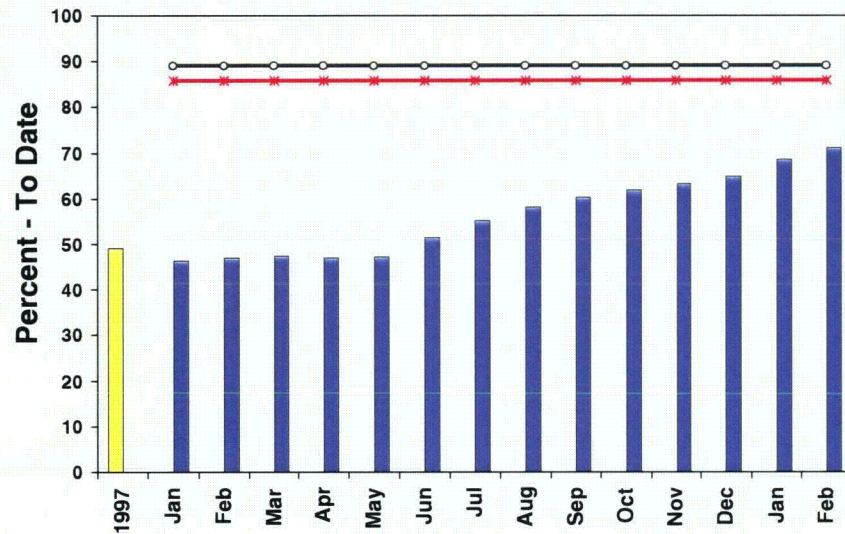
**Oliver D. Kingsley, Jr.**  
**Chief Nuclear Officer and President, NGG**

## **NGG PERFORMANCE SIGNIFICANTLY IMPROVED**

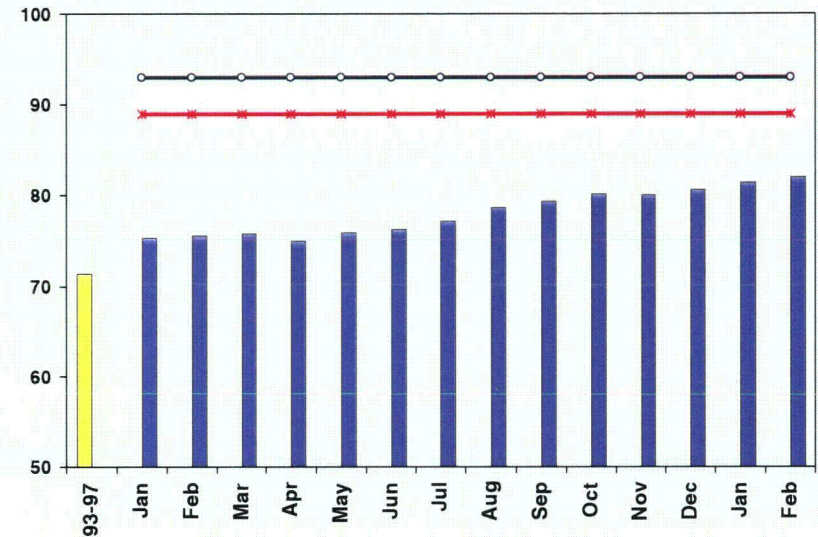
- **Higher Performance Standards Established**
- **Results Being Achieved**
- **Additional Work Remains**

