



# NRC NEWS

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**BEFORE THE  
AMERICAN NUCLEAR SOCIETY WINTER MEETING  
ALBUQUERQUE, N.M.**

**NOVEMBER 13, 2006**

Good morning. I'm very happy to be here with you. This is quite an audience, it is nice to see a "nuclear renaissance" at an ANS meeting.

I would like to thank the ANS organizing committee for providing me this opportunity. My fellow Commissioner, Dr. Pete Lyons, is also here today. You will hear from him later.

The theme for this meeting is "Ensuring the Future in Times of Change: Non-Proliferation and Security." What I want to discuss with you today is how the NRC can contribute to this mission.

In 2004, President Bush announced, and the Department of Energy has subsequently begun implementing, several major non-proliferation initiatives. You are going to hear in detail about the Global Nuclear Energy Partnership this afternoon, so I won't go into any details.

I can sum up the regulatory aspects of non-proliferation and security very quickly. Essentially, we are not going to have the worldwide nuclear renaissance without addressing safety and non-proliferation concerns. The question is how to do this.

The Commission believes that a strong and fully independent regulator, who communicates and exchanges best practices with strong and independent regulators from other countries, is the best guarantee of an orderly and safe deployment of nuclear plants to meet the world's growing energy demands. U.S. safety and non-proliferation goals can only be achieved in this context by working closely with NRC's international regulatory partners to create in those countries a strong governance

framework that ensures that these goals are achieved. The NRC will be working with our domestic and international partners to create that framework.

On the home front, much of the perspective I have gained in my brief time at NRC has to do with the future of nuclear energy here in the United States. It is not surprising that you – and the Commission – are thinking about the future. We are hearing predictions that the U.S. could build 50 nuclear plants in the next 20 years.

Furthermore, half of the 104 nuclear plants in the U.S. have either had their operating licenses extended for 20 years, or have applied for NRC approval. Most of the rest are expected to apply in the future.

I assumed the NRC chairmanship knowing that I would face a different set of challenges than my recent predecessors. We are talking more today about construction than decommissioning in an era that has been described as a “nuclear renaissance.” That said, I don’t want to talk to you today solely about new reactors. Instead, I want to focus on the things the NRC and the industry must do to insure the safety and reliability of the current operating reactor fleet, and why we must do them.

In my first months at NRC, I have given a fair amount of thought to my vision for the NRC. My vision is pretty basic. First and foremost, I believe that the NRC must continue to be a strong regulator.

I recently returned from Europe, where I conferred at length with my counterparts from other countries with established commercial nuclear programs. I can tell you from those conversations that the world is watching us. I was gratified by the high regard in which the U.S. regulatory regime is held.

I can assure you that the Commission intends to maintain and enhance that reputation for regulatory credibility.

I have simple criteria for achieving that, and here they are:

1. The NRC will hold our licensees accountable;
2. We will articulate our requirements clearly;
3. We will be demanding; and
4. We will be responsive to legitimate needs and concerns.

The NRC needs to show the industry, the financial community – and above all, the public – regulatory stability.

In turn, the industry needs to show the NRC the attention to detail and the focus on quality necessary to protect the public health and safety.

As you know, the elephant in every room in which nuclear people gather is that an accident anywhere would have a drastic impact on the industry everywhere. The Commission’s primary responsibility is to protect the public health and safety. The NRC has

many programs in place to ensure that no such accident occurs. I invite you as individual members of the “nuclear family” to support this whenever and wherever you can.

As you may have read in the press, low levels of tritium contamination have been discovered at a number of the nation’s nuclear power plants. That, in effect, was my welcome to the NRC. The Commission’s most basic regulatory obligation is to determine whether there is adequate protection of public health and safety. Addressing public concerns and perceived risk as a result of unplanned and unmonitored releases has been a big part of that job. The NRC has not found any public health impacts from these tritium leaks.

We have put out an extensive report on tritium, and I am encouraged by the industry’s response this year. I hope that you, the technical community, will follow up with a solid, long-term public education program to get ahead of the curve of “perceived risk.” I believe that an educated public will be an invaluable ally in the efforts to achieve our safety and non-proliferation goals.

