

TRANSCRIPT OF PRESS CONFERENCE BY NRC CHAIRMAN MESERVE

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

PRESS CONFERENCE

ROCKVILLE, MARYLAND

THURSDAY,  
APRIL 26, 2001

The conference came to order at 10:00 a.m. in Room T2B3, Two White Flint North, Rockville, Maryland, Richard A. Meserve, Ph.D., Chairman, presiding.

Present:

Richard A. Meserve, Ph.D., Chairman, NRC  
William Beecher, Office Director, Office of Public Affairs, NRC

Press Present:

Kiyoshi Ando, Nikkei Japanese Newspaper  
Jeff Beattie, Energy Daily  
Peter Behr, Washington Post  
Laura Cohn, Business Week  
Joe Hebert, Associated Press  
Brian Lee, Down Jones News Service  
Mike Satchell, U.S. News & World Report  
Matt Wald, New York Times  
Jenny Weil, Inside NRC  
Eric Weiser, Nuclear Waste News (Business Publishers)  
Brad Wright, CNN  
Amy Butler, Bloomberg News

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(10:00 a.m.)

MR. BEECHER: Good morning, I'm William Beecher. We might have a few more reporters coming in, but we don't want to keep you waiting.

Let me make a few points. The Chairman will begin with an opening statement. We will provide you copies of that statement after he's finished making it.

When I call on you to ask your question, please identify yourself by name and affiliation. This is being transcribed and it will be helpful to the stenographer if you identify yourself each time you talk so that he will be able to reflect that in the transcript.

We're also doing a videotape of this and that will be available. We're going to try to put the full transcript up on the web when it's available so if anybody wants to check quotes later on, they can do so.

MR. LEE: Bill, is there a reason why we can't have the statement until after he speaks?

MR. BEECHER: It's just going to be a few minutes and then you'll have it.

MR. LEE: Okay.

CHAIRMAN MESERVE: I think he seeks to have you listen to me rather than read the statement.

(Laughter.)

Good morning. Let me begin by expressing my appreciation to you for joining me today. I view this press conference as an important opportunity to discuss the NRC's regulatory activities with you and to relate these activities to the rapidly changing external environment in which the NRC must operate. In keeping with that objective, I would like to make a brief statement before I answer your questions.

Only a few years ago, pundits claimed that the deregulation of the electricity business would bring about the early shutdown of nuclear plants and the eventual end of reliance on nuclear power in the United States. In striking contrast to these claims, we in fact are seeing a growing interest in nuclear energy as an important and enduring contributor to energy supply. The NRC serves purely as a safety regulator, of course, but I cannot help but note that nuclear plants are seen as economical, reliable, and environmentally benign sources of electrical power and they're not subject to the fuel price volatility and emissions constraints that plague fossil plants. These advantages are compelling in a context of sharply escalating prices for natural gas and projected shortages of electrical generating capacity.

An important contributor to the changing attitude toward nuclear is the performance of nuclear plants continues to improve. Throughout the 1990s, capacity factors for nuclear power reactors increased from about 65 percent to nearly 90 percent as a result of improved maintenance, training, improved operating practices, and reduced plant outage times. Improved capacity factors are linked to improved economic performance which has made nuclear plants very desirable assets. Fortunately, safety performance, as measured by various indicators, has improved in parallel with economic performance.

One manifestation of the changed climate is interest in license renewal. The Atomic Energy Act provides for a 40-year initial license, but allows renewals in up to 20-year

increments. The industry has pursued license renewal in earnest after the initial two applications for Calvert Cliffs and Oconee stations which were approved last year. Today, we have 20 plants, 34 units, in the queue and now expect that between 85 percent and 100 percent of the existing nuclear plants will seek license renewal. If these applications are successful, the contribution of existing nuclear power plants to national electric generating capacity will continue to be significant throughout the next several decades of this century. As I think all of you know, nuclear plants provide about 20 percent of the electrical generating power in the United States today. It is even possible that we may receive an application to conclude certain reactor projects that were suspended for economic reasons in the 1980s.

As you are aware, the NRC has not received an application to build a new reactor for more than 25 years. Perhaps the most startling recent development is the growing industry interest in the construction of new nuclear plants. The NRC has already formally certified three advanced designs, the Westinghouse AP600, the CE System 80+, and the GE Advanced Boiling Water Reactor, all of which are evolutions of the current light water plants. Exelon has discussed the possible construction of a gas-cooled reactor, the Pebble Bed Modular Reactor.

The NRC, of course, does not have a promotional role with respect to nuclear power. Our role is to assure that the public health and safety are protected. We must ensure, however, that our regulations do not impose needless barriers to the development of new technology. In pursuit of these objectives and to prepare for possible new applications, the Commission recently directed the staff to assess its technical, licensing and inspection capabilities to respond to the recent developments.

