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 To: Lisa.slow@turner.com
 Date: Wed, Jun 2, 2004 5:16 PM
 Subject: NRC transcript

release EB

Lisa: attached is the transcript of the Chairman's visit to an Energy Daily press breakfast, which C-Span covered. I hope that helps. there are a few references to plant security, particularly in the event of an aircraft crash, and a line on page 6 about "We are now a safety, security and preparedness agency. We are no longer one-dimensional. These three areas, safety, security and preparedness are being integrated in a synergistic manner so each one reinforces each other. ... we have done significant security enhancements. in particular. ... look at the comments in the two full paragraphs on paragraph on page 7 of the transcript.

to get the industry perspective, I think dave suggested you reach out to steve kerekes at NEI. I'm sure he can help you.

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U4 reference P.23

B-19

Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

Title: Energy Daily Breakfast Meeting

Docket Number: (not applicable)

Location: (not provided)

Date: Thursday, May 27, 2004

Work Order No.: NRC-1520

Pages 1-41

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ENERGY DAILY

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BREAKFAST MEETING

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THURSDAY,

MAY 27, 2004

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The meeting was held at 10:00 a.m.,
Llewelyn King, presiding, with guest, Nils Diaz,
Chairman, U.S. Nuclear Regulatory Commission.

P R O C E E D I N G S

1
2 MR. KING: Good morning, ladies and
3 gentlemen. Thank you for coming. I'm Llewelyn King,
4 the publisher and founder of *Energy Daily*. We
5 appreciate you all coming on what is essentially a
6 holiday week, a holiday coming up. This is another
7 notorious breakfast which we've been running since
8 1974. The purpose is to provide everyone with the
9 stories of the day, with no advantage to the *Energy*
10 *Daily*. It's a pretty straightforward situation where
11 everything is on the record, and we could play it back
12 on our website from about noon on, so if you miss
13 something, you can get it off the website. We have
14 television today, C-Span, and I'd be grateful if you
15 would identify yourselves for the record.

16 Our guest today, an old friend of mine.
17 He just reminds me how long we've known each other.
18 After a while it doesn't get to be flattering.

19 CHAIRMAN DIAZ: I know that.

20 MR. KING: The Chairman of the Nuclear
21 Regulatory Commission will (inaudible), and I think we
22 have a few remarks, and then we'll move into
23 questions. And (inaudible) together to handle the
24 questions. Welcome and (inaudible) it doesn't get to
25 be flattering.

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1 CHAIRMAN DIAZ: It's my pleasure. Well,
2 good. I think I'll just focus your attention on a
3 series of issues. I'll go down a few bullets that I
4 have in here, and as everybody knows, this is the 50th
5 anniversary of the Atomic Energy Act, and in many ways
6 for many people this is a celebration, and for other
7 people this is an area of concern.

8 And this brings out the fact that nuclear
9 power has both many benefits, but it also creates many
10 questions for humanity. And in the NRC we deal with
11 those issues day in and day out, because our job
12 really is to provide the means to protect the people
13 of this country from radiological hazards. In many
14 ways, that's what we do day in and day out. We
15 provide radiological protection from the uses of
16 nuclear energy, and for civilian materials that are
17 based in medicine and industrial issues.

18 There is no doubt that many things have
19 changed in the last 50 years. I think even Mr. King
20 and I have changed a little bit in the last 50 years.
21 The reality is -- well, a little bit.

22 MR. KING: A little bit.

23 CHAIRMAN DIAZ: Yes. I'm not going to get
24 into that. Fundamentally, in the 50 years there's a
25 tremendous amount of increase of the two main uses of

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1 nuclear power and radiation, so the energy portfolio
2 has increased significantly from the standpoint of the
3 production of electricity. If you look back 50 years,
4 there's significant development which in many ways
5 stagnated during the crises that came in the 70s when
6 the prices of oil drove the prices of reactors very
7 high, but the level of safety, which is what I am
8 concerned with, has continued to increase.

9 The level of safety in reactors is a
10 continuous improvement that has really been
11 remarkable, especially the last 10 to 15 years. I
12 don't know whether you can say well, that is true
13 because of the mishaps like Three Mile Island, some
14 big mishaps like Chernobyl, but the reality is that
15 nuclear power plants in this country and abroad are
16 operated at a much higher level of safety than what
17 they were.

18 The other part of the equation that we
19 deal with is, of course, the issue of the use of
20 radioactive materials, and the increased use of
21 radioactive materials for medicine and for industrial
22 purposes have also continued to increase. In these
23 areas, safety has also increased.

24 I must note, however, that every year we
25 have several incidents, especially at hospitals with

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1 misutilization and misadministrations of radioactive
2 materials. This continues to be a concern, and the
3 agency is systematically trying to come up with better
4 ways to protect the patients, and occasionally work
5 with some of the industrial uses.

6 If you look at our reports to Congress for
7 the past many, many years, the only real issues were
8 the large amounts of radiation were either given to a
9 person as an internal or external radiation event,
10 really comes from the medical and from the industrial
11 communities. Those are the two that actually in many
12 ways directly related to the project and many ways
13 more significant than any other type of issue that we
14 have ever seen.

15 If you look at the NRC, we have changed
16 too, and we believe we have changed for the better.
17 When I came to the NRC eight years ago, we were still
18 in the process of accelerating and looking at how we
19 become more focused on safety, because the NRC many
20 times is preoccupied with the issue of is the right
21 thing being done. There was a lot of little tables
22 with checkmarks put on it, and people were worried
23 whether people were complying with a procedure or not.

