STATEMENT
BY DALE E. KLEIN, CHAIRMAN
UNITED STATES NUCLEAR REGULATORY COMMISSION
TO THE
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON CLEAN AIR AND NUCLEAR SAFETY

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Mr. Chairman and Members of the Committee, it is a pleasure to appear before you today along with my colleagues, Commissioners Jaczko and Lyons. On behalf of the Commission, I thank you for your continued support of the NRC's work to protect public health and safety and the common defense and security.

I would like to take this opportunity to focus on a few specific developments that have occurred since the Commission last appeared before you in April. Before I turn to these agency activities, however, I want to highlight one particular event that affected all of us very deeply. This is the first hearing at which the Commission has appeared without our long time colleague and friend Ed McGaffigan. His passing has left a void in the agency and at this table this morning. I want to thank all of you for your kind words of comfort to Ed's family.

GAO Report on New License Applications

In August, the Government Accountability Office released a draft report, "Nuclear Energy: NRC's Workforce and Processes for New Reactor Licensing are Generally in Place, but Uncertainties Remain as Industry Begins to Submit Applications" (GAO-07-1129). The report discusses the NRC's ability to manage its workload in light of the anticipated receipt of 20 new reactor license applications in the next 18 months. The Commission appreciates the time and effort taken by GAO to address this important topic, and we consider the draft report to be comprehensive, fair, and balanced. The report accurately identifies the accomplishments as well as the challenges that the agency faces in preparing its workforce for new reactor licensing reviews.

As the Members of the Committee are aware, the NRC, with the support of Congress, has been addressing this issue as a high priority for several years. The agency is continuing to take aggressive steps to prepare for the challenges outlined in the report. Our Office of New Reactors (NRO), in particular, is hiring staff with the appropriate skill sets and is providing essential training to staff members. In addition, NRO is taking steps to ensure that combined license application reviews are consistent, coordinated, and efficient.

Last week, the NRC received the first of five applications (for a total of 9 new reactors) we believe will arrive this calendar year. As you know, the NRC has licensed over 104 nuclear power plants in the U.S., and I want to assure you that although the NRC has not licensed any new plants recently, the agency is prepared to address this important activity. The Commission believes that as a result of our efforts in recruitment, training, retention, and knowledge management, the NRC has the skilled work force to complete thorough reviews in a timely and effective manner.

Reactor Oversight Process vs. Independent Safety Assessment

Another issue that I would like to discuss with you this morning is NRC's inspection program for currently licensed reactors. At the April hearing and in subsequent interactions, Members of the Committee expressed a desire for more information comparing the Independent Safety Assessment inspection conducted at Maine Yankee in the mid-1990s and the current, risk-informed, performance-based Reactor Oversight Process.

The NRC conducted an Independent Safety Assessment at Maine Yankee in 1996. It is important to note that the Maine Yankee Independent Safety Assessment occurred prior to the development of the Reactor Oversight Process and in response to a unique set of concerns connected with the facility's power uprate application and allegations of misconduct.

While the Independent Safety Assessment was the proper tool to use in 1996, the Commission believes that today's Reactor Oversight Process is far superior to the Independent

Safety Assessment process. In developing the Reactor Oversight Process, the NRC took the lessons learned from the Maine Yankee Independent Safety Assessment and incorporated its best features into the new Reactor Oversight Process, which is designed to be objective and predictable, meaning that given comparable performance, different licensees will receive the same level of regulatory oversight. Unlike the Maine Yankee Independent Safety Assessment, which occurred after performance deficiencies were detected, the Reactor Oversight Process directly couples performance deficiencies at any plant with increased inspection, focuses increased inspection resources to address declining plant performance, and provides insight into the overall root and contributing causes of performance deficiencies. The inspections gather additional information to be used in deciding whether continued operation of the facility is acceptable and whether additional regulatory actions are necessary to address declining plant performance. The Reactor Oversight Process inspection modules utilize on-site inspectors as well as personnel from the regional offices, NRC headquarters, and outside experts to provide a diversity of technical expertise which enhances the degree of independence of the inspection effort. The regulatory tools available to the inspectors, regional and headquarters management, and to the Executive Director for Operations are extensive.

When a plant experiences an isolated operational event or a degraded plant condition that merits immediate enhanced oversight, a prompt, reactive inspection will take place. Similar to the Maine Yankee Independent Safety Assessment, the highest level of reactive inspection requires that the inspection team include members who are independent from significant involvement in the licensing and inspection of the facility.

Although the Commission is confident that the Reactor Oversight Process is superior to the Maine Yankee Independent Safety Assessment, we continue to improve the process. For example, in 2006, the NRC staff, at the direction of the Commission, significantly enhanced the way the NRC reviews design issues. The resulting Component Design Basis Inspection procedure, which is an important element of the Reactor Oversight Process, is a comprehensive

team inspection to verify that design bases have been correctly implemented for selected risk significant components and that operating procedures and operator actions are consistent with design and licensing bases. This inspection procedure ensures that selected components are capable of performing their intended safety functions. The NRC's enhanced Component Design Basis Inspection has been performed at Indian Point Unit 2 and resulted in only minor findings. An equivalent inspection is scheduled to be performed at Indian Point Unit 3 this month.

