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"TAKING THE FINAL STEPS IN PROMULGATING  
A DEFENSIBLE DEACTIVATION, DECONTAMINATION AND  
DECOMMISSIONING REGULATORY REGIME"

BY

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TO

THE THIRD ANNUAL NUCLEAR DECOMMISSIONING  
DECISIONMAKERS' FORUM  
LANSLOWNE EXECUTIVE CONFERENCE CENTER  
LANSLOWNE, VIRGINIA  
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Good morning, ladies and gentlemen. I am delighted to be here today to address the "Third Annual Nuclear Decommissioning Decisionmakers' Forum" here at Lansdowne. I had the pleasure of addressing this forum last year and found the discussions with the conference participants to be particularly stimulating, informative, and constructive. (So much so that I agreed to come back this year and do it again.)

Last year, I emphasized to conference participants the importance that the Commission has placed on decontamination and decommissioning activities. That level of importance has not diminished at the NRC over the past year. To the contrary, the Strategic Assessment and Rebaselining of all of the NRC's activities, which I will describe in greater detail later, has identified that two of the sixteen issues having the greatest importance to NRC's mission are related to decommissioning activities.

The Commission therefore has a strong interest in the wide variety of decommissioning issues being addressed at this Forum over the next three days. This is quite apparent from the agenda which shows that NRC staff will be discussing the details of our on-going programs on each day of the Forum.

This morning I would like to address four of the topics that will present unique challenges to the NRC in the coming years. The first topic concerns NRC's decommissioning cleanup standards. (I note that a session here will be devoted to this subject, and it is appropriately titled "The Devil is in the Details." Later in my talk, I will mention some of those details.) Next, I will discuss electric utility deregulation and the impact that deregulation might have on nuclear facility decommissioning. Then, I will turn to the NRC's Strategic Assessment and Rebaselining of regulatory activities. Finally, I will discuss the external regulation of the Department of Energy (DOE).

#### DECOMMISSIONING CLEANUP STANDARDS

An important aspect of any successful regulatory program, and the decommissioning program is no exception, is having fair, consistent, and cohesive regulatory requirements. The Commission put into place general requirements for decommissioning in 1988. These regulations addressed many of the various aspects of decommissioning a nuclear facility, including planning requirements, timing, assurance of the availability of adequate funds, and environmental review requirements. But, over time, we have identified additional regulatory requirements that need to be promulgated, or existing requirements that need to be amended, in order to put our regulatory program for decommissioning activities into final form.

One area that our 1988 regulations did not address was the acceptable levels of residual radioactivity for decommissioned facilities. As a result, the NRC initiated a rulemaking in 1992 to establish appropriate radiological criteria for decommissioning. Over a two-year period, the NRC conducted a series of workshops and meetings across the country to discuss the scope, issues, and alternative approaches to the rulemaking. The discussions involved a broad cross-section of interested entities and individuals, including the Environmental Protection Agency, industry, States, local governments, Native Americans, academia, vendors, civic and environmental groups, environmental justice organizations, and other Federal agencies. The workshop and scoping discussions were used in the preparation of the proposed rule on radiological criteria for license termination that was published in August 1994 (59 FR 43200).

Since the publication of the proposed rule, the NRC has conducted additional public workshops on the implementation of a dose-based standard for decommissioned sites, and on public participation in planning and conducting decommissioning.

As a result of the very extensive public participation process that has been used in this rulemaking, the NRC has received

literally thousands of comments on the subject. Having completed its analysis of these comments, the staff plans to submit a final rule to the Commission for its consideration early next year.

In formulating and promulgating its final rule on radiological criteria for license termination, the Commission will give particular consideration to: (1) an all-pathways dose criterion in the range of 15 to 30 mrem per year; (2) inclusion of specific alternative criteria for certain facilities; (3) elimination of a separate groundwater standard; (4) the appropriate application of ALARA based on the dose criteria selected in the final rule; (5) a greater reliance on institutional controls; and (6) the appropriate value of the maximum dose limit permitted if restrictions should fail.