24 I think we have changed tremendously, and
25 changed for the better. This change is that things

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1 that are important to safety rise up from where they
2 were and are given national attention, and things that
3 are not are taking a different perspective.

4 We no longer do enforcement on minor
5 safety issues. We just work with the licensees to
6 make them better, but we do take serious safety issues
7 and elevate them. And like I keep saying, you can
8 always tell when something is very serious by the
9 amount of inspectors that come into a site. The
10 numbers of inspectors are multiplied.

11 We are in a new phase. There is no doubt
12 about it, and this focus on safety goes not only from
13 the reactors, it goes all the way to the materials
14 arena. And we are trying to get to be an agency that
15 is risk-informed and performance-based, a new way of
16 doing things that allows to do things more efficiently
17 and more effectively.

18 Even now in the past year, we changed the
19 NRC even further. We used to be a safety agency. We
20 just always did public health and safety, public
21 health and safety. Well, 9/11 changed that
22 completely. We are now a safety, security, and
23 preparedness agency. We are no longer one-
24 dimensional. These three areas, safety, security, and
25 preparedness are being integrated in a synergistic

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1 manner so each one reinforces each other. I know that
2 you have very strong interest in security. We have
3 done significant security enhancements.

4 The agency in February of 2002, three
5 months after 9/11, in that very, very I'll almost say
6 arbitrary manner issued orders for all nuclear power
7 reactor licensees and told them flat out to go ahead
8 and increase their security in a manner that was, even
9 at the time we were not sure of all the intelligence
10 that was available but we actually went and did it.
11 We actually increased the security for access control,
12 security for protection against ground, a land-based
13 attack. We issued new water-based criteria, and we
14 required the licensees to actually be prepared to deal
15 with the potential effects of an aircraft attack. And
16 out of that came out a continuing study which is
17 called our Aircraft Vulnerability Study.

18 The studies, as you know, are classified
19 but they do confirm that the power reactor facilities
20 are the most protected civilian facilities in the
21 country. And that this criteria, this approach that
22 we have used for many years is called Defense-In-
23 Depth, gives us time to deal with unexpected events no
24 matter where they come from.

25 What we have learned in the last two and

1 a half years is a sophisticated set of analyses that
2 I believe have ever been done on power reactors is
3 that we have time, and time is on our side. And,
4 therefore, we have concluded that the potential
5 radiological consequences from aircraft attacks on
6 nuclear power reactors are low.

7 You can say that it's low but it's not
8 zero. Absolutely true, it is not (inaudible), and we
9 deal with that day in and day out; therefore, the next
10 phase that we did is we say what is our next step to
11 make sure that we're protecting the people of America,
12 so we have increased emergency preparedness.

13 We have taken an agency preparedness like
14 a routine. You do it every do. You check it out, you
15 do it into a vital component of our triad, safety,
16 security, and preparedness. What we have done
17 internally is created an organization, doubled the
18 number of people. We're integrating right now
19 emergency preparedness with incident response. We are
20 shaking that issue loose and making sure that it is on
21 par with the amount of attention that we always gave
22 safety, and now to security, and now to preparedness.

23 I know that I could go on for some time.
24 The other issue that I think is very important is the
25 issue of sources. We have been working in securing

1 radioactive sources with the Department of Energy. We
2 actually have worked in a very, very close manner with
3 Homeland Security, with EPA, FAA, with DOE, and with
4 all the other agencies and have created a series up
5 response plans, including things like assessing what
6 the results of any potential device is, both health
7 wise contamination and cleanup levels. We are a lot
8 better now than we were.

9 We have answers, we have action plans. We
10 believe we are capable of addressing these issues in
11 a manner that are protective of public health and
12 safety. Are we there? Do we have everything we
13 should do, no; but we certainly have come a long way.

14
15 I think I'm going to stop right there
16 because I've done enough damage.

17 MR. KING: If you've got a question, would
18 you identify yourself and give your affiliation so
19 that we'll know for the television. Questions. Go
20 ahead.

21 QUESTION: Hi. I'm Darren (inaudible)
22 Daily. There's an issue right now in the Senate where
23 there's a fight over whether to allow DOE to
24 reclassify certain high-level waste at at least one
25 site, the Savannah River site. Folks that oppose it

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1 say that this would create some kind of precedent for
2 some kind of reclassification at a public site. What
3 is your feeling on that about what DOE would like to
4 do with some of that waste?

5 CHAIRMAN DIAZ: Well, I do believe that
6 the issue of incidental waste, as it's called, which
7 are waste that are in the stream of the higher-level
8 waste, is an issue that DOE is trying to deal with in
9 a manner that I call it risk-informed. Can I separate
10 enough of this waste, can I handle this waste in a
11 manner that still provides protection that doesn't
12 really entail all of the processing that we have to do
13 with the other waste. And I think this is a issue for
14 the Congress of the United States to address, which is
15 where it's being addressed.

16 I do believe there are things that can be
17 done to separate waste in a manner that classifies
18 them and is easier to handle. I think DOE has a
19 series of problems with this thing, and I would like
20 to say they are not my problems.