# NGG PERFORMANCE IMPROVEMENTS

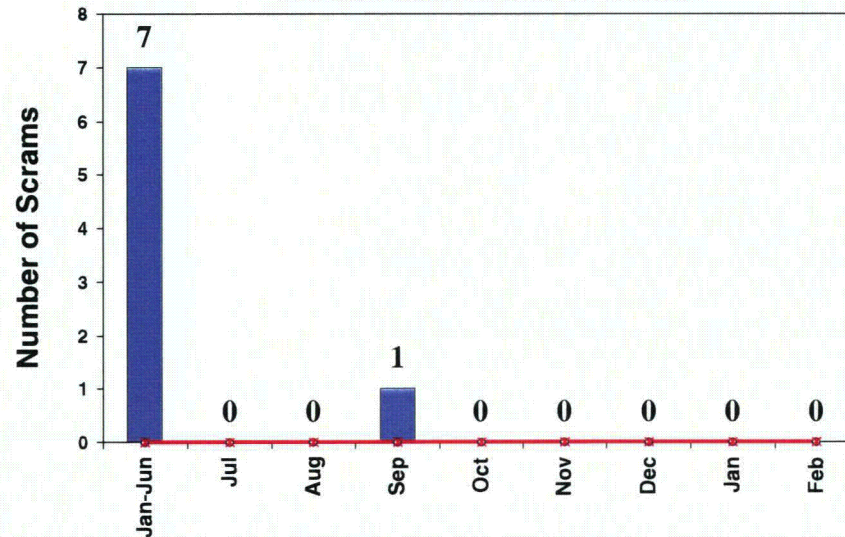
## NGG Capacity Factor \*



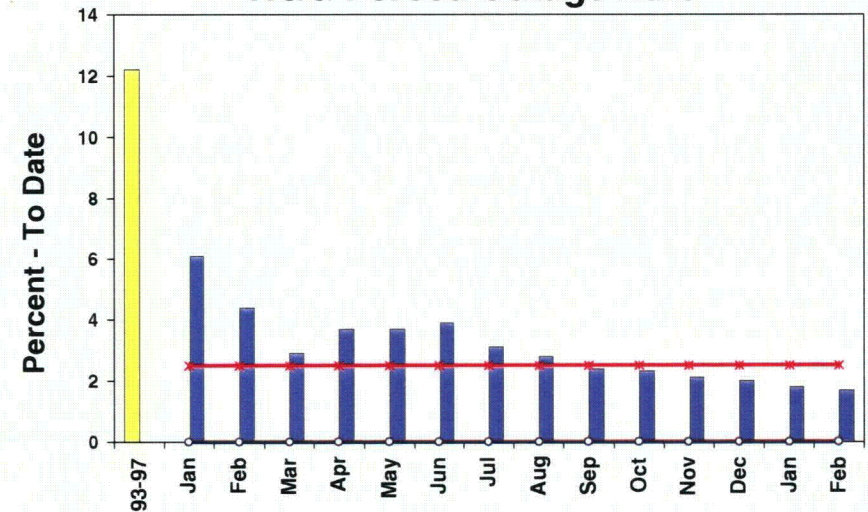
## Average INPO Performance Index



## NGG Automatic Scrams



## NGG Forced Outage Rate



## **1998 -- DEFINED FUNDAMENTALS AND IMPROVED PROCESSES**

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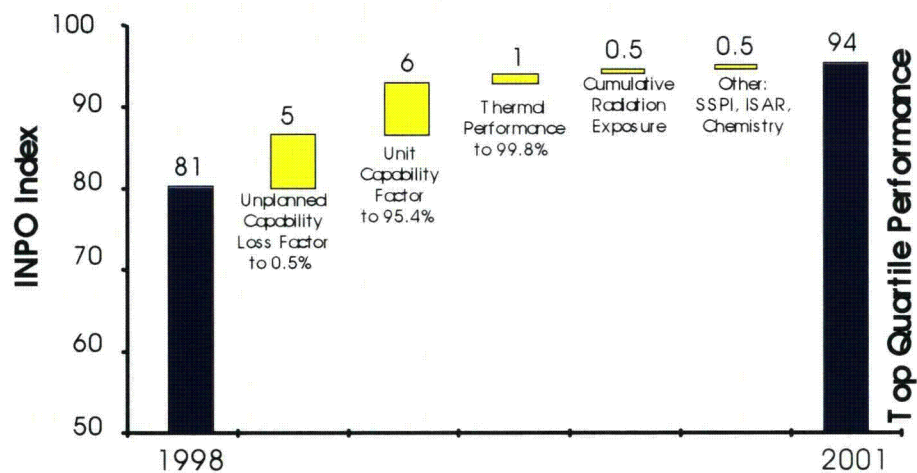
- **More Effective Leadership**
- **Focus On Problem Resolution**
- **Strategic Reform Initiatives (SRIs)**
  - ▲ **Completing Initial Implementation**
  - ▲ **Continue As Governing Principles**
- **Process and Program Improvements**
- **Effectively Address Cyclic Performance**

## **NGG ACTIONS CONTINUING AND GOING FORWARD**

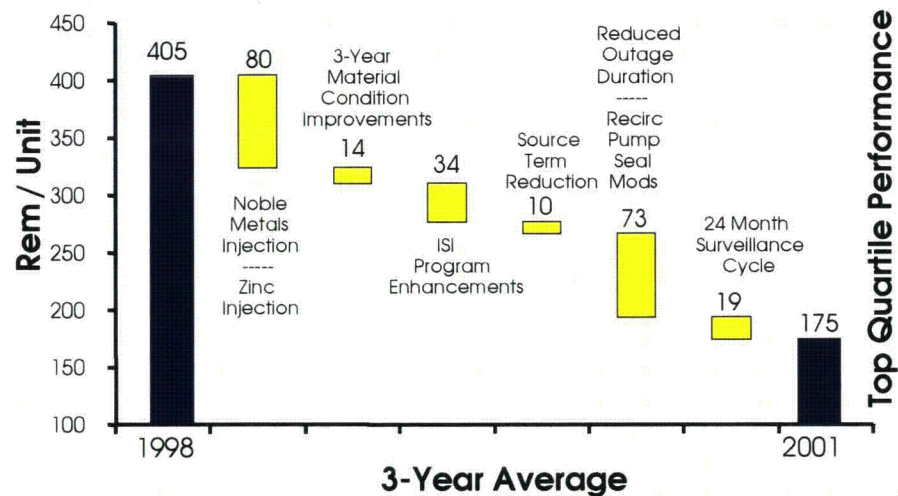
- **NGG Continues to Focus on:**
  - ▲ **Magnitude and Rate of Improvement**
  - ▲ **Comparison to Industry Best**
- **Instill Performance Standards Into Organization**
  - ▲ **Management Oversight**
  - ▲ **Accountability**
  - ▲ **Employee Communication and Engagement**
  - ▲ **Identify and Correct Problems**
- **Take Each Site to Next Level of Performance**

# ANALYSIS OF PERFORMANCE GAPS

## NGG INPO Performance Index Gap Analysis



## Quad Cities Radiation Exposure Gap Analysis





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# **STRATEGIC REFORM INITIATIVES**

**David R. Helwig**  
**Senior Vice President Nuclear Services**

## **STRATEGIC REFORM INITIATIVES (SRIs)**

---

- **Designed to Arrest Cyclic Performance**
  - ▲ **Focus on Performance and Results**
  - ▲ **Defined Expectations and Standards**
  - ▲ **Basic Processes and Fundamentals**
  - ▲ **Clear Roles and Responsibilities**
  - ▲ **Effective Oversight**
- **Implementation Complete**
- **Foundation for Continuous Improvement**



## **EFFECTIVENESS REVIEWS**

---

- **Effectiveness Reviews Completed**
  - ▲ **Original Purpose Satisfied**
    - ◆ **Accomplishments**
  - ▲ **Areas for Improvement Identified**
    - ◆ **Focus Areas**
  
- **Overall Effectiveness Review**
  - ▲ **Scheduled To Begin End Of March**
  - ▲ **Teams Include Outside Experts**

# **NGG-1, STRENGTHEN PERFORMANCE MONITORING AND MANAGEMENT**

---

- **Accomplishments**
  - ▲ **Consistent Implementation of Measures**
  - ▲ **Measures Aligned With Goals and Business Plan Actions**
  - ▲ **Integrated Process Supporting Management Review and Attention**
  
- **Focus Area**
  - ▲ **Use for Trending and Analysis**

## **NGG-3, ENSURE EXCELLENCE IN PLANT MATERIAL CONDITION**

- **Accomplishments**
  - ▲ **Work Control Planning Process**
  - ▲ **System Health Indicator Program (SHIP)**
  - ▲ **Comprehensive Process Model and Reporting**
  
