



# NRC NEWS

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**“The Way We Are”  
Prepared Comments for Dr. Nils J. Diaz, Chairman  
U. S. Nuclear Regulatory Commission  
at the  
Nuclear Energy Assembly  
San Francisco, California  
May 18, 2006**

**[Slide 1]** Good Morning. Thank you, John, for your kind remarks and thank you, Admiral Bowman, for the invitation to address the 2006 Nuclear Energy Assembly. Let me start by noting that the views I will be sharing with you today are my individual views, not necessarily the views of the Commission.

It is indeed my great pleasure and privilege to participate in this meeting, at a time when our Nation is, and many other Nations are, addressing national security, energy security, and economic security, with consideration of their linkage and with urgency. Two years ago, I said to this assembly: “I personally believe that the nuclear option will have a growing part to play in this country’s energy mix, as the nation -- the private sector, the public sector, and the American people -- soberly weighs the costs and benefits of different energy options.” Today, I am personally convinced that nuclear energy is being given serious consideration for several good reasons, including its strategic and environmental worth, and that the Nuclear Regulatory Commission (NRC) must be, and will be, ready to exercise its responsibilities under the law for comprehensive and timely licensing safety reviews of new plant applications. Concurrently, the NRC must continue, and will continue, to provide strong, fair, and open oversight over operating reactors. Today, the nuclear industry tells us that utilities intend to submit multiple Combined Operating License (COL) **[Slide 2]** applications to the NRC for three different light-water reactor designs, beginning next year. The consortia and the Department of Energy are developing applications for AP1000 and the ESBWR, and AREVA is working on pre-design certification and COL preparations for the EPR. We are told that utilities are working together on using standardized designs, that reactor vendors are mobilized, that architect-engineers are engaged, and that all are working on the supply infrastructure and financial arrangements.

We also have been told that applying for a COL is not necessarily a commitment to build a plant. The NRC understands. Regardless of that uncertainty, the NRC must be ready to conduct thorough and timely safety reviews, in accordance with our statutory responsibilities, following due

process, in an open manner, while protecting the national security interests. Therefore, the agency is aggressively working to put in place the regulatory infrastructure necessary to effectively and efficiently conduct the technical and legal reviews for the anticipated new plant licensing applications, including COLs, Early Site Permits or equivalent environmental submissions, and the concurrent design certifications. We are re-organizing, hiring, enhancing existing programs and processes, and developing new ones to meet the workload. We are breaking the old reactor licensing mold and building a new, well-planned, rigorous, and disciplined, new reactor licensing review organization that befits the needs of our nation and fulfills the responsibility assigned to the NRC. The modernization of the NRC will be in its thinking as well as in its structure, more focused, more open, more responsive, and of course, more risk-informed.

I used the phrase, “befits the needs of our nation,” deliberately and fully realizing its implications. The nation is not dealing solely with the potential to provide additional base-load electricity. The nation is faced with decisions that must take into consideration the impact that safe, reliable and economical nuclear power generation can have on the well-being of our people, on energy independence, on security and the environment, and on the American way of life. Therefore, I submit to you that the stakes of the anticipated new reactor deployment are high, and deserve the best of the industry and the best of the NRC.

I know there still is a little bit of apprehension in the industry and the NRC. When old-timers look at times past, the question pops up: Can we really do this? For the NRC, the answer is yes, we can. We are not forgetting what happened and what we learned. In fact, we have learned from what we did right, from what we did wrong, and from what we did not do. I believe we are starting the right way; finishing the right way is indispensable. I also hear a yes, we can from the nuclear industry.

I am accused of being an optimist. If tried, I will be convicted. I am also accused of being realistically conservative. Convicted! I say “we can” because “we can.” (Yogi Berra, eat your heart out). The nuclear industry, the NRC, and the country have changed, and changed for the better. We have the know-how, new and safer designs, the needed design and construction tools and methods, the information technology, and a regulatory agency that understands its obligations and responsibilities. I am confident the NRC and the industry can do the job that befits the needs of our nation.

I decided to talk today about “the way we are,” because we know the way we were, and it is important to realize the way we are now. In fact, I will take a few minutes to go down memory lane, and to begin, I will repeat some words I made at my first RIC speech: **[Slide 3]** “Congratulations. By any objective, practical measure nuclear industries in the U.S. are much safer today than at any other time. This is particularly noticeable from comparative analysis of safety indicators.” You have done your job well and have enabled the country to consider the nuclear option in the new socio-political, energy portfolio, environmental and economic construct that the nation is forging. **[Slide 4]** The continued safe and secure operating record of the U.S. nuclear fleet is an enabling factor for the anticipated expansion of nuclear energy. In addition, the many improvements made in the regulatory structure by the NRC, often through open and active participation of the industry and other stakeholders, are also enabling factors. Let me name a few key industry performance improvements and NRC changes that come to mind.