21 QUESTION: I'm with the Las Vegas Sun.
22 The State of Nevada that I have asked the Nuclear
23 Regulatory Commission to intervene in the Department
24 of Energy's idea to move waste from Fernald to the
25 Yucca Mountain site. I don't know if you're responded

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1 to them yet, or do you --

2 CHAIRMAN DIAZ: We are in the process of
3 responding. Of course, we have a series of
4 regulations that deal with what is called 11E-2 waste.
5 And fundamentally, we've tried to classify waste that
6 has been used in the processing of Uranium and what is
7 separated, and the law allows us to do certain things
8 and does not allow us to do other things. And the
9 issue for now, what we're trying to do is make sure
10 we're responsive to whatever needs are presented, but
11 we go slow on these issues. These are the type of
12 things that we don't decide overnight, and I hate to
13 say this but my lawyers have a lot to say about the
14 kind of things that we do. It's not purely a
15 technical issue. It goes into legal issues and,
16 therefore, there is a lot of back and forth into it.
17 I don't think the issue has been totally reviewed, but
18 I do know that the commitment has been made not to
19 move them until every "I" has been dotted.

20 QUESTION: Mr. Chairman, (inaudible) of
21 Reuters. Last week before Senator Voinovich's
22 hearing, he took a little bit of heat from a GAO
23 report regarding the Davis-Besse incident. There was
24 some discussion. Part of the issue was safety culture
25 and whether NRC should be involved in the safety

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1 culture. Have you considered your position or the
2 agency's position, that that really doesn't fall under
3 your jurisdiction, or do you think you're likely to?

4 CHAIRMAN DIAZ: Well, any time that the
5 Congress of the United States (inaudible) issue, we
6 pay very serious attention to it. And we believe we
7 have some good answers to the issue. There is no
8 doubt that the NRC is committed to a strong safety
9 culture in our licensees, but the way we do it, rather
10 than just saying have a safety culture, we have a
11 series of indicators.

12 I referred to it in the hearing as paying
13 more attention to the management of safety, which are
14 things that we can actually probably measure, and
15 actually see in the issue of the safety culture. So
16 we require our licensees to have a strong safety
17 culture. That somebody once in a while doesn't do it,
18 there's no doubt about it, and it happens. It happens
19 here, it happens everywhere.

20 However, I'd like to say that we are very
21 much aware of the need to address the issue. And, in
22 fact, you can see a couple of little speeches I have
23 given to the industry, at INPO last year in which I
24 addressed the issue of safety culture and complacency
25 and so forth.

1 I do believe that the role of the NRC is
2 definitely not to manage these plants, and I think
3 that Senator Voinovich completely agrees, that we're
4 not a manager of nuclear power plants. I think our
5 role is to make sure that the licensee does what they
6 have to do. And in this case, Davis-Besse did not do
7 what they had in their own plan regarding safety
8 culture. In other words, they violated their own
9 plans and their own standards, and that we can hold
10 them accountable for.

11 I do believe that we're learning more
12 about what are the type of things that we can measure
13 by the type of things that we can add to it. And in
14 the case of Davis-Besse, because the culture was
15 really not good, we went a step beyond what we would
16 normally do, because in the case of safety, the
17 Commission and the Atomic Energy Act, 50 years that
18 tells us we have a tremendous amount of flexibility
19 and latitude. We require it for five years provide
20 independent assessment of their culture, their
21 operations. And that's kind of unique. We have only
22 done that -- we did a little bit with Milstone when we
23 required them to provide an independent body to look
24 at their culture, and an independent assessment of
25 their safety system. So in unique cases, we do it.

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1 We'd rather the licensees do it, and we see what the
2 results are.

3 QUESTION: Well, the GAO report mentioned
4 the possibility for other mishaps is still out there.
5 You mentioned that First Energy's safety culture
6 obviously wasn't good. Are you concerned that there
7 are other ticking time bombs out there that could come
8 up if you don't look at it more closely.

9 CHAIRMAN DIAZ: We haven't seen any
10 ticking time bombs. Okay. I can categorically tell
11 you that there's never going to be another hole in the
12 head of a reactor vessel in this country. I mean,
13 you're never going to find one. And you can say well,
14 is that because of the strong regulator? Well, a
15 little bit, take a little bit of credit for that. But
16 fundamentally if you look at what it cost them, there
17 is no other industry in this country that's going to
18 take that risk.

19 Now we're going to make sure that there's
20 strong regulations, and we have gone that way.
21 However, I think what the GAO was saying, and they
22 might have even quoted me, is the fact that I said
23 that there might be some other things that are not as
24 obvious and as clear as the Boric Acid corrosion in
25 the plant. And that's why a year ago I started to

1 push very hard and established a Materials Degradation
2 Program, a program that is not only looking at the
3 nozzles of the pressure vessel head, looks at the
4 materials in the plant and all of the systems that
5 could actually have an impact on safety.

6 At the same time then, the industry has
7 established major programs in Materials Degradation.
8 This, by the way, is not an issue only of the nuclear
9 power industry. You talk to the Presidential Science
10 Advisor, which I occasionally have the pleasure of
11 doing, that's an issue that is very big on his list.
12 This is an issue of America, do we have many, many
13 assets that have materials degradation problems, and
14 we need to come up with a new technology, a new way of
15 fixing them.

16 QUESTION: Chairman, you're a nuclear
17 engineer by training and a nuclear professor before
18 you joined the NRC. Do you feel that the need for
19 technology is evolving or is it frozen in time? We
20 haven't seen a new plant, since everybody knows in
21 more than 30 years. In everything else we see
22 technological evolution, oil (inaudible) is something
23 different after 30 years than it was before. How do
24 you feel about the evolution of the technology?