- **Focus Areas**
  - ▲ **Improve Execution of Work Management**
  - ▲ **Refinement of Long-Term Planning Process**
  - ▲ **Proactive Use of SHIP**

## **GOING FORWARD**

---

- **Tangible Performance Improvements Achieved**
- **Sustained Performance Requires Continued Vigilance**
- **SRI's Define Key Areas of Performance**
- **Workforce Engagement and Continuous Improvement Must be a Way Of Life**

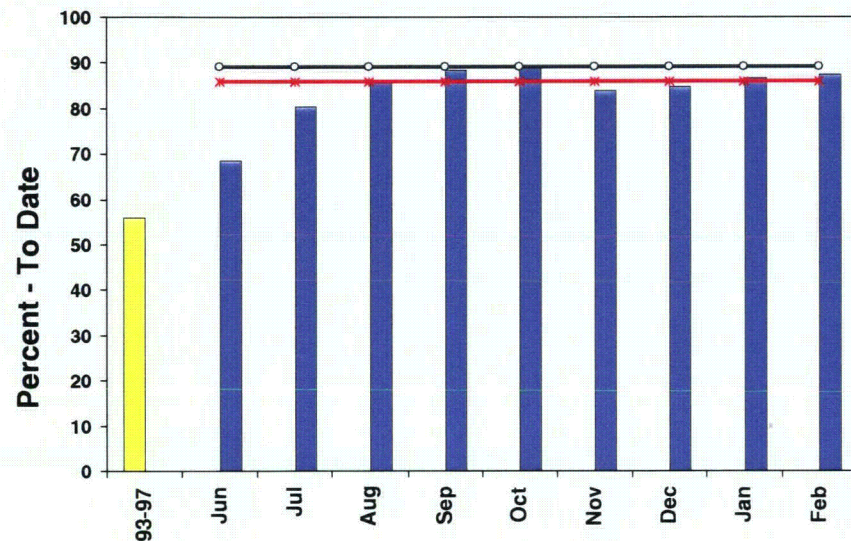
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# **BWR PERFORMANCE**

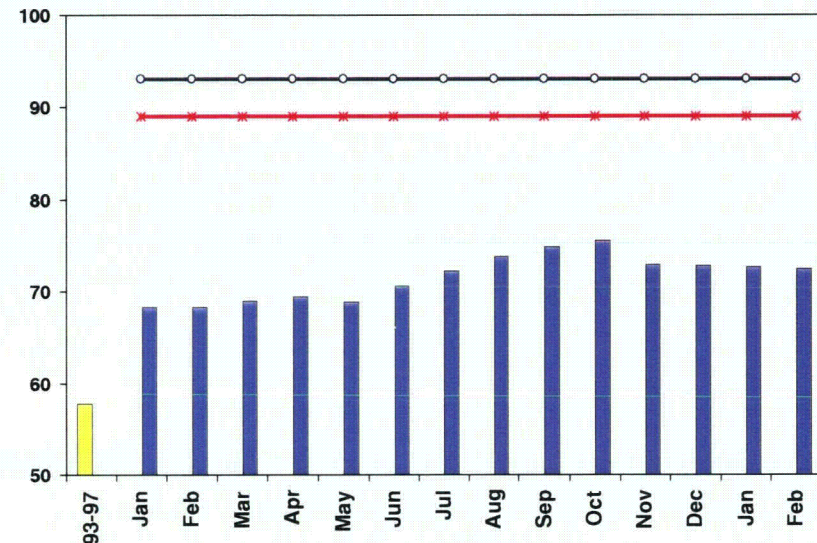
**Christopher M. Crane**  
**BWR Vice President**