Recently, NRC staff performed a comparison of the Maine Yankee Independent Safety Assessment and the current Reactor Oversight Process to determine if there are any gaps in the Reactor Oversight Process. After review of the results of the staff's efforts, the Commission remains convinced that the Reactor Oversight Process effectively incorporates the elements of the Maine Yankee Independent Safety Assessment and provides better oversight than an Independent Safety Assessment, since the Independent Safety Assessment was a one-time, "snapshot" inspection and the Reactor Oversight Process provides continual evaluation.

While circumstances that led to the Maine Yankee Independent Safety Assessment do not exist at Indian Point, performance issues at Indian Point have resulted in an increased level of oversight. NRC believes that the current increased level of oversight at Indian Point is appropriate and that the performance of the current Reactor Oversight Process inspection regimen for Indian Point will effectively assess the same elements of plant operation that would have been addressed by the Independent Safety Assessment, albeit over a longer period of time.

GAO Investigation of Materials Licensing

A third issue is the GAO investigation of Materials Licensing. Earlier this year, GAO created a fake business in order to obtain a valid radioactive materials license from NRC. After NRC approved the license, GAO investigators altered the license so it appeared that this company was authorized to purchase larger quantities of radioactive sealed sources than the

maximum listed on the approved license. GAO then sought to purchase, from two U.S. suppliers, gauges containing sealed radioactive material. The gauges GAO sought to purchase were Category 4 sources under the International Atomic Energy Agency's Code of Conduct which contains 5 categories of sources. GAO also attempted to obtain a license from the State of Maryland, an Agreement State, but withdrew the application after Maryland license reviewers indicated they would visit this company before granting the license.

The NRC has a risk-informed approach to regulating sources, with greater controls imposed on the most significant sources. The Commission recognizes that GAO identified a gap in our program for protecting lower risk sources. As soon as GAO informed us of the problem, we took immediate action to address the weaknesses in our licensing process. Within days, NRC suspended the review of all new applications for materials licenses until it could determine what interim corrective actions were necessary to resolve the weaknesses. NRC discussed the issues with the Agreement States. On June 12, 2007, NRC issued supplemental guidance with additional screening criteria intended to help the NRC license reviewers determine whether a site visit or face-to-face meeting with a new license applicant is required. Such visits are now required by NRC prior to approval of a broader range of applications if the applicant for the new license is not an existing Agreement State or NRC licensee. NRC has also established a pre-licensing working group to develop improved guidance addressing the weaknesses found by GAO.

In addition, the NRC staff has developed an action plan detailing other steps NRC plans to take, and the resources needed, which the Commission approved last month. In approving the plan, the Commission emphasized the importance of developing practical common sense approaches to verify the validity of license applicants.

The action plan consists of three distinct but integrated components. The first component is the previously mentioned Pre-Licensing Working Group, which is being chaired by both a NRC Regional representative and an Agreement State Program Director. The Pre-

Licensing Working Group is focusing on relatively short-term fixes that can be implemented quickly while longer term solutions can be considered and implemented as appropriate. The second component is an independent, external review panel consisting of three knowledgeable but independent individuals. This second panel will look at the overall materials security program concerning these lower risk sources and make recommendations, if appropriate, for fundamental program changes. The third component is a Materials Working Group that will be led by NRC Headquarters and have representatives from both the NRC Regions as well as the Agreement States. This third group will review the efforts of the other two components as well as solicit additional thoughts and make recommendations for long term improvements in the regulatory process. Since an overwhelming majority of these lower risk sources are located in Agreement States, it is vital to have Agreement State participation in this action plan.

Nuclear Fuel Services

Finally, I want to discuss with you the March 6, 2006 incident at Nuclear Fuel Services in Erwin, Tennessee. During the transfer of a solution containing highly enriched uranium (HEU) through a transfer line, approximately 35 liters of highly enriched uranium solution leaked into a glove box and passed through drains to the floor. Upon discovery, the operator promptly stopped all processing of highly enriched uranium in the facility. The Commission summarized the incident in its May 2007 report to Congress on Abnormal Occurrences in 2006.

The Commission recognizes that there were numerous opportunities prior to the abnormal occurrence report in which the NRC could have and should have promptly informed Congressional Oversight Committees of the highly enriched uranium spill event at NFS. We are instituting actions to ensure that Congress is informed in a timely fashion of future events involving our regulated activities. Regardless of the sensitivity or classification of information, we will promptly inform Congress of significant events and agency actions in response to those events.

We also recognize that the NRC could have shared more information about the event with other agencies and the public. As a result, the Commission directed the staff to work with the Department of Energy's Office of Naval Reactors to revise existing guidelines and procedures to ensure that information on licensed activities involving the Category I fuel facilities is publicly available. The Commission's goal is to strike an appropriate balance between a regulatory process that is open to the public and the protection from disclosure of sensitive information which could be helpful to potential adversaries. The revised guidelines have been approved by the Commission. In September, we provided public access to hundreds of previously withheld documents related to NFS-Erwin, BWX Technologies, and other fuel cycle facilities.

Conclusion

Mr. Chairman and Members of the Committee, as our agency prepares for the numerous new reactor applications that are expected, we continue to remain focused on the safety and security of the existing fleet of reactors, fuel cycle facilities, and nuclear materials. I want to assure you that we are doing everything we can to continue protecting the American people and the environment.