25 CHAIRMAN DIAZ: Well, it certainly hasn't

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1 evolved very fast. You're absolutely right, the
2 nuclear technology in this country, and really in the
3 world is kind of -- is not frozen. It has evolved
4 slowly. That doesn't mean that changes are not being
5 made even to existing reactors or to the new reactors
6 that are being built, especially in the East, in
7 Japan, South Korea, Taiwan, China. But the changes
8 are evolutionary in measure, and the reason is this is
9 a very conservative industry. And by being
10 conservative, they have tried to assure themselves and
11 whoever invests in these things, and the country, that
12 what they are doing already fits the framework of
13 performance and of regulation.

14 I believe that for the nuclear power
15 industry to move forward, and I'm now talking as an
16 old nuclear engineer, they need to evolve more
17 rapidly. They need to actually have plans that run
18 more efficiently, at little higher temperatures. They
19 need to really get rid of all this whole analog
20 systems going to digital controls and
21 instrumentations. There are many, many things that
22 are state-of-the-art, and they are bringing them in
23 into the old plants. But if there are new power
24 plants, they definitely need to move into an area that
25 makes them more efficient, and at the same time, we

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1 will require them to be moving at a higher level of
2 safety; meaning that inherent safety becomes part of
3 the criteria, rather than something that you add on
4 later on.

5 QUESTION: (inaudible) evolution?

6 CHAIRMAN DIAZ: In a certain way, yes. I
7 think that in a certain way in this particular area
8 where conservatisms is such a big part of all that is
9 done, it inhibits it because people say I do not want
10 to have uncertainty. Uncertainty is one of the great
11 enemies of this area.

12 On the other hand, I do believe there is
13 enough known learned now that the basis is there to
14 move forward. I think we know much more now than we
15 did many years ago. There is a good, strong,
16 scientific and technological basis to move reactors
17 from where they are to a higher level of performance.
18 And I think the industry is looking seriously at that.

19 QUESTION: Do we learn enough from the
20 Nuclear Navy and the nuclear submarines, do we learn
21 enough to do. I believe there's evolution going on
22 now.

23 CHAIRMAN DIAZ: Yes, we do. We, of
24 course, as you know, we do have significant programs
25 with the Nuclear Navy and there is a learning process.

1 I do believe that those programs, of course, have
2 improved also in the areas of materials and controls.
3 But I think the big step in the nuclear power plants
4 comes in the area of can we increase the efficiency of
5 generation. We're stuck at the 32, 33 percent level,
6 I think, that that can only be resolved with higher
7 temperatures. And this is why the move to either gas
8 turbines. You know, it's probably a very good move
9 for the future. Nobody is going to go there, as you
10 well know, in the next 20 years. They need to be
11 assured that this fits both the expectations of
12 performance, the expectations of safety, and the
13 expectations of what the country was to be assured
14 that these things are very, very safe. So I have, by
15 the way -- I coin a phrase about a couple of years
16 ago, which is an interesting phrase. It's just that
17 we need to be conservative, but we need to be
18 realistically conservative. We need to avoid the
19 extreme levels of conservatism, because it doesn't
20 serve the American people very well.

21 QUESTION: Mr. Chairman, (inaudible).
22 There seems to be a lot of pressure and uncertainty on
23 the Hill this year, and I know the NRC has asked for
24 increases in several areas, including preparations for
25 the Yucca Mountain license application.

1 CHAIRMAN DIAZ: Yes.

2 QUESTION: If you don't get the budget in
3 time (inaudible) that's needed, how is that going to
4 affect the agency's goal to start up on that project?

5 CHAIRMAN DIAZ: Well, it certainly will
6 impact us after a while. If there is a continuing
7 resolution, we will be essentially at the previous
8 year's level, and we have anticipated a significant
9 increase from the nuclear waste fund. And if that
10 increase doesn't come, we will be curtailed.

11 Now the agency, of course, will look to
12 right now how to accelerate other projects we already
13 have on our plate. We have the licensing of the MOX
14 facilities, we have potentially two enrichment
15 applications for fuel enrichment plants, so we can
16 juggle our things for a few months, but if it goes
17 longer than a few months, then it would curtail what
18 we can do in the high-level waste area.

19 QUESTION: If I can ask a follow-up.

20 CHAIRMAN DIAZ: Sure.

21 QUESTION: If the agency has three, maybe
22 four years to get through this very complex license
23 application, even in the best of times, is this a job
24 that the NRC could get done in that period of time, or
25 do you think it's going to take longer?

1 CHAIRMAN DIAZ: How long do I have to
2 answer this question? No, fundamentally three years
3 is very tough. I would say it's very, very difficult
4 for us to handle this massive adjudicatory process,
5 which is going to probably be the largest that has
6 ever been done in this country in a three year period,
7 but we're going to try. We're going to give it our
8 best try.

9 We have a one year leeway which we have to
10 justify, so given that the Department of Energy is
11 telling us they're going to deliver an application in
12 December, and given the fact that we have insisted
13 that the application be as good as it can be, if it's
14 a very good application and it's delivered on time,
15 we're going to try our best to do it in three years,
16 but we will do it in four years.

17 QUESTION: (inaudible), National Public
18 Radio. Back to the question of the (inaudible). The
19 DOE's plan is to take out it says over 99 percent of
20 the waste. That still could leave tens of thousands
21 of gallons of high level waste in the bottom of these
22 tanks. What has the NRC done to evaluate the safety
23 of that proposal? Has all the science been done, and
24 how confident are you that the rivers will be safe
25 (inaudible)?