# QUAD CITIES STATION PERFORMANCE IMPROVEMENTS

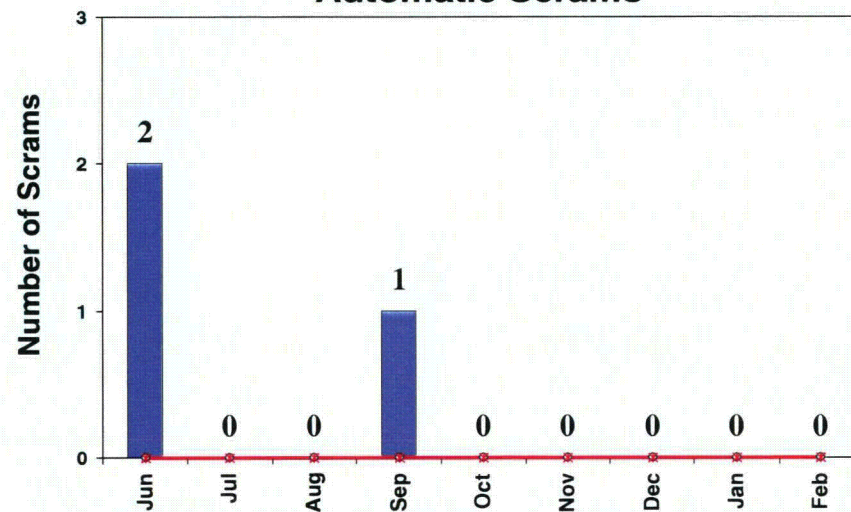
## Capacity Factor



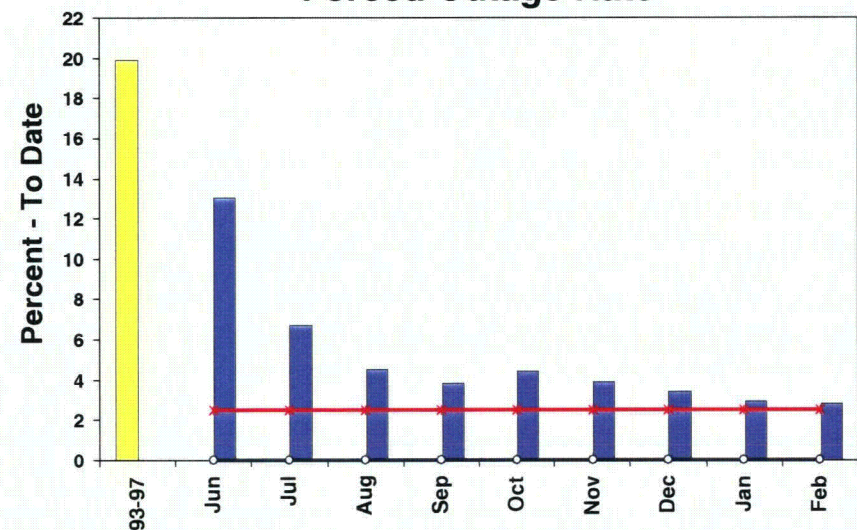
## Average INPO Performance Index



## Automatic Scrams



## Forced Outage Rate



1993-1997 Average
  1998 Actual
  Industry Top Quartile
  Industry Median

## **QUAD CITIES STATION ACCOMPLISHMENTS AND RESULTS**

---

- **Since Restart, Sustained Dual Unit Operation**
- **Well-Executed 28-Day Unit 1 Refueling Outage**
- **Strengthened On-Site And Corporate Oversight**
- **Engineering Improvements**

## **QUAD CITIES STATION ACCOMPLISHMENTS AND RESULTS**

---

- **Long-Standing Material Condition Issues Addressed**
  - ▲ **Operator Challenges Reduced**
  - ▲ **Corrective Maintenance Backlog Reduced**
- **Fire Protection Program Improvements**
- **Decrease In Human Error Events**
- **Improved Trend In Operator Configuration Control Errors**
- **Chemistry Performance**

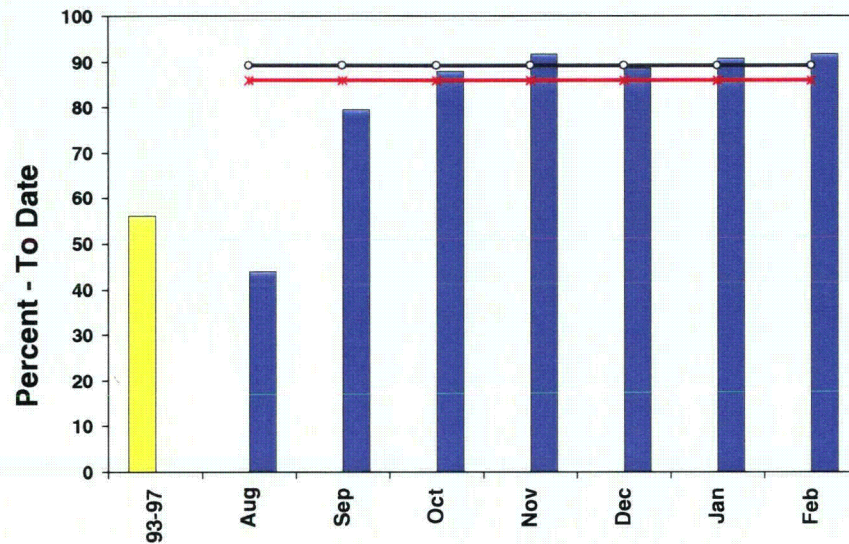


# **PERFORMANCE DECLINE ARRESTED, TREND IMPROVING**

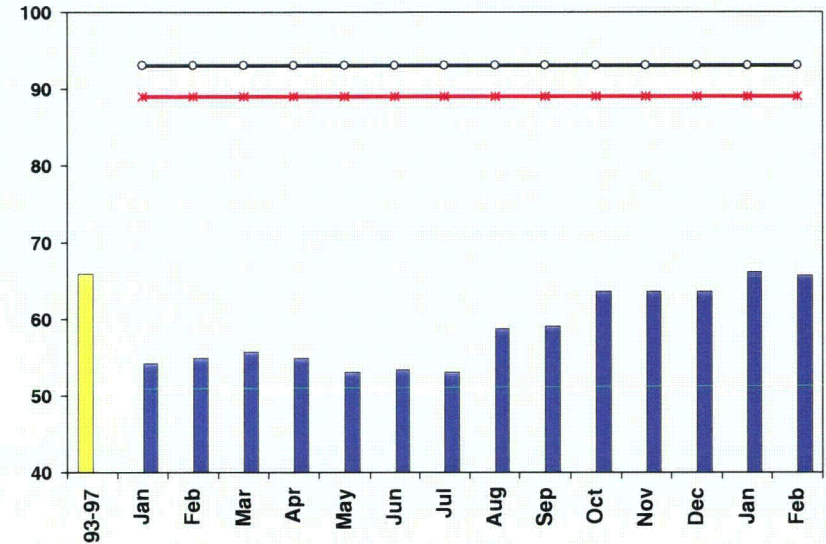
- **Focus Areas**
  - ▲ **Operations Leadership Role**
  - ▲ **Configuration Control Errors**
  - ▲ **Work Control Process**
  - ▲ **Equipment Reliability**
  - ▲ **Repetitive Equipment Problems**
  - ▲ **Reduce Number of Maintenance Rule (a)(1) Systems**
  - ▲ **Radiation Exposure**