We are also continuing to pursue the reexamination of the foundations of our regulatory system through the application of risk information. Improved probabilistic assessment techniques combined with over four decades of accumulated experience with operating reactors have caused us to recognize that some regulations may not serve their intended purpose. This effort to risk-inform our regulations is a complicated process, but we are continuing to make progress. An early application of this new approach is reflected in the revision of the NRC inspection program to focus attention on matters of the greatest safety significance. The resulting new oversight program for reactors is viewed as a major improvement over the previous process. These activities will help to establish a stronger foundation for the regulation of any new reactors that are eventually built in this country.

Finally, I want to note one other important initiative. Enhancing public confidence in the NRC is one of our strategic goals and is one of critical importance in this new era. Some have concerns about the risks -- real and imagined -- that nuclear technology presents. The affected public has the right to have these concerns directly and forthrightly confronted. Moreover, there is an imperative for the NRC to reach its decisions through open processes so that corrosive suspicions of the reasons for NRC actions are avoided. Public confidence in nuclear power will not be achieved unless the NRC engages the concerned public: we must both act to ensure safety and be seen to act responsibly for this purpose.

I want to conclude by noting that we are in a period of such unusual change that it is difficult to predict with certainty exactly what may happen in the nuclear sector even in the short term. But it seems clear to me that there is now a greater interest in examining energy policy than at any time since the late 1970s. This is reflected in the Task Force being chaired by Vice President Cheney and in the numerous energy bills now pending in the Congress. It is the

NRC's role in this changing external environment to continue to ensure the safety of nuclear plants, while remaining agile in responding to change. Although I have been with the NRC for only about 18 months, I am very impressed with the competence of my colleagues on the Commission and of the NRC's staff. I am confident that we are up to the task.

I would be happy to respond to your questions.

MR. BEECHER: And for Matt who came in a little late, welcome, Matt.

As I call on you, please identify yourself because a stenographer is taking a transcript and it will ease his task in getting things right.

Who would like to ask the first question? Please.

MR. WRIGHT: Brad Wright with CNN. You mentioned that there are concerns from the public about safety. A lot of people don't understand the science that goes into what a nuclear power plant is. Have the safety concerns changed at all or dramatically in the last 15 or 20 years and what are the concerns now?

CHAIRMAN MESERVE: Let me say, we do not have a polling capacity to monitor the public concerns. What we hear about are what people present to us as issues. And so I can't purport to speak for what the bulk of the American public thinks about nuclear energy. I read the polls that you read that are reported from time to time in periodicals and reported on television.

I think there are several areas of concern. One is people may not fully appreciate the safety systems that exist in nuclear reactors. They have concerns about the possibility of dangerous events that could occur at a nuclear reactor. There are also concerns about what I'll call the back end of the fuel cycle. How do you handle the waste that results from the operation of nuclear power plants? There is a government program to evaluate the possibility

of the disposal of spent fuel at Yucca Mountain which has not been something that has yet moved forward. It's a matter that's under evaluation and people do have concerns about the ultimate disposition of the spent fuel.

And then there are proliferation concerns associated with nuclear matters more generally and that would arise in particular with regard to something we don't do in this country, which is the reprocessing of spent fuel to recover plutonium. Plutonium could be used in a weapon. We don't do that in the United States, but that is of interest in some other parts of the world.

So there's a range of different areas in which the public has concerns. We try to address, in particular, the safety concerns that people have from nuclear operations and try to satisfy ourselves that all the nuclear plants are operating with an adequate margin of safety.

MR. WRIGHT: If I could just follow up with that, I know that there is some concern because -- over the sale of some plants, Vermont Yankee comes to mind immediately. What are the NRC's concerns about that and is there a legitimate concern that someone could end up owning a plant that really doesn't know how to run it?

CHAIRMAN MESERVE: Let me say that a lot of concern that has arisen over some of these plants has had to do with economic issues associated with the sales. The NRC does not have a role in assessing the economic dimensions of the sales. Our role is one of safety concerns.

What we're seeing is a situation in which there is a lot of restructuring that's going on in the nuclear industry, in part, I think, driven by price deregulation. At the moment we have 40 different entities which are the owners or operators of nuclear plants in the United States. We have 103 operating power reactors in the United States. And what we're seeing is

consolidation occurring in the industry where a few companies have expressed an interest in acquiring nuclear plants from others. We are monitoring that situation. We are cautiously optimistic that there are opportunities for safety improvement as a result of this restructuring in that you have entities which are acquiring nuclear plants that will have a commitment at their upper management levels to nuclear and to ensuring the capacity for continued operation of nuclear plants. With such larger companies there is the possibility of economies of scale and bench-strength in staffing, with opportunities for promotion within the nuclear ranks that may be not be possible in a generating company that just has one nuclear plant, for example. So there could be some safety benefits that result from a consolidation, but this is a situation we are monitoring. We want to be sure, of course, that all of the nuclear plants are operating safely.

