Prepared Remarks of U.S. Nuclear Regulatory Commission Chairman Dale E. Klein IAEA General Conference Senior Regulators Meeting Vienna, Austria October 3, 2008

I am very pleased to be participating in today's Senior Regulators' Meeting at the International Atomic Energy Agency's General Conference. I am especially delighted to be sharing the podium with Vice Minister Li.

The theme of this discussion is "Establishing a National Nuclear Safety Infrastructure." We all know that such a goal requires a great deal of coordination and planning, whether the safety infrastructure is being created for the first time, or simply expanding to accommodate significant anticipated growth in nuclear power. This second category, of course, is the situation facing our two nations—the U.S. and China. It is my understanding that China is planning to build over 40 new nuclear power plants over the next 15 to 20 years, expanding its nuclear capacity to over 60 gigawatts, from its current level of 9 gigawatts.

But as the world witnessed during the spectacular Beijing Olympic Games, China is more than capable of performing amazing feats of planning, organization, and engineering. Let me offer China my congratulations on the great success of this event, and suggest that all of us would be very happy if the worldwide expansion in nuclear power proceeds as smoothly as the Olympic Games did. The Olympic Games opening ceremonies involved many people working together—with all of them knowing their precise roles. Likewise, a successful nuclear safety infrastructure also depends on the coordinated efforts of many different people, each of whom must know and perform his or her specific role. This includes regulators, industry executives, construction personnel, vendors, plant operators, and many others.

As for the responsibility of regulators, I know that Vice Minister Li shares my belief that an independent safety regulator is essential to ensuring reactor safety and public confidence. In fact, we both believe that strong regulatory oversight is the keystone for expanding the use of nuclear power.

There is another reason that it is appropriate for us to be together on this panel. While the building expansion in China is very dramatic, the interest in new nuclear plants in the U.S. is also strong. As of today, the NRC has received 16 applications for 25 new power plants. If the NRC finds that the applications meet our standards, it seems likely that in the next decade the U.S. and China will be pouring more concrete, using more steel, and erecting more containment buildings than the rest of the world combined. This presents our two nations with a special responsibility to set a good example. And it presents opportunities for our two regulatory bodies to work together and share insights. Therefore, I would like to say a few words about how China and the U.S. are cooperating in the area of nuclear safety, and how these efforts can offer some lessons for "Establishing a Nuclear Safety Infrastructure."

As many of you know, China announced plans to build four Westinghouse AP 1000 reactors in December 2006. Since the NRC had already certified the AP 1000 design, this presented an opportunity for more extensive cooperation between our two nations—specifically, between the NRC and the National Nuclear Safety Administration (NNSA). Last year, a team of NRC staff went to China and worked with NNSA staff to train them on the U.S. review and certification process for the AP 1000. I believe these efforts have demonstrated our mutual determination to cooperate, and will provide a firm foundation for further collaboration. Over the next year, when construction of the AP 1000 begins in China, the NNSA has invited the NRC to send inspectors to observe these construction activities. As part of that process, we will share information about the similarities and differences in the U.S and Chinese regulatory processes and inspection methodology.

In addition, when fabrication of specialized components begins, the U.S. will also send vendor inspectors to China to observe how these components are fabricated, and we expect China vendor inspectors to visit the U.S. to inspect components going to China. Let me note here that vendor inspections are regarded as a valuable regulatory tool at the NRC. Many of you have heard me talk about a U.S. regulation called Part 21, which requires that defective, counterfeit, or misused components be reported to the NRC. This information is shared with industry, and is made publicly available. I have suggested before that this kind of information should be collected by all regulators and shared across national borders. Today I will modify my view by saying that this is not merely a good idea, but perhaps even a necessary one. And I think that those nations which have nuclear construction under way now, or in the near term, should begin to pay attention to this need right away.

The cooperative efforts between the U.S. and China that I noted earlier are not merely beneficial to our two nations. I think they can serve as a useful example for other nations, as well. It is both expensive, and unnecessary, for regulators to operate in a vacuum. This is especially true for nations that are contemplating the adoption of nuclear-generated electricity for the first time. Moreover, no single entity—including the IAEA—can be <u>everywhere</u> in the world. Yet, we must all be concerned about preventing a nuclear accident <u>anywhere</u> in the world. Therefore, a coordinated international approach in which every nuclear nation can share its own experiences and expertise can benefit all nations.

That is the intent of new National Nuclear Installation Safety Infrastructure for New Entrants document that has just been released by the IAEA's International Nuclear Safety Group. Before I say a few words about the report, let me thank INSAG, and especially its Chairman former NRC Chairman Richard Meserve—for their hard work and expertise, and offer my congratulations on the release of this important document. I believe that another INSAG report on operating experience feedback will serve as a great benefit to the nuclear community. Together, these documents should go a long way toward helping new entrants into the field of nuclear energy learn from the experience of other nations.

Those of you who attended the roundtable discussion on Monday already have some familiarity with the recommendations of the Safety Infrastructure Report. Speaking for myself, I was very pleased to note the report's emphasis on "qualified managerial and operating personnel with an appropriately embedded safety culture." As the report rightly notes: "reliance on robust designs and engineered safety systems alone is insufficient [because] a nuclear power plant is operated by people." I also admire the clear, step-by-step preconditions the report lays out for regulating the entire life cycle of a nuclear power plant, up to and including decommissioning and waste management.

But let me add one other point that I think is especially relevant today, in light of the very significant global interest in building new nuclear power plants. I believe that Vice Minister Li would agree with me when I say that, as regulators, we are sometimes criticized for being too slow.

But it must be emphasized that public confidence in the safety of nuclear power is not strengthened by sacrificing thoroughness for speed. Rather, it is strengthened when the public feels assured that plants are being built, operated, and supervised <u>properly</u>. I believe, therefore, that all parties are best served if we insist on a rigorous and disciplined licensing process for new reactors.

Let me also add that public confidence is enhanced when regulators operate in a fair, predictable, and transparent manner—while also protecting proprietary information, and limiting access to security related information. At the NRC, we believe that the industry and the general public should have a reasonable expectation of timely regulatory decisions based on good science and high quality engineering practices. We are demanding; but we also seek to be responsive. All stakeholders in the nuclear industry—the financial community and, especially, the public—must be made aware of the status and progress of issues that may affect them. This is an approach that has worked well for us, and I believe such an approach can be beneficial for other nations interested in expanding commercial nuclear power.

Much more could be said on this very important topic, but I think that the points I have touched on should be enough to stimulate further discussions today. Once again, on behalf of the U.S. Nuclear Regulatory Commission, let me say how pleased we are to be participating in this year's annual meeting. I look forward to the other presentations by my friends and colleagues later today.

Thank you.