Let me take a moment to discuss two of these items -- the all-pathways dose criterion and the separate groundwater standard -- in further detail. With regard to the inclusion of a separate groundwater standard in the NRC's final rule, at this point, the Commission is reluctant to include such a requirement, based on information currently before us, because a separate groundwater standard has not been justified on either a technical basis or a cost-benefit basis. The Commission believes that adequate protection of the public can be provided by the establishment of an all-pathways dose criterion that limits the amount of radiation a person potentially can receive from all possible sources at a decommissioned site, including doses received from drinking water obtained from groundwater. Based on information and data currently available to the Commission, a separate groundwater standard appears to have minimal additional safety benefit compared to an all-pathways dose criterion. Furthermore, the costs associated with this benefit appear to be unreasonably large. The Commission believes that compliance with an appropriate all-pathways standard would satisfy the Atomic Energy Act requirement to protect public health and safety.

#### DEREGULATION OF ELECTRIC UTILITIES - EFFECT ON DECOMMISSIONING

Let me now turn to an area where NRC had specific decommissioning regulations but, because of a changing business and regulatory environment, the NRC has had to reassess those requirements.

The U.S. electric utility industry has entered a period of economic deregulation and restructuring with potentially profound impacts on its business practices. These changes have operational, economic, and ownership aspects that are of importance to the NRC. As the business environment changes, the NRC must ensure not only that operational safety is scrupulously protected, but also that adequate decommissioning funding is available, whether nuclear facilities operate to the termination

of their operating license or shut down prematurely. In addition, since deregulation may change the financial and business structure of some licensees, the NRC may need to monitor their financial qualifications more closely.

In the fall of 1995, the Commission initiated a reevaluation of NRC policy regarding decommissioning funding. The NRC issued an advance notice of proposed rulemaking (ANPR) in April of this year, seeking additional information on electric utility restructuring in general. The advance notice of proposed rulemaking explained that the NRC was concerned that some additional decommissioning funding assurance might be needed for those power reactor licensees that would no longer be subject to rate regulatory oversight by FERC or the State public utility commissions.

The NRC's decommissioning regulations already have some built-in capability to address rate deregulation. Currently, NRC regulations allow only licensees meeting the NRC's definition of "electric utility", to use the external sinking fund method of decommissioning funding assurance. Power reactor licensees that are no longer considered "electric utilities" within the current NRC definition, will be required to provide some other method of assurance, such as a letter of credit or surety bond, for any unfunded balance of decommissioning costs.

As indicated in the advance notice of proposed rulemaking, the NRC believes that additional measures may be required. Regulatory changes might include eliminating ambiguities in the NRC's definition of "electric utility", and taking account of alternative methods of providing assurance of decommissioning funding - for example, pooled insurance, if available, or accelerated funding of decommissioning. The NRC staff currently is developing a proposed rule in light of comments received.

#### NRC'S STRATEGIC ASSESSMENT

The NRC has underway, as I mentioned earlier, a Strategic Assessment and Rebaselining of all NRC activities. This is a critical self-evaluation and rebaselining of work intended to provide a sound foundation for the agency's direction and decision-making for the rest of this decade and into the next.

This initiative is comprised of four phases. During the first phase, we identified key strategic issues, questions, and decision-making points that the Commission needed to address.

In the second phase, for each key strategic issue, two of which relate to decommissioning activities, papers were developed containing policy options for Commission consideration. The

Commission has expressed its preliminary views on each of these issues. However, before reaching final decisions on the issues, the Commission wanted to have the benefit of the views of "stakeholders" -- the industry, our licensees, and the public who will be affected by the decisions.

The issue papers were made publicly available on September 16, and the NRC held public meetings in October and November to discuss the issue papers and to obtain comments from stakeholders. The comment period closed on December 2. I hope that many of you afforded yourselves the opportunity to comment on the issue papers. The Commission will consider the comments of the stakeholders in reaching final decisions which will form the basis for the agency's strategic plan.

A principal outcome of the third phase of this process will be the strategic plan which will establish a framework to guide future NRC decision-making. In the final phase, the plan will provide a basis for aligning the NRC's resources with its mission and goals.