MR. BEECHER: Who would like to ask next, Matt? Identify yourself, please.

MR. WALD: Matt Wald, New York Times. Do you favor ending the Environmental Protection Agency's involvement in Yucca Mountain and leaving the licensing decision on the standards solely to the NRC as I understand is under discussion in the Administration?

CHAIRMAN MESERVE: Let me say that the statute governing Yucca Mountain has a remarkably complicated decision structure associated with it. It involves the construction and operation of the facility by the Department of Energy. It involves the Environmental Protection Agency setting general standards. It requires the NRC to assume the role of applying those standards and supervising the construction, licensing, and operation of the facility. There is a role for the President in making a decision as to whether to go forward with the site, opportunities for States and affected Indian Tribes to petition the Congress, and

opportunities for Congress to veto the decision. It's an incredibly elaborate structure that's been established.

We have had disagreements over the years with EPA as to the appropriate standards to be applied to Yucca Mountain. These disagreements have extended for many years and apply not only to Yucca Mountain, but to the standards that should cover the decommissioning of other nuclear sites.

Probably the most important aspect of this disagreement has been a different philosophy as to how one should approach the assessment of safety in decommissioning. We have advocated the application of what I'll call an all pathways standard where one looks at all the ways in which people could be exposed to radiation and assesses the cumulative impact of all of those and ensures that the cumulative impact is one that is acceptable.

The EPA would supplement that with a separate standard for groundwater. We have seen that as inappropriate and unnecessary in that groundwater is already included in the all pathways standard. And EPA justifies it not so much on the basis of pure health and safety, but on a desire to preserve a resource, which is not actually an element that's in the statute. The statute directs that the standards are to be focused on protection of public health and safety.

This does have implications in that EPA would apply a very low dose limit and as it happens through some accidents, I think, of history that EPA would apply antiquated, some very antiquated science in assessing whether the groundwater standards are satisfied. They would apply dosimetry from the 1960s, rather than current scientific understanding of that issue.

So we've had long standing disagreements with EPA on that issue. One way to solve that problem would be to put us in charge of establishing the standards. That would have to be a decision that's made by the Congress. If, however, there is no change, and EPA

establishes standards, we will, of course, comply with the law and will conform our regulatory approach to the EPA standards.

MR. BEECHER: Next question. Yes, Joe?

MR. HEBERT: Joe Hebert with the AP. Could I just follow up that on another -- since we're talking about Yucca Mountain. What is your view at this point of where that is going in terms of the NRC's license application? Do you see that because it seems like things are going kind of very slow and they're behind schedule, is there some concern that the NRC down the road is going to be pressed to maybe consider this issue, not have enough time or anything like that?

CHAIRMAN MESERVE: The statute does have a series of deadlines within which various agencies are to complete their actions. The triggering event for the NRC licensing stems from the submission of an application to proceed with construction by the Department of Energy. So the fact that the Department of Energy and the Administration have been slow in getting to the point where they made a decision whether or not even to proceed with Yucca Mountain has not created a timing problem for us in terms of our licensing obligations under the statute. The starting point hasn't been hit yet.

I think that Yucca Mountain has obviously been a controversial issue. I think that any Administration, any agency of government that has to deal with the issue has wanted to proceed cautiously to make sure that they're making sound decisions. It's not surprising to me that it has taken time for the promulgation of standards by EPA. As I mentioned, we have to conform our regulations to the EPA standards and so we've been awaiting the issuance of EPA standards before we proceed with our own regulations. We have gone through a comment period, and we are waiting for the EPA to act in order to provide us a foundation for proceeding.

MR. HEBERT: The standard is one issue, but the NRC is going to have to look at the entire design of Yucca Mountain and every time you turn around the design is changing. I was just curious if you had any concerns of meeting the 2010 opening date that we keep hearing about in light of the fact that the Energy Department can't seem to get its act together as to what kind of design they want.

CHAIRMAN MESERVE: Obviously, if there were stability in things like the design features, it would be easier for the Department of Energy to complete its application and the assessments that are necessary to support the application. That would facilitate our getting right into the work. When and if there's a decision by the President to proceed, which has not occurred yet, there are several steps that need to occur before DOE will be at the point of even a filing of an application. There is a site consideration report that needs to be prepared by the Department of Energy and a recommendation has to be made by the Secretary of Energy to the President as to whether to proceed on Yucca Mountain. The President has to make the decision, and as I mentioned, there's a role for affected States and the Congress in deciding whether to allow the process to go forward. So we're a long ways away because of all these procedural steps before we're into the middle of evaluating an application.

MR. BEECHER: Next question. Yes, please?

MR. BEATTIE: Jeff Beattie with the Energy Daily. Going back to the EPA/NRC question, you had mentioned that one possibility would be to allow the NRC to have the sole standard setting authority at Yucca. And my understanding is that NRC has suggested that to both Congressman Barton's subcommittee and to Vice President Cheney and I'm wondering if you've gotten any sense back from them whether that might happen or any kind of indication.