# LASALLE UNIT 1 PERFORMANCE IMPROVEMENTS

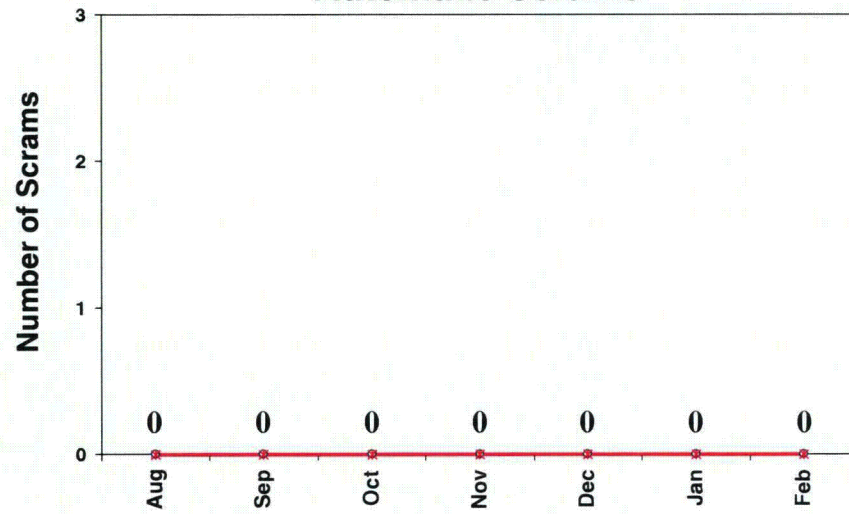
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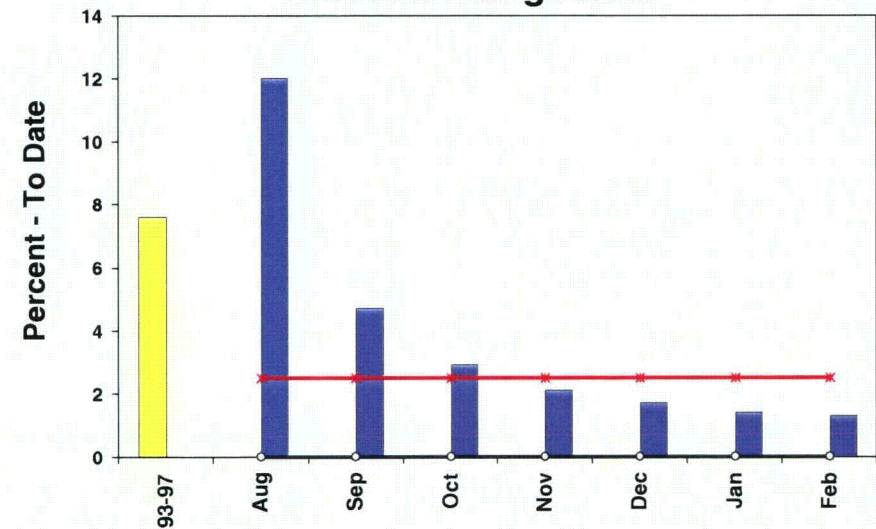
## Average INPO Performance Index



## Automatic Scrams



## Forced Outage Rate



1993-1997 Average
  1998 Actual
  Industry Top Quartile
  Industry Median

# **LASALLE UNIT 1**

## **ACCOMPLISHMENTS AND RESULTS**

- **Management Team In Place and Engaged**
- **Operating Fundamentals Improvements**
- **Material Condition Improvements**
- **Long-Standing Design Issues Resolved**

## **NEXT STEPS**

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- **Unit 2 Restart**
  - ▲ **Original Engineering Complete**
  - ▲ **Detailed Plan, Enhanced By Unit 1 Lessons-Learned**
  - ▲ **Comprehensive Assessment Of Restart Readiness**

## **FOCUS AREAS**

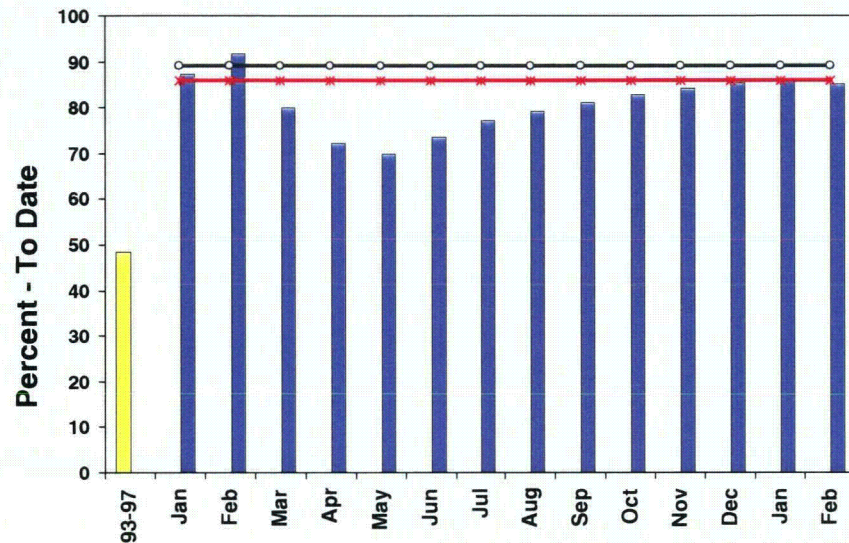
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- **Work Management**
- **Human Performance**
- **Configuration Control**
- **Chemistry**
- **Radiation Protection**