- **[Slide 5]** Extended shutdowns longer than 6 months: Perhaps my favorite is the decrease; better, the minimization of extended shutdowns.

- **[Slide 6]** Safety *and* compliance. . .it *was* compliance vs. safety.
- **[Slide 7]** Another favorite is the revised 10 CFR 50.59, where minimal became usable.
- **[Slide 8]** We now also have better, risk-informed Technical Specifications supporting safe on-line maintenance, risk-informed in-service inspection requirements in 10 CFR 50.55a and containment integrated leak rate test intervals in 10 CFR 50, Appendix J; all of which are enabling factors for shorter and more safety focused outages.
- We have the risk-informed Maintenance Rule, which provides for safer configuration controls during plant operation and maintenance.
- **[Slide 9]** We have made significant changes to the Reactor Oversight Process and the enforcement policy, to make them more risk-informed, objective, predictable, and understandable.
- **[Slide 10]** We have Regulatory Guide 1.174 which enables the use of risk insights and information in the licensing process.
- **[Slide 11]** Let's not forget the 42 license renewals and 108 power uprates that have been approved to date and which enable the current operating infrastructure to continue to safely and reliably serve the Nation by providing much needed electricity.
- **[Slide 12]** We issued a policy statement in 1998 that set the stage for efficient adjudicatory proceedings on license renewals and license transfers. In 2004, we revised NRC's rules of practice in 10 CFR Part 2 and more recently established model schedules to guide our boards and ensure more effective and efficient adjudication. Current proceedings reflect these measures.
- **[Slide 13]** We have proposed revisions to Part 52 to allow for amending design certification rules to facilitate increased completeness, standardization, and stability in new plant licensing process. We are also considering changes to the limited work authorization process to allow credit for work previously done for existing sites where plants were planned but not build.
- **[Slide 14]** We have added a risk-informed option to the special treatment requirements (10 CFR 50.69) to allow for ranking structures, systems, and components in accordance with their safety significance and treating them in a manner commensurate with their safety ranking.
- **[Slide 15]** We have added a risk-informed option to the fire protection requirements (10 CFR 50.48). You choose, Appendix R vs. NFPA-805. Finally, a chance for closure on fire protection issues.
- **[Slide 16]** We are well on our way to adding a risk-informed option for the large break LOCA in 10 CFR 50.46a. This is a truly significant risk-informed addition to our regulations.
- **[Slide 17]** Today, the NRC has integrated safety, security, and emergency preparedness. This was an important step, considering the terrorist attacks of September 11, 2001, and the lessons the Nation learned from the 2005 hurricane season. The extraordinary efforts of almost 5 years have paid off: U.S. nuclear power plants are being operated safely and securely.

Let me now go to new reactor licensing; it could be on many people's minds. The tripling, in less than a year, of the number of potential applications that the NRC is expected to review and act on presents a significant challenge to our preparatory activities. However, the NRC has and continues to receive the budgetary support needed to establish the infrastructure to conduct our licensing reviews for the anticipated applications. In addition, the NRC is establishing new and practical approaches to conduct the necessary licensing reviews of multiple applications in parallel, in an effective and efficient manner. I am referring to the design-centered review approach **[Slide 18]**, which I believe is critical for better and timely safety reviews. The approach is founded on the concept of "one issue - one review - one position for multiple applications" to optimize the review effort and resources needed to perform

the necessary regulatory reviews. The viability of this approach will depend upon multiple entities working together to provide standardized applications to support timely licensing decisions. I believe that we are on a success path, and that standardization will provide significant benefits to the quality and timeliness of new reactor reviews, and will also provide significant safety enhancement to new reactor designs. Moreover, I am convinced that the approaches we're considering today will result in significant benefits not only in relation to NRC's initial licensing reviews, but also in relation to industry's operation and maintenance of the plants and NRC activities during the operation phase.

An effective, efficient, transparent, and predictable licensing process, which you and the Nation as a whole have demanded and we strive to provide, will rely on high quality applications at the front-end, appropriate use of requests for information throughout, and holding applicants and the NRC accountable on both of these points. Note I said "high quality applications" not "perfect applications." It is worth repeating: **[Slide 19]** no application should be submitted before its time. The NRC staff will ask, seriously and judiciously: is this application acceptable for docketing? A "yes" is a necessary but not a sufficient condition. **[Slide 20]** Moreover, it is essential that the industry ask: does the application contain the necessary and sufficient information for the review to be finished in a timely manner? I suggest you use this latter standard, and you fully QA the answer.

I would like to spend a minute on the NRC-regulated industry relationship. NRC and industry have separate and distinct responsibilities, however, the separate responsibilities come together in a common objective to ensure the safety and security of the American people. This relationship need not be a friendly one, it need not be antagonistic either. This is also true of NRC relationships with other stakeholders. If the NRC and the industry are doing their jobs well, they will "benefit the needs of our Nation." One good way to do our jobs right and avoid unnecessary antagonism is to communicate well and timely and then do it again.