CHAIRMAN MESERVE: I have no indication that this is something that the Administration is interested in pursuing. In fact, I am aware that there is a lot of thought that's underway at the EPA and Department of Energy right now with regard to the standards for Yucca Mountain and that -- I don't know where that's headed, but I think there is an evaluation that's underway right now to try to determine what form the standard should take.

Perhaps this area of controversy that I've mentioned might be resolved as a result of that process.

MR. BEECHER: Next question. Yes, please.

MR. SATCHELL: Mike Satchell from U.S. News and World Report. Despite 20 years of demonstrated safety improvements, the critics in the environmental groups are still able to fairly easily demonize nuclear power. In fact, you called it corrosive suspicions in nuclear power. Now as nuclear power comes back into play now, one sees the Sierra Club and NRDC talking, using phrases like World War III, the fight's back on, this sort of stuff.

I realize that NRC doesn't have an advocacy role, but what do you see happening here when only 50 percent in polls of the public support new nuclear power plants or support nuclear power construction or new reactors? There's a hell of a selling job to do here. What's the NRC's role in this, if any?

CHAIRMAN MESERVE: Well, our obligation is to call the matters that are before us as we see them on the basis of the science and the legal constraints that are imposed on us. We are not going to be affected by political pressures or public attitudes as to what the right decisions are. Our obligation is to reach sound decisions based on the science and engineering that's involved in the matter that's before us.

My quote about corrosive suspicions that you raised had to do with the procedural process that we have to follow. The Agency has to be open in all of its activities so that people understand what we're doing and why we're doing it. We must confront the concerns that people raise and deal with them in a straight-forward and forthright way. And I can hope that with that sort of activity by the NRC that people will have confidence in the decisions we reach.

I'm not prejudging whether we're going to decide that any particular plant can be built or should be built or whether any particular design is appropriate. That's a matter we have to decide on the merits and the particular situation that's presented.

MR. BEECHER: Brian?

MR. LEE: Yes, Brian Lee with Dow Jones. I guess my question is a follow on to that. Do you see any role for the Commission in terms of communicating to the public a scientific-based risk assessment of the technology? If you were to apply a comparative risk analysis, it's much safer than traveling in an automobile or crossing a busy street. Is there any role for the Agency in trying to counter some of the overblown assessments of the risk of the technology?

CHAIRMAN MESERVE: Well, we're in a difficult situation. We don't have a promotional role. But I think it is our obligation to assure the public of the foundations for our decisions and make sure that people understand why we've made the particular decisions that we have made.

We do try to reach out to the concerned public when they raise issues. We do this by frequent public meetings in which we interact with the public, try to answer their questions. We have wide availability of public reports and items of that nature. We have a

website that is frequently accessed that provides the public with information. My colleagues on the Commission and I take every opportunity to talk with the public and to respond to their concerns, as does the NRC staff with our encouragement. So we are trying to respond to issues, but it's a delicate job because we call them the way we see them and we don't have a promotional role.

MR. BEECHER: Next question, Jenny.

MS. WEIL: Jenny Weil, McGraw-Hill. NRC's budget for the next fiscal year is pretty tight and with all of the interest in new power plants, has there been any decision on where and how that funding --

CHAIRMAN MESERVE: Sorry, could you speak up, Jenny?

MS. WEIL: I'm asking about funding for activities related to new power plants, the licensing.

CHAIRMAN MESERVE: As you know, we recently submitted our budget to Congress for Fiscal Year 2002. The process that agencies of the government go through to build the budget starts about a year in advance of its submission. The serious interest in the possibility of new construction has just arisen in the last couple of months. As a result of that, the budget that we submitted to Congress does not reflect the increased workload. This places added demands on staff and the finances of the agency to be able to make sure that we have the necessary capacity.

We're in the process of evaluating what resources will be needed and we will communicate that to the public.

MS. WEIL: Does that look like it's going to be another budget request, an increase?

CHAIRMAN MESERVE: I'm not exactly sure. I don't think it will be a formal supplemental budget request. I think there's been interest on the Hill, if this does materialize, about what sorts of resources would be required and we'll respond to that by providing additional information.

We do have a capacity to some extent to reallocate resources within the agency. We are, to some extent every year, responding to a somewhat varying workload that we could not predict. For example, there may be an event that occurs that requires a lot of effort. There may be a license application that we hadn't anticipated that is submitted that requires a lot of effort. So it's not uncommon for us to have to be able to adjust to the circumstances.

MR. BEECHER: Yes sir.

CHAIRMAN MESERVE: Hi, Peter.

MR. BEHR: Pete Behr, Washington Post. A question about USEC's decision to go to one processing plant. Did the Commission in this review see any concern that moving to one processing plant would create any vulnerability for a U.S. supply of enriched fuel or leave the U.S. too dependent on Russian supplies or other foreign supplies?