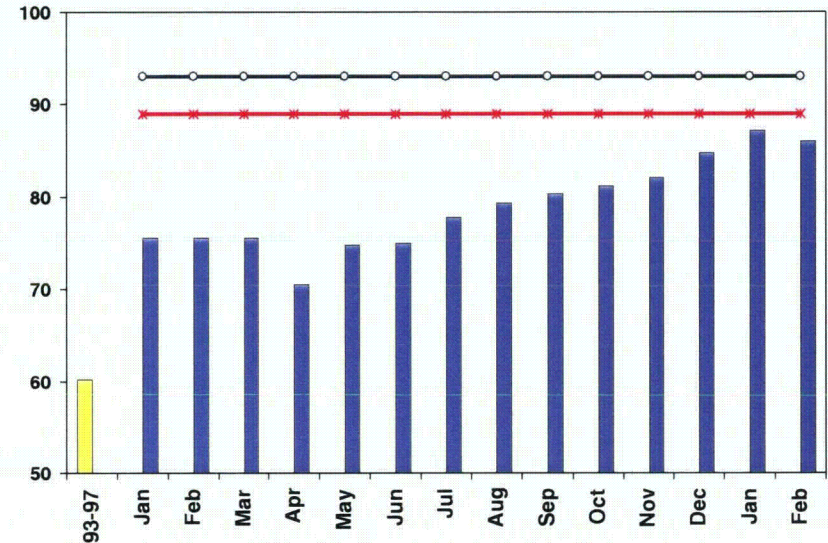


# DRESDEN STATION PERFORMANCE IMPROVEMENTS

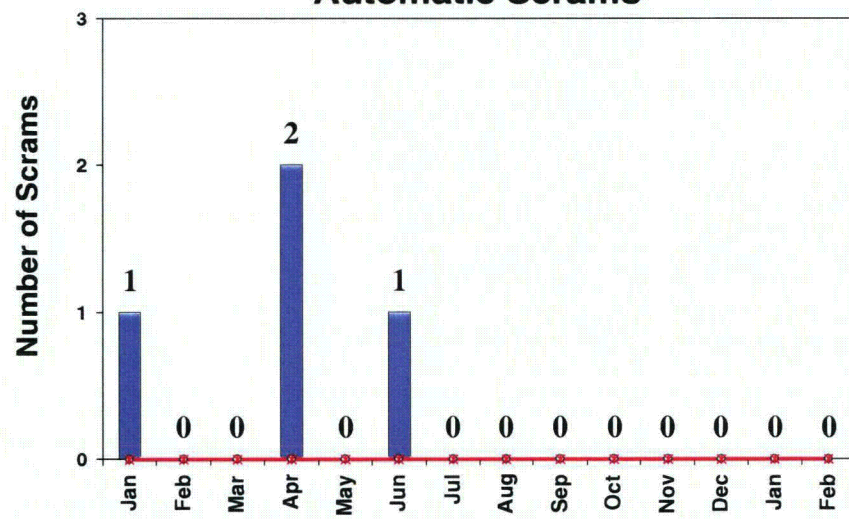
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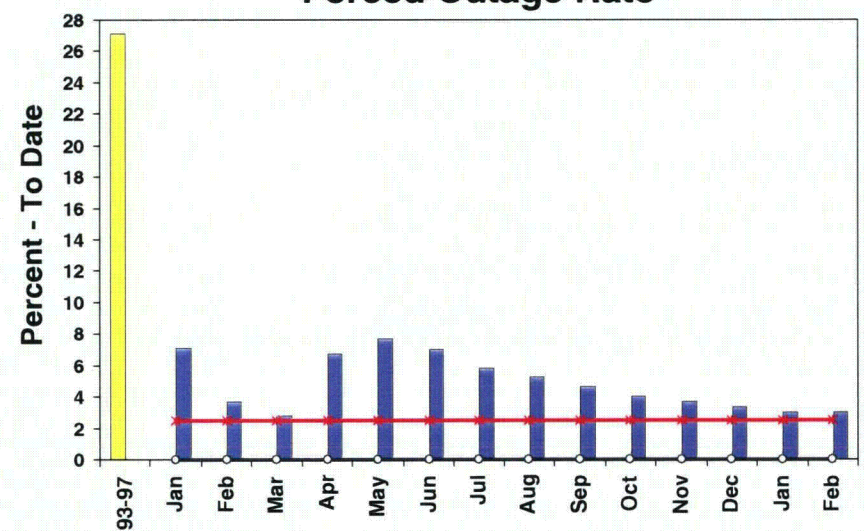
## Average INPO Performance Index



## Automatic Scrams



## Forced Outage Rate



1993-1997 Average
  1998 Actual
  Industry Top Quartile
  Industry Median

## **DRESDEN STATION ACCOMPLISHMENTS AND RESULTS**

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- **Scram Reduction**
- **Material Condition Improvements**
- **Better Operation**
- **Improved Engineering**
- **Reduced Overall Radiation Exposure**

## **MOVING DRESDEN TO NEXT LEVEL OF PERFORMANCE**

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- **Complete Identified Material Condition Improvements**
- **Further Improve Human Performance**
- **Engineering Program Improvements**
- **Additional Radiation Exposure Reduction**



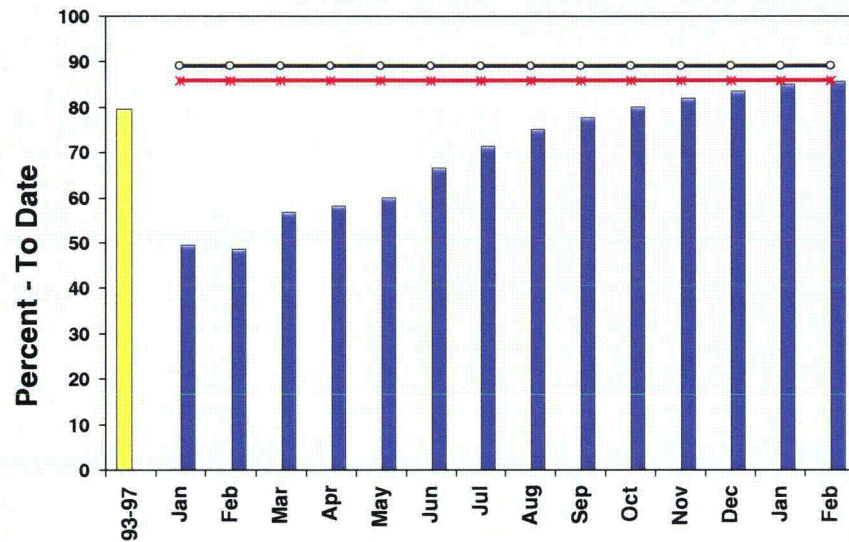
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# **PWR PERFORMANCE**