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1 CHAIRMAN DIAZ: Well, we have not done it,
2 because like I said, it is not on our plate, so we
3 don't provide those evaluations. It's Department of
4 Energy evaluations. The NRC does not regulate DOE's
5 abilities, so they are not on our every day plate. We
6 do have memorandums of understanding with the
7 Department of Energy, and we do conduct a series of
8 evaluations, and we have done that. We have projects
9 in Hanford support some of the departments work in the
10 Hanford area, specifically in the radiological
11 protection arena. But I think what they are trying to
12 do is handle the problem in a manner that allows them
13 to do what is more important first, and the things
14 that can be done, and then have the assessment that
15 although this waste are still radioactive, they do not
16 pose the significant hazard that the rest of the waste
17 would. I think that's a good way of doing things,
18 because if not, we might not be able to handle all of
19 it, so doing it in phases is a good approach.

20 I am not really familiar with what is the
21 total amount of radioactivity, or what it is, but I am
22 sure that a lot of people are going to be looking at
23 it. And it might end up that we might be consulted,
24 but that has not taken place.

25 QUESTION: I mean, part of their defense

1 is that they say well, the NRC has approved our plan,
2 is one of the things they say. What (inaudible) true?
3 Have you run any computer models (inaudible)?

4 CHAIRMAN DIAZ: What we have done is look
5 at the sequence of operations, but we have not any
6 long-term effects or issues. We assume that the
7 Department of Energy is going to do that, and provide
8 it to us. That it still (inaudible) and the process
9 is being done.

10 QUESTION: Actually, do you evaluate the
11 details and models --

12 CHAIRMAN DIAZ: We don't evaluate all the
13 detail models or predictions. Now I could be wrong on
14 that, but I have not seen -- it hasn't crossed my
15 desk. It hasn't my crossed my desk, it means that
16 there is a process that has not taken place.

17 Now can we be asked to do that? The
18 answer is yes. Can the Congress turn around and say
19 we want NRC to -- the answer is yes. But has the
20 process been done and completed? The answer is no.

21 QUESTION: Jeff Beatty with Energy Daily.
22 In the past couple of years, the NRC has looked at
23 individual problems at individual plants and judged
24 them to be important enough to issue sort of a fleet-
25 wide generic (inaudible) inspections or assessments

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1 (inaudible). And given the discovery of the missing
2 spent fuel rod noticed at Vermont Yankee, and
3 discovered at Milstone a couple of years ago, I'm
4 wondering if the NRC is considering any sort of
5 similar fleet-wide communication (inaudible)?

6 CHAIRMAN DIAZ: Well, we have already done
7 it. We pick up the phone and call all of the people
8 that have similar reactors and could have similar
9 materials and tell them to make sure they start
10 accounting for all the material, which we have already
11 done. The issue is we're now in a little more
12 demanding mode because this practice of having a pail
13 that breaks, it's okay. This is something that
14 (inaudible) fuel is doing to occasionally may be
15 damaged and come apart. The issue of putting it in a
16 pail and sitting in a place is probably ok. Most
17 plants have a pail that is locked and cannot be
18 opened, and cannot be moved. In this case it was not,
19 and obviously somebody did not really realize what
20 they were handling.

21 Now the good part of the story is that
22 that means that that fuel was no longer very, very
23 radioactive as we consider it, because if not, once
24 you take it out of there, something would have
25 alarmed, so it was probably handled underwater or put

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1 in a shielded cask. It was probably, and this is all
2 conjecture, that we don't have any real data on where
3 it went. It probably is not there. It's not on a
4 part of the plant. It was probably with all the
5 radioactive waste, so it was taken to the waste
6 handling facility. It was probably mixed with
7 concrete, and so by the time it left the plant, it met
8 all of the criteria for shipping fuel because they
9 checked the outside of it, and there was no
10 contamination on the outside. It met the
11 transportation radiation level, and so it met what the
12 criteria that we have for moving things outside of the
13 plant.

14 How it happened, we don't know. We're
15 still trying to figure that out. Have we addressed
16 the issue? The answer is yes. Will we be able to,
17 once we get some answers, go back and make sure there
18 is proper communication that identifies what they have
19 to do? The answer is yes.

20 QUESTION: Steven (inaudible) McGraw Hill.
21 Chairman, you mentioned a moment ago that most over-
22 used word in Washington, but that a paradigm of
23 realistic conservatism and at meetings I've seen the
24 staff on technical issues this is beginning to be
25 considered and brought into technical meetings on

1 various issues. Can you tell us more about how you
2 hope, and how management is going to make sure that
3 this approach is brought into NRC's technical analyses
4 and decisions on a more nuts and bolts level with what
5 I think Commissioner McGaffigan referred to as several
6 layers of bounding conservatism studies, how it causes
7 the agency to look to make conservatism in its
8 technical studies more realistic without eliminating
9 important parameters in the study?

10 CHAIRMAN DIAZ: Sure. The issue of
11 realistic conservatism, of course, came out very
12 clearly when we started to deal with some of the
13 vulnerability assessment and some of the consequence
14 analysis. And what happens is that we scientists, I
15 used to be a scientist. I'm no longer qualified, but
16 I used to be able to doodle in the issue, they have a
17 tendency of taking a complex issue and then saying all
18 right. I'm going to deal with it in a manner that
19 allows me to make the calculations, and so we take
20 issues that have - let's just say the word that is
21 seven dimensions, and we say I'm going to make it one
22 dimension. I'm going to be able to work with this
23 problem. And when they do that, they get to a result,
24 and that result normally could be slanted one way or
25 another. And the way that in our business we do it,

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1 we make it conservative.