CHAIRMAN MESERVE: We processed an application for an amendment for the license for Paducah that allowed the Paducah facility to increase the level of enrichment that could occur at that plant. And we determined that it was appropriate to issue that amendment, and Paducah has over the recent weeks been changing its processes. In fact, I think it is very close to having achieved the increased enrichment levels which it sought.

That action by itself was one that should be seen as enhancing U.S. capacity. It provided two enrichment plants that could reach enrichment levels which were appropriate for fuel for power reactors.

As I understand it, USEC's motive in undertaking that upgrade was so that it could shut down the Portsmouth facility.

Our role in this has been one of focusing on the safety issues associated with the operation of these plants. We have not gotten into the details of what the appropriate U.S. policy should be as to supplies of enrichment capacity.

It is my understanding that the Secretary of Energy does envision providing money to USEC that would allow the Portsmouth facility to remain in what they call cold standby so that the plant could be brought on line if a situation were to arise in which there was a need for enrichment services from that facility. So the government as a whole is responding to this situation, and the Secretary of Energy, who has responsibility in this area, is taking steps to assure that there is some capacity to turn to Portsmouth if the need should arise.

MR. BEECHER: Next question. Yes, Jenny.

MS. WEIL: Jenny Weil. I have another budget question. Considering now that you're probably looking toward the FY 03 budget, is there any decision on how to -- whether the level of resources will stay the same for inspections?

CHAIRMAN MESERVE: There's been no decision, even within the NRC with regard to the next budget, the Fiscal 2003 budget. The Fiscal Year 2002 budget for inspections basically stays level with the previous year. We are anticipating a submission by the staff of a paper that will reflect the first year's experience with the new oversight program, and that paper will deal with a wide range of issues including the staffing and other resources that are necessary to implement the program. I think that will provide the foundation for making decisions as to future years.

MR. BEECHER: Next question. Please identify yourself again.

MR. HEBERT: Joe Hebert, AP. In terms of the new technology that's coming along for possibly a new design reactor application, I think there was a speech by one of your fellow, one of your Commissioners, Mr. Merrifield, that raised questions of whether or not the NRC -- and I think you have too -- is prepared to deal with this new technology. And more broadly, that maybe the NRC has got a little bit of brain drain problem because over the years there haven't been all kinds of people wanting to get into the nuclear energy issues.

What is the status of that? Are you concerned that you don't have the manpower to evaluate this new technology and more broadly, that you may be overwhelmed somewhat in the coming years?

CHAIRMAN MESERVE: As I think I mentioned in my statement, there are three advanced designs that the NRC has already certified. So in recent years we have had the capacity to be able to process requests by vendors that we evaluate new and different designs.

As it happens all those designs are evolutions of current designs. They're light water plants. They have features that don't exist in current plants that would make them safer than existing plants.

There are some proposals on the table for some very different kinds of reactors that many of you, I'm sure, have read about. The Pebble Bed Modular Reactor, which Exelon is interested in, is an entirely different type of reactor. Instead of using water as the working fluid, it uses helium. It has other features that make it quite different from any reactor that is operating in the United States today.

There will be some challenges for us in being able to deal with such a novel design. And so we do have a research component within the NRC that will have the obligation

to evaluate the design and we need to make sure that they have the horsepower to be able to do the job.

Let me say more generally that the NRC does have a serious manpower issue that we need to address. The NRC has had declining budgets in real terms for about 15 years until very recently, and the way we have been able to handle that has been basically by attrition in the staff. The number of FTEs, full-time equivalents, has declined over the years. That has occurred not by reductions in force, but rather by allowing normal retirements to occur and then not replacing people at the same rate they are departing. That has changed the demography of the agency. We now have six times as many people over 60 as we have under 30 in this agency. We have important parts of this agency in which 20 to 25 percent of the people are eligible to retire today. We hope they don't retire. And I don't think many of them are planning to retire immediately, but we have that vulnerability. So we do have a need to rebuild our bench strengths here at the NRC and I have charged our Executive Director of Operations to develop a plan that will enable us to do that.

Let me say that this is not a problem that is unique to us. There are other agencies in government that have a similar problem. And we share this issue with the nuclear industry as a whole in that there has been a decline in the number of nuclear engineering departments and the number of graduates of nuclear engineering in various schools. This, I think, reflected the different climate for nuclear that existed as recently as a year ago.

But the industry, the national labs, other government agencies, NRC, all draw from the same educational pipeline. And so we do have challenges broader than just the NRC in generating the capable people that we're all going to need to be able to deal with the changed world in which we find ourselves.

MR. BEECHER: Yes.

MR. SATCHELL: Mike Satchell, U.S. News. Do you see if the PBMR technology proves out, do you see this quieting the criticism that nuclear power is dangerous?