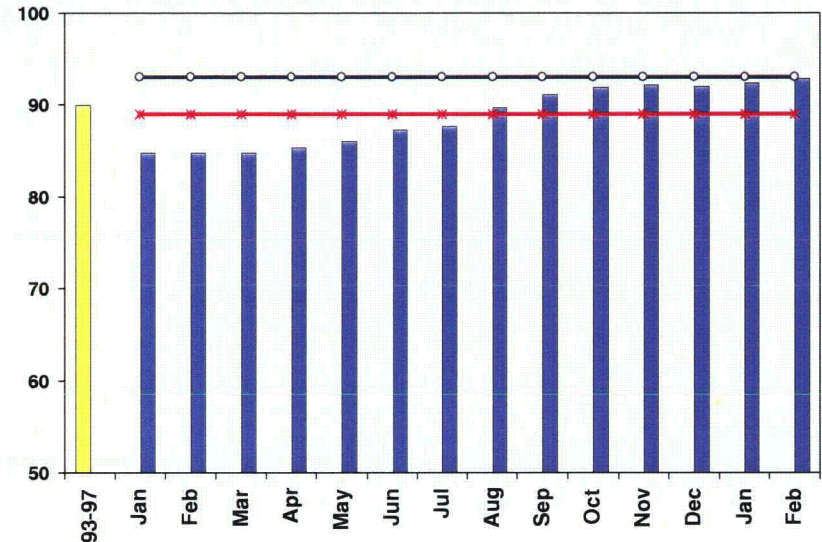
**H. Gene Stanley**  
**PWR Vice President**

# BYRON STATION PERFORMANCE IMPROVEMENTS

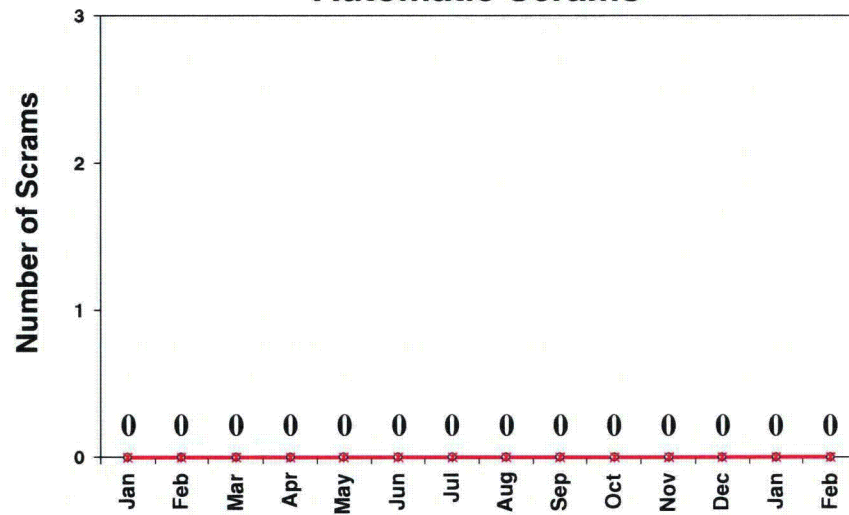
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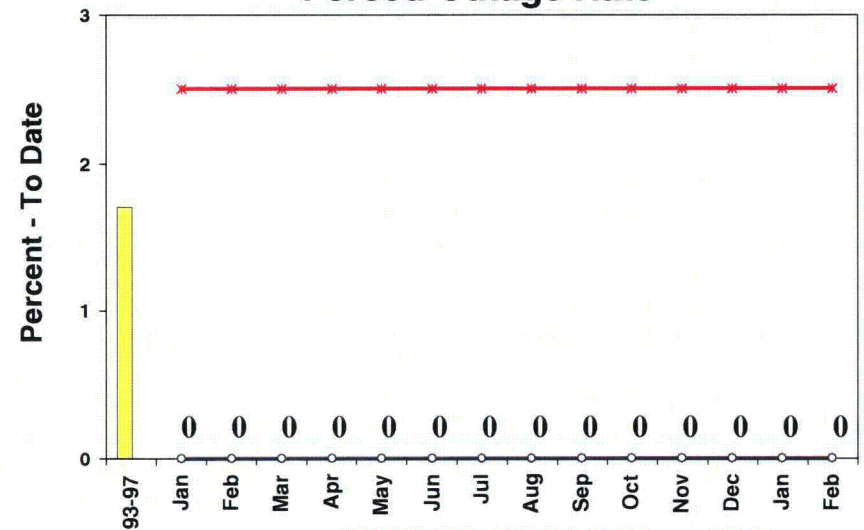
## Average INPO Performance Index



## Automatic Scrams



## Forced Outage Rate



1993-1997 Average
  1998 Actual
  Industry Top Quartile
  Industry Median

Data Include S/G Replacement  
and Refuel Outages

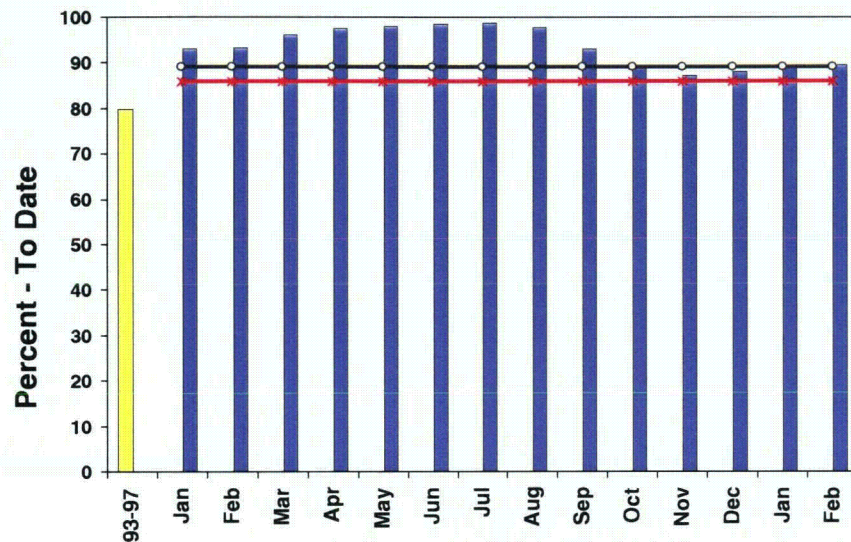
## **BYRON STATION PERFORMANCE**

- **Top Level Plant Performance is Good**
- **NGG's Higher Performance Standards and More Effective Oversight Have Surfaced Low-Level Issues**
- **NGG and Site Management Addressing Low-Level Issues To Prevent Cyclical Performance**