In a recent speech to industry executives, I shared some of what I like to call my most basic insights, “Thoughts While Shaving.” I got one the other day. What does a regulator want most?

No surprises. If the NRC identifies a problem, especially if it is a surprise, that means the industry is not doing its job and INPO is not doing its job. There should be no surprises.

I know that the industry’s response to significant surprises is far-reaching and effective. But the key word here is “response.” Where is the next surprise going to be found? Neither the industry, DOE, nor NRC has in my view put enough money in the last decade into research issues associated with operating power plants.

We need to get ahead of the unknowns and the only way to do that is we, including the NRC, DOE and industry, must bring focus and funding to our research efforts.

Accountability and hard work are what is required to get the nation’s nuclear industry from the here and now of possibilities to the future that is envisioned – hard work to maintain and improve safety performance for all operating reactors while at the same time preparing for the construction of new reactors.

The Commission is gearing up to meet these challenges, adding personnel and reorganizing. We will increase our staff by a net of about 200 positions a year through 2008, and the Commission is also battling for a greater share of the finite resources of government to get our expanded staff adequate office space and resources to do their jobs.

While we’re talking about staffing, let me share a concern. As the entire industry begins to staff up for this “nuclear renaissance,” it needs to evaluate its ranks not only in terms of succession planning, but also the expertise of its personnel. I would venture to say that the nuclear operating organizations today are very much different than they were 10 years ago. This is because the demands of the nuclear industry changed. The demands of the

industry are changing again and the industry needs to plan for that change instead of responding to it.

The NRC is preparing for the future, training new executives and making organizational changes. The Commission has created an Office of New Reactors, separate from the Office of Nuclear Reactor Regulation. The new construction office in Atlanta will be headed by a Deputy Regional Administrator for Construction.

We will also look at some possible procedural changes in the review process in the future. I would like to see the review time required for early site permits and combined operating licenses reduced, with no compromise on safety. That is not an unrealistic goal, if the industry does its job on the front end.

We will set out our requirements and let the industry know where it stands at all times. The NRC will not be a bottleneck. The NRC will conduct comprehensive safety, environmental and legal reviews.

If the industry provides the NRC with high quality submittals, the NRC will show the industry timeliness.

The key to success in these endeavors is an open, continuous line of communication. There can be differences of opinion, but there *must* be continuous communication.

Another initiative that will help to achieve an orderly and safe expansion of nuclear energy worldwide is the Multinational Design Evaluation Program (MDEP).

Unlike the previous generation of nuclear power plants, the majority of plants to be built around the world in the next five to 15 years will likely be limited to a small number of relatively standardized designs, purchased from a limited number of multinational corporations. This standardization creates an opportunity to leverage the resources and knowledge of the national regulatory authorities who will review these designs. This international regulatory transparency is fundamental in achieving safety and non-proliferation objectives.

In September 2005, the NRC approved Stage One of the MDEP and some preparatory work for Stage Two. Stage One is under way, and is currently focused on the planned design reviews associated with the AREVA EPR reactor. A reactor of this design is now being built in Finland, has been proposed for construction in France and is undergoing pre-application reviews in the U.S. Several U.S. license applications over the next few years are expected to utilize the design.

Stage Two is intended to be more extensive. Its early activities are beginning and will proceed in parallel with Stage One. The primary objective of Stage Two is convergence of codes, standards and safety goals for designs across international borders. Stage Three of the MDEP will depend to a large extent on the results of the prior stages. The implementation and expansion stage would use the products of the Stage Two effort to review the advanced reactor designs of Generation IV reactors.

I believe that the MDEP will initially encourage development of standardized reactor designs, which will allow for more meaningful exchanges of reactor experience. The MDEP should foster the safety of reactors in those countries with less experienced and extensive regulatory regimes, and enhance the safety of advanced reactor designs by encouraging a comprehensive safety review. And eventually, international regulatory partners will become accustomed to sharing insights on licensing that will improve licensing processes in general around the world.

The premise of your meeting theme is undeniably true: This is a time of change, and it is during unsettled times that we must take particular care to ensure the future. There is a lot of hard work to do.

You can be assured that the NRC will do everything in its power to ensure the future in these changing times.

Thank you, and I look forward to your questions during the Q&A period.