CHAIRMAN MESERVE: I think it's way too premature to be able to say that. The PBMR does have some features which are interesting and could pose some safety advantages. We have not yet analyzed the reactor to be able to assess those fully. It's a reactor with a lower power density and a lot of heat capacity, so that means if there is an event that were to occur, it would occur slowly. It would take a long time for the reactor to heat up.

The fuel is in a form where it requires extremely high temperatures for the fuel to melt, perhaps higher temperatures than could be achieved in the reactor. It is asserted that it has the capacity to be able to cool itself from natural cooling and wouldn't have to rely on pumps and other extraordinary measures to cool the reactor in an emergency situation. So it has some features that are very interesting from a safety perspective. We are in preliminary conversations with Exelon about the possibility of our undertaking a certification of that design. We have not yet undertaken a full evaluation of it and of course, before I can make any statements as to the safety of the design, we would have to undertake much further work than we've done to date.

MR. SATCHELL: And in the same vein, what would you say getting back to this political question of how safe nuclear power is in the public perception, what would you say to the Sierra Club, for example, that talks about in this vein of the re-emergence of nuclear power that this is a hell of an expensive and dangerous way to boil a pot of water? How do you respond to this kind of criticism that's still visceral?

CHAIRMAN MESERVE: Well, let me say the economics of the matter is a question, particularly in a deregulated electricity market, that the generators have to make. We're

seeing that existing nuclear plants are among the cheapest that are on the grid today. They're cheaper than coal today in terms of operating costs. That doesn't include the capital costs. So, if you have an existing plant, it's the one you want to have running because it's the cheapest one.

The decision as to whether to build a new plant is going to be driven, in part, by the economics of how a nuclear plant compares with alternatives in terms of the economic costs. So I think that, particularly in a deregulated market, the economic issues are ones that get resolved by a decision of whether people step to the plate and decide to buy one.

The more fundamental question is one of safety. We seek to assure that these plants are adequately safe. We have a very aggressive inspection program to assure that they are, in fact, operated safely, as I think many of you know. The NRC has federal employees that are permanently assigned to operating power reactors. They have a right to go anywhere they want in the plant. And we supplement those inspection resources with skilled people from the regions who have special skills as well. Licensees are expected to fulfill their obligation to run the plant safely, but we have very close scrutiny of the plants to assure that they're doing the job.

On a technical level -- an engineering level -- we can describe what we're doing. We can provide analyses about the safety of the plants. But the acceptability of the plants is ultimately a decision that the public will have to reach. I would just assert that there is no technology that is risk-free. We try to assure that nuclear is adequately safe, but one ought not to say that the alternatives necessarily have safety advantages. There are real lives that are associated, for example, with the mining of coal and with the particulates from burning coal and so forth.

The other issue, and this is a personal view, -- I'm not speaking for the Commission -- that I think that everyone should consider is that as global warming becomes a

matter of increasing concern, we have to look at our energy supplies in terms of their contribution to global warming. As you know, coal and natural gas do contribute carbon dioxide to the atmosphere, do contribute greenhouse gases. Nuclear power reactors do not contribute greenhouse gases to the atmosphere, so that there is a trade off there that may become increasingly important in the years ahead.

MR. BEECHER: Laura?

MS. COHN: Laura Cohn with Business Week. I wanted to get back to Yucca for a moment. I know it's not ultimately your decision, but what do you think the odds are that we get a recommendation on Yucca this year and if we don't get it, do you think the current enthusiasm for a nuclear power could fade somewhat?

CHAIRMAN MESERVE: I have no way to make an informed judgment as to when there will be a recommendation to the President or a decision by the President.

I think that the Department of Energy has said that they expect and hope to make a recommendation this year. I anticipate that the President would respond relatively shortly thereafter, but I have no way of knowing whether that schedule is realistic or not.

MR. BEECHER: Yes, would you identify yourself first, please?

MR. ANDO: Kiyoshi Ando, Japanese newspaper, Nikkei. Maybe you have mentioned this earlier, I came in late, but concerning the regulatory issues that you have mentioned in your opening statement, I understand it is industry which decides not to have new applications. That was industry's decision for the past 25 years, rather than the regulatory pariah, but if there is any regulatory pariah at this point that makes it a little bit difficult for industry to file a new application, what is it and how can you change that?

CHAIRMAN MESERVE: I think I mentioned earlier that we have tried to approach our regulatory system with the attitude that we should not impose needless impediments. One of the things that happened several years ago, the NRC basically re-evaluated the way in which we licensed the construction and operation of nuclear power plants. Under the old system, applicants would submit a request for a construction permit. The process would involve an opportunity for litigation and a lot of controversy quite often. Then the plant would be built. Quite often there would be modifications of the design that would be made during the course of construction and then there would be a process for an applicant to request an operating license after the plant was ready to go. And that would frequently also involve a lot of litigation at that stage and an evaluation of the design, after it's already built, to assess its adequacy. There are some plants that were never completed that were started in a period in which there were very high interest rates, so all the delay incident to this process made the plants extraordinarily expensive.