# BRAIDWOOD STATION PERFORMANCE IMPROVEMENTS

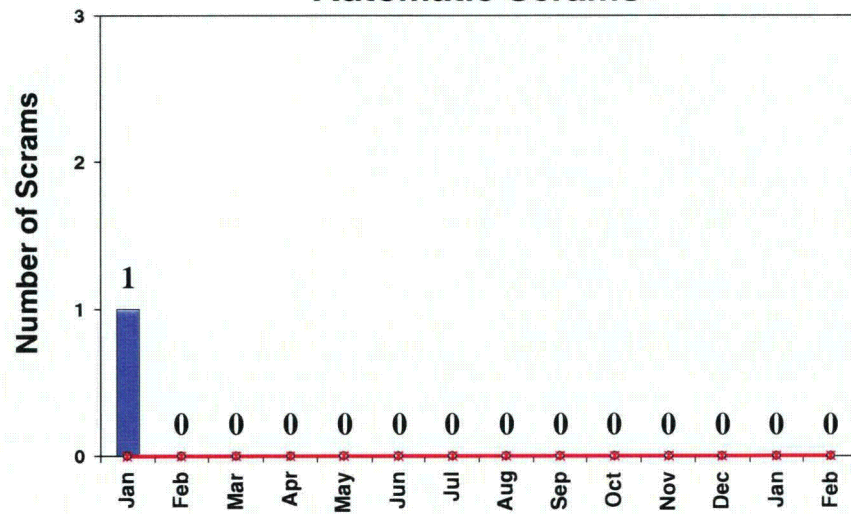
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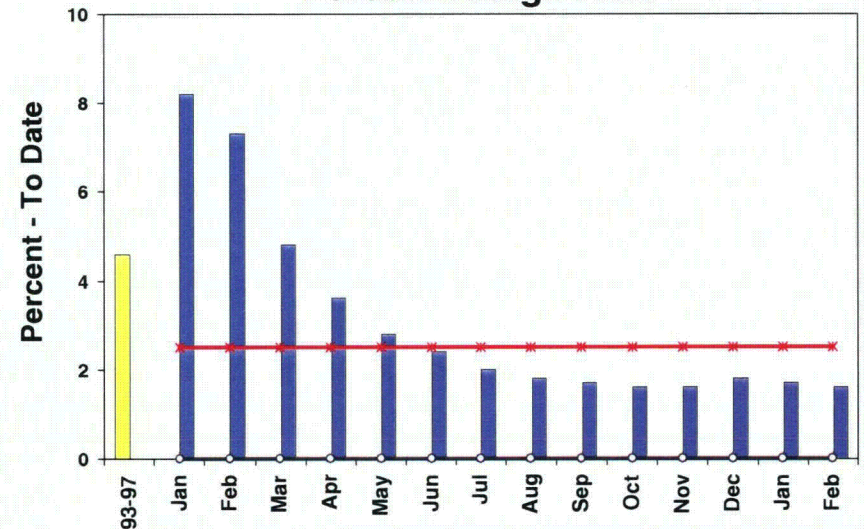
## Average INPO Performance Index



## Automatic Scrams



## Forced Outage Rate



1993-1997 Average
  1998 Actual
  Industry Top Quartile
  Industry Median

**Data Include**  
**S/G Replacement Outage**

## **BRAIDWOOD STATION ACCOMPLISHMENTS AND RESULTS**

- **Improved Material Condition**
- **Breaker-to-Breaker Operation**
  - ▲ **467-Day Run For Unit 1**
- **World Record 70-Day Steam Generator Replacement**
- **Engineering Improvements**

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## **CLOSING REMARKS**

**Oliver D. Kingsley, Jr.**  
**Chief Nuclear Officer and President, NGG**

## **ONGOING APPROACH TO IMPROVEMENT**

- **Results to Date Validate Improvement Plan**
  - ▲ **Setting Expectations That Exceed Regulatory Standards**
- **Method for Continuous Improvement**
  - ▲ **Standards and Programs**
  - ▲ **Performance Monitoring**
  - ▲ **Strong Management Team**
  - ▲ **Intervention As Required**
- **1999: Sustain and Improve Performance**
- **2001: Achieve Top Quartile Performance**



# **NRC STAFF'S ASSESSMENT OF COMMONWEALTH EDISON'S PERFORMANCE**

**Jim Dyer  
Region III  
March 2, 1999**

**VIEWGRAPH 1**



# CHRONOLOGY

- Commission Meeting 06/30/98
- Dresden removed from watch list 07/29/98
- LaSalle Unit 1 startup 08/01/98
- SRI Acknowledgment Letter 08/05/98
- Additional ComEd Oversight Panel Meetings 09/14/98  
11/17/98  
01/28/99
- Braidwood Unit 1 completes S/G outage 11/12/98
- Quad Cities Unit 1 completes 28 day outage 12/05/98
- Dresden Unit 3 outage on schedule 02/25/99

# **REGIONAL ACTION**

- **Completed corporate review of selected Strategic Reform Initiatives**
- **Completed resident and regional inspection of selected Strategic Reform Initiatives**
- **Continued enhanced inspection and assessment of ComEd**
- **Continued public oversight meetings with Dresden, LaSalle, Quad Cities, and ComEd senior management**
- **Conducted PPRs and SMM screening meetings**

# **RESULTS**

- **Concluded that ComEd has implemented Strategic Reform Initiatives**
- **Performance improved at Dresden, LaSalle, Quad Cities**
- **Performance remained constant at Byron and Braidwood**
- **Improvements driven by ComEd management team**
- **Corporate assessment/oversight added value to improvement programs and processes**

VIEWGRAPH 4

# **FUTURE ACTIVITIES**

- **Continue ComEd Performance Oversight Panels (CPOP)**
- **Continue augmented coverage through LaSalle Unit 2 startup**
- **Continue enhanced inspections and periodic management meetings - Dresden, LaSalle, and Quad Cities**

VIEWGRAPH 5