2 Then they say all right, now I know what
3 it is in this simple one point analysis. Let me go to
4 the next level. And they go to the next level, they
5 say all right, I'm going to consider another factor.
6 And then they start saying but I want to be
7 conservative, and then they add another layer of
8 conservatism. And when they do this five times, the
9 fifth iteration has already forgotten what the first
10 one was, and so the end result is that you don't know
11 how conservative you are.

12 People used to think that conservatisms is
13 good. My point is that unnecessary conservatism is
14 paid by the American people. They pay for it. Power
15 companies don't pay for it. You, I, everybody pay for
16 the electricity. You, I, everybody pays for the
17 medical procedures, so are we having the American
18 people pay for unnecessary conservatism? And the
19 answer is yes. Okay. So what we're doing is from the
20 beginning, we want people to add just the amount of
21 conservatism that they can justify because of the end
22 use, the amount of conservatism that can be assessed.

23 It's very simple when people design a
24 bridge, you know, designers, and normally the way it
25 used to be, they'd come and say I want this bridge to

1 do this, and this, and this. Then at the end they say
2 I'm going to have a safety margin of two. Well, that
3 to me is very realistic. They knew what they wanted
4 and they added a safety margin of a factor of two.
5 Well, I think we should be able to do the same thing.
6 It might be that we want to add a safety margin of
7 fire. Because we want to be more conservative. That
8 is the case, but when we don't know what the amount of
9 conservatism is, it becomes not realistic. It doesn't
10 serve anybody.

11 And what the staff is doing, and they
12 started with research, but is cooperating to the other
13 offices when we make analysis, we make technical
14 vulnerability assessments, when we made comparisons,
15 we are going to not take the worst case scenario at
16 every step. We're going to try to determine what is
17 the margin of safety because that's where our low is.
18 We are supposed to be have a margin of safety, they're
19 going to ensure that there is a very good margin of
20 safety. We're going to know what that is.

21 QUESTION: Tom (inaudible) International.
22 Am I'm not sure if (inaudible) but earlier this month,
23 Secretary Abraham said that it might be worth
24 considering federalizing some of the guard forces at
25 nuclear facilities. And I was wondering if you could

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1 explain any of the considerations surrounding
2 something like that, or any progress made in that
3 direction.

4 CHAIRMAN DIAZ: Sure. I believe that what
5 Secretary Abraham was saying is there are facilities
6 which have potentially higher risk profiles, and those
7 facilities he might consider having an extra level of
8 security, which would include the federalization of
9 those guards.

10 The issue, of course, the way that is
11 played out is because of the different ways that
12 people come out with the so-called design basis
13 threat, and the design basis threat is being compared
14 to the so-called postulated threat. Now there is a
15 big difference between the postulated threat and the
16 design basis threat. Postulated threat is what can
17 happen in 10 years, what if serious or circumstances
18 converge that allow terrorists to gain this, or this,
19 or that, and are really more pointed to the
20 acquisition of nuclear weapons than some of the other
21 facilities.

22 I believe Secretary Abraham was
23 specifically addressing the security of facilities who
24 have or could have nuclear weapons or nuclear weapons
25 materials. It really doesn't cover the other DOE

1 facility, and is really not applicable to civilian
2 nuclear reactors, where this threat is much more
3 reduced. And it really does not compare to the
4 postulated threat.

5 QUESTION: The Commission right now is two
6 commissioners short. I know the Senate is -- that
7 there's a hold-up in the Senate on one of the
8 nominees. Have you heard the White House giving any
9 names for the second nominee, and how has it affected
10 the Commission?

11 CHAIRMAN DIAZ: Well, we love good
12 company. There's no doubt about it. But the
13 Commission is working well. I haven't heard from the
14 White House what they intend to do. I believe that
15 there have been many, many times in the history of the
16 Commission where we worked with even two
17 Commissioners, which makes it even more difficult to
18 do certain things. Although, as you know, the agency
19 becomes a single agency administrative as to
20 commissioners, which is what happened when Chairman
21 Jackson came into the Commission. She was a single
22 agent administrative for a series of months.

23 I do hope that the Congress is working on
24 the issues. I'm sure the White House is, but we are
25 working well. My two fellow commissioners and I have

1 worked together now for many years. We communicate
2 very well, and we are addressing all the issues that
3 need to be addressed. It's not impacting the work
4 that we do. Could we have a little more help? Yes,
5 I think that's fine, but we're doing well.

6 QUESTION: Can I ask you about the sources
7 at NRC. We've had movement and talk about maybe
8 somebody building a natural uranium Canadian CANDU
9 reactor. A while back there was talk about a pebble
10 bed reactor, and you have just talked about a high
11 temperature light water reactor, I think. Do you have
12 any sources to license any new designs?

13 CHAIRMAN DIAZ: We have made preparations
14 to license what is on our plate. To go beyond that,
15 the answer is no, but we are fully manned to complete
16 the licensing for the AP1000, which final design
17 approval is expected for September. And then we're
18 going to rule making, and it should have -- the rule
19 making should be done December, '05. We have two
20 other pre-applications which includes the ESBWR and
21 the Advance CANDU 700. Those are in the pre-
22 application space. We have cut back in the work on
23 the high temperature reactors, like the pebble bed or
24 the gas core reactors because we see them as being
25 further in the future, and we have enough on our

1 plate.