We have a system in place now in which vendors of particular plant designs can submit the plant design and we will evaluate it. We will hold a public process in which we can receive comments on the adequacy of that design and we can decide whether to certify that design or not. If we do certify the design, then a person who wants to build that plant can take that design basically off the shelf, install it at the site and the issues associated with the design have already been resolved and would not be subject to litigation. There would have to be a demonstration that the conditions justifying the certification, of course, were fulfilled and the plant was built within the constraints of the certified design.

We similarly allow licensees to come forward with an early site permit which is before you've decided whether to build a site or not, you can come forward and we will

evaluate whether that site, at that particular location, is one that's suitable for a nuclear plant.

We'll go through the environmental process that's associated with making that decision.

And we also now allow for licensees to come forward and to seek a combined license. That could involve an early site permit, or could involve one of these certified designs, or could involve neither. The process allows one to get all of these matters resolved early so that the financial decisions about whether to proceed would not be at risk from the regulatory system.

We have, as I mentioned, certified three designs according to this system.

We've not yet had a request for an early site permit. We've not yet had a request for a combined license. So we haven't tested part of the system, but we do have a different regulatory system in place.

In light of the recent greater interest in new construction, we do have an aggressive effort to examine this regulatory framework and make sure that it's one that's going to work. We have sought public comment on that matter and I anticipate that there may be a proposed rule later this year to make some minor modifications of the basic structure I've described. It's one that we believe will allow a contraction in the time that it will take to make the decisions related to nuclear power plants. I think there's great interest in the industry to reduce the time that would take them to build the plant, the physical time that would be taken. Some of these designs, like the Pebble Bed Modular Reactor that you talked about, are attractive because it's a modular unit. It's smaller. Some of it could be factory constructed and there is a belief that if that were to proceed that it could be constructed relatively quickly. And so that is obviously a factor that the vendors are considering when they're presenting designs to us for our evaluation.

MR. BEECHER: Brian.

MR. ANDO: Sorry, could I follow up?

MR. BEECHER: Sure.

MR. ANDO: How short will it become, like half the time it used to be?

CHAIRMAN MESERVE: Since we haven't done it, it's hard to predict. We believe that there should be a significant savings in time for the regulatory process. Exactly how successful we're going to be remains to be seen.

MR. LEE: Brian Lee with Dow Jones. He actually anticipated my question. Let me phrase it a little differently. There are some approved sites that have not had a plant constructed there. How -- given it's a ballpark estimate, how fast -- if a company came to you with an application for a pre-approved design plant, one of these three that you've got on the books now, how soon could they get a plant approved and maybe up and operating?

CHAIRMAN MESERVE: Let me say that I think the critical path on that is likely to be just how long it takes to build the plant, rather than the regulatory system.

MR. LEE: The regulatory approval alone then.

CHAIRMAN MESERVE: The regulatory approval might be a couple of years. But I don't think that any of the people who are talking about new plants would anticipate they'd be able to build a plant in less than five or so years. Anyway, that's an impression I have.

MR. BEECHER: Next question, Jenny?

MS. WEIL: Jenny Weil. Have there been continuing discussions with South African regulators about having an NRC staffer go over and assist, participate in a demonstration project?

CHAIRMAN MESERVE: Let me tell all of you what this is about. Exelon, a U.S. company, has been engaged in an investment in South Africa for the possible construction

of a Pebble Bed Modular reactor in South Africa. I understand that they are in the middle of a feasibility study about this reactor now with a decision to be made some time later this year as to whether to go forward and to construct the reactor in South Africa, with the expectation that they would do a lot of testing of the design and of its components with a real facility on the ground.

We and the Department of Energy have been very much involved in this because of our interest in advanced nuclear designs. We have been engaged in that process, to some extent, through and with the Department of Energy, basically monitoring what's going on.

We have indicated to the South Africans that we would be interested in participating to some extent in their activities. They would have to make the decisions, but if they have issues as to applying a risk-informed approach to the evaluation of this license, there may be some interest in our providing some assistance in that area. We have not yet heard back from the South Africans with regard to the opportunity that we offered to them. I think it has to do with the situation in South Africa, that they have not yet made the decision, as I understand it, whether to proceed or not.

MR. BEECHER: We have time for one or two more questions. Yes?

MR. HEBERT: You said in your remarks that you expect anywhere from 80 to possibly 100 percent of the current reactors to ask for extensions.

As you probably know, some nuclear critics have been saying that these plants are getting too old. The containers are cracking. There are all sorts of other problems. You've also promised expedited action on all of these re-licensing. Do you have any concern that maybe you're going to have to be sort of forced to consider these re-licensings too quickly and not adequately review them?