In the interest of time, I will speak only briefly about the Commission's preliminary views on those issues that relate to decommissioning. As I had mentioned earlier, two of the 16 direction-setting issues that were identified in the Strategic Assessment and Rebaselining initiative are related to decommissioning activities. For both of these issues (one on reactor decommissioning and a second on nuclear materials facility decommissioning), the Commission is looking for new and innovative approaches that will improve the efficiency and effectiveness of site and facility decommissioning. For example, with respect to the decommissioning of non-reactor facilities, the Commission's preliminary views were that a variety of options should be pursued by the NRC that would place appropriate responsibility on licensees to remediate their sites while giving NRC the appropriate tools to deal with problem sites and licensees.

The Commission is looking at the possibility of implementing a performance-oriented decommissioning review process that provides only residual contamination goals for decommissioning, and allows the licensee to proceed with decommissioning without obtaining prior NRC approval of a decommissioning plan. The preliminary view of the Commission is that such a process should be tested on a pilot scale for a few selected materials licensees to determine the potential success and effectiveness of this approach. Based on the results of this pilot program, the Commission could consider, at a later date, whether this approach to decommissioning should be adopted on a broader scale.

The preliminary views of the Commission also favor the possibility of transferring sites that pose little risk, and where little progress is being made toward ultimate site decommissioning, to EPA's Superfund Program. The Commission would have the NRC staff conduct a risk-informed performance-based assessment to determine those sites that fall into the low-risk category.

Many NRC staff members have worked very diligently on the Strategic Assessment and Rebaselining initiative, and I am confident that it will provide the NRC with a path that will lead it into the next century. I would encourage all of you to maintain an awareness of this very important activity.

#### EXTERNAL REGULATION OF THE DEPARTMENT OF ENERGY (DOE)

Another topic that I would like to discuss briefly, and also a subject that was identified in our Strategic Assessment and Rebaselining initiative as a direction-setting issue for the agency, is the external regulation of U.S. Department of Energy (DOE) activities. It is an issue that has the potential to affect significantly the future operation of the NRC.

In 1995, the DOE created an Advisory Committee on External Regulation. In its report, which was published last December, the Committee recommended that DOE be regulated externally, and named NRC as one of two potential safety regulators, the other being the Defense Nuclear Facilities Safety Board.

NRC already has some oversight responsibilities for certain DOE activities, most notably the licensing of a high-level radioactive waste repository and the "greater than Class C" waste disposal facility. The Energy Policy Act of 1992 created additional oversight responsibilities for NRC in the form of a certification process for the U.S. Enrichment Corporation gaseous diffusion plants in Portsmouth, Ohio, and Paducah, Kentucky. For years, we have consulted with DOE on the West Valley Waste Demonstration Project in New York, and we currently are evaluating the possibility of licensing future high-level waste vitrification facilities.

Many questions remain to be answered about NRC oversight of DOE, and, of course, Congress must address budget and, if needed, pass implementing legislation before additional NRC oversight of DOE facilities could occur. In the Strategic Assessment and Rebaselining, the Commission has taken a preliminary position that it would not pursue actively the added responsibilities that would result from regulating DOE activities, but, given adequate resources and a reasonable time schedule to develop and initiate a regulatory program, the NRC could provide adequate regulatory

oversight of DOE, and would be the appropriate Agency to do so, if asked. The Commission further concluded that if NRC were to be given added regulatory oversight responsibilities, the Commission would prefer that the additional authority be given to the NRC on an incremental basis, and that some type of prioritization be used to determine the types of DOE facilities that, if subject to NRC oversight, would provide the greatest potential benefit to public health and safety.

#### CONCLUSION

In conclusion, I would like to reiterate that the topics that you will be discussing over the next three days are of great importance both to the NRC and to the nuclear industry. It is critical that the nuclear industry and the regulatory authorities assure the public that the nuclear facilities can not only be constructed and operated safely, but that at the end of their useful lives, those same facilities can be decommissioned in a manner that protects public health and safety.

Thank you very much for your attention and I wish you a very successful conference.