2 I don't think there would be a very high
3 temperature light water reactor. We need to change
4 the fuel, and we need to change the medium to be able
5 to go to the high temperatures. And I think that that
6 is in the future. I believe that the materials
7 technology and the fuels technology have advanced to
8 the point that we can consider high temperature
9 reactor. Those reactors that will give a thermal
10 efficiency of conversion of 42, 43, 45 percent, and
11 that makes a big difference for the economics of those
12 plants, and with the fuels, and the fuels also makes
13 a big difference, and the safety of the plants.
14 There's much more inherent safety in the larger,
15 potentially graphite reactors than the light waters.

16 QUESTION: Jeff Beatty with Energy Daily.
17 I'm wondering if given some of the materials related
18 discoveries have been made over the past couple of
19 years again with Davis-Besse and steam dryer at
20 Vermont Yankee. And given that there's an enormous
21 number of plants lined up for either power uprated
22 systems (inaudible), do you feel that those systems
23 for judging those applications and improving uprates
24 and license extensions is catching everything that
25 needs to be caught (inaudible) this point? I mean,

1 simply you approved or reclassified the State of
2 Vermont (inaudible) independent engineering assessment
3 of (inaudible) and the uprate proposal there. Is that
4 -- are you considering anything additional for other
5 similar applications?

6 CHAIRMAN DIAZ: We are reassessing the
7 power uprates because we just had a power plant that
8 was granted what we call an instrument power rate of
9 1.2 percent, I believe, and the licensee itself came
10 and said that they are not able to meet the
11 requirements of the uprate, and so they are going back
12 to their original power until we can do it.

13 These are highly technical issues. We
14 believe we have done a very good job in assessing the
15 power rate, especially in placing them in what we call
16 our safety framework. The issue of the steam dryers
17 is really not a safety issue of concern. It is an
18 operational issue. It is only a concern if the steam
19 dryer starts breaking into pieces, and could go into
20 the core vent. Normally, most plants would be able to
21 detect that. They make noise, they have loose parts
22 monitors that should be able to tell them. Also, what
23 happens very quickly is the amount of moisture that
24 goes to the turbine increase very rapidly, and the
25 turbine you don't do that. Turbines don't like

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1 moisture.

2 So to answer your question, we are, of
3 course, increasing our assessment; especially of the
4 extended uprates, making sure that they fit into our
5 safety framework. We believe they do. What we're
6 doing in Vermont Yankee is part of another role,
7 enhancements of engineering inspections that we are
8 going to do everywhere, because we realize that we
9 could do engineering inspections a little better.

10 And these engineering inspections are
11 going to be called risk-informed inspections, in which
12 we're going to go and take vertical slices of safety
13 systems, and Vermont Yankee was the perfect one to do
14 the first one, and so we're going to dedicate
15 additional resources to it. We're going to do it, and
16 it's independent because the NRC is an independent
17 agency. It's independent because we're going to make
18 sure that everybody that works on it has no ties or
19 relationships to the licensee, or the way that things
20 were done. And it's new and it's better, because we
21 just started working on it in December and established
22 with many hours. And I have been directly involved in
23 this, by the way. Occasionally, I like to go back to
24 my engineering roots.

25 QUESTION: (inaudible) National Public

1 Radio. You talked a bit about the possibility of a
2 plane flown into a nuclear power plant. What's the
3 worst case scenario if a plane gets a direct hit on a
4 spent fuel pool and you talked about time. How much
5 time?

6 CHAIRMAN DIAZ: Well, enough time to do
7 all of the things that we need to do to protect the
8 people. Spent fuel pools are really, in our
9 assessment, have come down several levels of safety
10 assessment. Spent fuel pools are okay. We know what
11 we will have to do. There is really very low
12 probabilities of any significant hazards to the public
13 from a direct hit on the spent fuel pool. It's just
14 really not there.

15 That doesn't mean that everything is
16 honky-dory every place. We have systematically
17 analyzed all of these systems. What I can tell you is
18 that there is enough time to protect the people around
19 this plant and the people of this country. And that
20 we know.

21 QUESTION: What's the technical basis,
22 that it's just that it's hard for them to actually
23 catch fire, hard to imagine a leak of the water? What
24 is the --

25 CHAIRMAN DIAZ: Excellent question, by the

1 way. Nuclear power reactors don't have mechanisms for
2 quick releases of radioactivity. They're just not
3 there. Small releases of radioactivity, a little bit
4 of radioactive water in the place; yes, but those are
5 not consequential. We always worried if the core of
6 the reactor melts and the radioactivity of the core
7 goes to the environment. Okay.

8 What we have found is that the way that
9 these plants were built, operated, and what we call
10 the severe accident and mitigation strategies that
11 were put in these power plants in the late 1980s,
12 early 1990s, are very good at mitigating whatever can
13 happen, whether it's a plane crash or somebody throws
14 a bomb. The combination of these systems are so
15 robust that even if worst case things happen, we have
16 plenty of time to protect the people of this country.

17 So what I'm saying flat out is that there
18 are no quick mechanisms for significant releases of
19 radioactivity that we have identified. Does that mean
20 that the probability is zero? No. I can't say that,
21 but it is very low. Does it mean that we know
22 everything that we need to know? It doesn't mean
23 that. It means we have analyzed every angle that is
24 most probable, every structure, every system. We have
25 looked at every type of airplane. We have looked at

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1 different ways of doing it, and we are convinced
2 enough for me to stand here and to tell the Congress
3 of the United States that the probability of a
4 significant radioactive release to occur before the
5 time that we have protected the people is very low.
6 And that includes not only nuclear power plants, it
7 includes all the spent fuel pools, the independent
8 spent fuel pools at facilities, it includes dry casks
9 and it includes transportation of the spent fuel.
10 Beyond transportation, the transportation casks that
11 we have analyzed. And in those cases, there is either
12 little release, no release, very little release, but
13 in all cases there is time to protect the American
14 people. And that's the answer that we needed, that's
15 the answer that we have. And that's what we are
16 clearly coming out and saying.