CHAIRMAN MESERVE: Well, let me say that we have set a schedule for how we try to process these renewals and our goal is to do them within 30 months. When there's no hearing, the process can be completed within 25 months. So there's over two years of effort that we envision because it's not an easy job. And we are primarily interested in assessing aging phenomena in these plants. We have to be satisfied that if we allow an extension of the license that there will not be a reduction in the margin of safety. And that involves a very intensive inspection effort by the NRC. It involves a lot of analysis that needs to be done by the licensee that then needs to be checked by the NRC. It's not a simple task and that's why we think that something on the order of 25 months for the evaluation is something that is appropriate. So we're not doing these in a situation where the application arrives one day and a week later we're saying yes, that's okay. There's a lot of work that goes on to satisfy ourselves that the extension of the license is appropriate.

MR. HEBERT: Three plants and five reactors have already been considered. Do you have any idea how many of these applications will end up being rejected?

CHAIRMAN MESERVE: We're going to call them as we see them, case by case. We have received, as you indicated, the two that we've approved. We have three that we are evaluating now and if they don't meet the criteria, we're going to reject the applications but I can't predict ahead of time that that situation is going to arise.

Let me say, though, that one ought not to imagine that you go to visit a nuclear plant nearing the end of its original 40-year license and expect to see a large measure of equipment in that plant that is 40 years old. There are constant maintenance obligations that are imposed on the licensees, so that pumps, valves, piping, cabling, electronic equipment, measurement devices are constantly being changed out and upgraded and repaired as part of our

normal vigilance on nuclear plants. Although the plants may be approaching 40 years of operation, that doesn't necessarily mean that the entirety of the plant is that old. I had the misfortune of owning a used car once and as years went on it got newer and newer. Something like that experience can occur in a nuclear plant as well.

MR. HEBERT: Well, in this licensing thing though, part of this is people are buying plants now more readily.

You said earlier that you no longer take into account economic viability of a company, did I hear you correctly, and only safety issues? Is that true?

CHAIRMAN MESERVE: Let me clarify. The economic decisions about whether it's a good deal or not for somebody to transfer a license is not a decision that we make. That's something that's of interest to other agencies in government and the public utility commissions perhaps in the State where the transaction is being considered.

In the context of license transfer, which is what would be involved if somebody buys a nuclear plant, we look at the technical capabilities of the new entity to make sure that they have the capacity to fulfill their obligations to assure safety.

We look at foreign ownership considerations which are required under the Atomic Energy Act that we evaluate.

And then finally, we look at their financial wherewithal, not in terms of whether the deal is a good one or not, but whether this company has the financial resources in order to be able to maintain the plant appropriately and has the capacity to continue to make the funding that's necessary for decommissioning. Every operating reactor is required during the period of operation to provide funds for the eventual decommissioning of the site, so the money is there by the end of the license term. So we do look at the financial considerations, but only as

they relate to those matters, namely, the safety operations and the capacity to assure that the decommissioning will be completed successfully.

MR. BEECHER: Last question.

MR. WEISER: Eric Weiser, Business Publishers.

In your speech you had mentioned public confidence as one of the key areas. With the ADAMS system there's been a lot of problems people accessing that. Has this been solved? I understand that if the application gets submitted, that there will be a data base with that?

CHAIRMAN MESERVE: Yes. ADAMS, for those of you who are not intimately familiar with the NRC, is basically an electronic document system that we put in place. It was intended to be a vehicle for the electronic repository of all documents. We hoped to remove ourselves from the paper world and have official documents that would be submitted in ADAMS, processed in ADAMS and all the work flow would occur through ADAMS.

We perhaps were a little ahead of ourselves in starting this system, and it has not operated as smoothly as we had hoped. We have made efforts to improve the system. We have a problem that this is an area where our aspirations might have been greater than what technology can provide at the time that we launched into the project. So we have continuing challenges to make sure that this system is as workable as possible. We do have plans to upgrade so that it is like a web system. Then you'll be able to access it using a browser rather than using the client-server approach that we have now. So there is a plan for its upgrade, but it's an area of continuing challenge for us.

MR. BEECHER: One more question?

CHAIRMAN MESERVE: Sure.

MR. LEE: Thank you. Brian Lee with Down Jones.

It seems fairly clear, given the public comments by Vice President Cheney concerning nuclear power that the pending task force report that the Vice President chairs is going to come out with a strong recommendation for not only maintaining the existing fleet of plants, but perhaps even building new plants, going forward.

Do you personally, not necessarily as an NRC official, do you personally think that this is, given some of the comments you made about global warming and what not, do you feel that this is a good policy move for the country?

CHAIRMAN MESERVE: Well, again, we don't have a promotional role here at the NRC. I think that there is value in having diversity of energy sources and energy supply and that nuclear certainly ought to be something that's fully evaluated as a component in that mix.

MR. BEECHER: Ladies and gentlemen, thank you very much.

(Whereupon, at 11:03 a.m., the press conference was concluded.)