17 QUESTION: Does that mean evacuating
18 people, or just getting it under control?

19 CHAIRMAN DIAZ: Both. It means eventually
20 if we have enough time to get things under control.
21 If things we have not foreseen happen, there would be
22 plenty of time for evacuating the people and having
23 our emergency plans in action. And as you heard me
24 said, and this is a reality, is that emergency
25 preparedness has been elevated to a new level. Does

1 that means we're not confident of our result? No. We
2 are confident that we're getting good results, but we
3 also realize that we cannot stop there; therefore, we
4 have taken emergency preparedness to the next level of
5 activity.

6 QUESTION: Thank you. Along the same
7 lines of emergency preparedness, we understand that
8 there's some real plan for the IP 2 Plan up in New
9 York in the next few weeks. What makes these drills
10 special in terms of their security profile, and why
11 aren't more of these drills being done at other plants
12 in the United States?

13 CHAIRMAN DIAZ: Well, first you see these
14 gray hairs? That's where they come from. Yes, we
15 have an emergency preparedness exercise that will take
16 place at the Indian Point Power Plant in New York that
17 contain a terrorist scenario, and that has been the
18 subject of significant attention, both by Homeland
19 Security, the NRC, and especially the local
20 authorities, the county executives and the State of
21 New York. It is the first of a kind.

22 And Indian Point will be the first power
23 plant in this country to have all three of our
24 elements of scenarios, which includes three things.
25 Very up-to-date force-on-force. It includes an

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1 integrated tabletop. Integrated tabletops are at the
2 present time -- of course, they are tabletops because
3 we have not really done a complete exercise yet. If
4 the integration of the federal agencies in this
5 country get together to put all their resources to
6 address whatever can happen at a power plant, and in
7 this case, we are the lead role. We are the ones that
8 have established this. We identified the need to
9 establish the scenarios. Secretary Ridge was
10 extremely helpful in moving this issue forward. The
11 White House got involved, so we now have many players
12 involved from the different federal agencies. And
13 Indian Point was actually the second plant to have an
14 integrated response analysis. The third one was
15 Calvert Cliffs, as a matter of fact.

16 QUESTION: When is this exercise going to
17 take place?

18 CHAIRMAN DIAZ: The one on -- the federal
19 exercise I think is June the 8th. The tabletop
20 already took place, so they have two of the three
21 legs. The third one is emergency preparedness
22 exercise with a terrorist scenario built into it, and
23 that has been the subject of a tremendous amount of
24 preparation.

25 It involves a significant amount of

1 resources, and in which we're going to test all of the
2 elements of emergency preparedness, including these
3 issues that have been brought up regarding
4 communications, regarding it will happen, but I think
5 it would be a fairly tough test. I would like to say
6 that I believe that FEMA and the NRC, the licensee,
7 and the county executives, which I met with them last
8 week on this issue. I went to New York, and went into
9 the Lion's Den, and sat in there and talked with them,
10 are prepared. And we are moving very quickly to that
11 deadline.

12 QUESTION: Linda (inaudible). You seem to
13 be pretty confident about airborne attacks. How about
14 ship borne attacks. What are you doing about that
15 aspect. I'm usually around the water around Calvert
16 Cliffs. I guess that makes me really nervous to go by
17 Calvert Cliffs.

18 CHAIRMAN DIAZ: Again, we have run the
19 scenarios of water-based attack since February of
20 2002. Our licensees have had to consider the
21 potential for a water-based attack. They are
22 prepared. They're ready. We also did assessments on
23 the potential vulnerabilities if something much larger
24 than what is anticipated is done. We have identified
25 what we call mitigating strategies. And I go back to

1 this integration of safety, security, and
2 preparedness.

3 What happens is that the things that we
4 identified years ago that could mitigate a very large
5 reactor accident are in place, and the people are
6 being able to be drilled in how to deal with these
7 issues. This has served us very well. We've been
8 able to address every single one of these effects that
9 we have identified. There's always the one that we
10 have not identified; and, therefore, we always go a
11 little bit beyond where we should be.

12 And, in fact, some people in the industry
13 claim that I am very, very, very -- too safety
14 conscious. I'm always pushing them a little bit
15 beyond where they should be. And maybe so. But I do
16 believe that we're now at a stage where the licensees
17 have responded. They have submitted their plans. We
18 have inspected them, and we know where they are. And,
19 therefore, we're confident they're capable of handling
20 the vast majority of what could be thrown at them.

21 MR. KING: Well, before we conclude and we
22 reach the end, I want to thank our co-sponsor, BP, and
23 acknowledge Mike Ryan, who heads the Washington
24 office, and Sara Howell who is here from BP in New
25 York, and we appreciate your support for a vigorous

1 dialogue with the press on energy issues. Nils Diaz,
2 Chairman of the Nuclear Regulatory Commission, thank
3 you so much for being with us.

4 CHAIRMAN DIAZ: Thank you.

5 MR. KING: Thank you all for coming. I
6 appreciate it.

7 (Adjourned.)

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