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CURRENT REGULATORY ISSUES

Introduction

Good afternoon ladies and gentlemen. I am pleased to have the opportunity to speak with you at the NRC's seventh annual Regulatory Information Conference.

This is an exciting time to be in government, and an exciting time to be at the NRC and the regulated environment in which we operate. Old paradigms are being broken, and new ways of thinking and doing business are emerging. I know that the utilities themselves are undergoing significant transformations in trying to cut costs, without cutting corners; to assess and enhance safety, without diminishing safety, and to improve operational performance, without increasing costs. We at the NRC are doing similar activities. But as you can tell from staff initiatives, many of which are being discussed at this conference, the NRC has taken great strides to listen to the industry and to incorporate processes that focus on results to assist you in your endeavors, and still keep our focus on safety.

I would like to talk to you today about a few of the items that have greatly influenced the NRC within the past year, and give you a sense of where the agency is headed. I will give you an idea about the recent initiatives in the Federal Government. I also want to address the Towers-Perrin report. Finally, I will provide you with my perspective on a technical issue that I find particularly interesting, RPV Annealing.

Recent Federal Government Initiatives

Recently, Congressional action and Presidential directives have made it clear that their aim is to reduce the size of the Federal Government, which includes the NRC. Three separate, yet interrelated, mandates have required us to streamline and downsize. The Federal Workforce Restructuring Act reduces the number of FTEs through FY 1999. The OMB budget guidance reduces our dollar base through the year 2000. Finally, the National Performance Review has asked us to re-evaluate the way we do business. I will address the impact of each of these individually.

First, a Presidential Executive Order and action by the Congress established annual FTE targets and set the level of government-wide reductions to approximately 250,000 FTE for FY 1995 to FY 1999. Our share from this mandate was a reduction of 393 FTE, from a level of 3,377 in FY 1993 to 2,984 in FY 1999, or approximately an overall 12% FTE reduction. The NRC has been meeting its targeted goals. So far, the agency has accomplished these reductions mainly through attrition and the use of buyouts. While the agency has been making its FTE targets we face even greater challenges in later years as reductions are larger.

We are developing plans on how to achieve these reductions in the out-years. We have informed the Administration and the Congress that we will endeavor to comply with the proposed FTE reductions. We will do so unless we reach a point that we believe further reductions will jeopardize our public health and safety mission.

Second, the agency's budget has been steadily decreasing over the past two years and is projected to be further reduced through the year 2000. Our budget in FY 1993 was \$540 million. Over the past two years, due to good financial business practices, we submitted a rescission of \$12.7 million in FY 1994 and a budget amendment to reduce \$20 million in FY 1995 to a level of \$525 million. I'd like to provide a few examples of the good financial practices that have saved us millions of dollars. In FY 92 we noticed that the rate per square foot of rent we were paying to GSA was approximately the same rate one would expect to pay in downtown Washington. We challenged the GSA rates, submitted a convincing argument to GSA and our rent was reduced over \$2.6 million. Another example of where we saved dollars was in our commercial contracts. We used to maintain a contingency fund in the event the money would be needed for the closeout of contracts. We discovered that the funds were rarely used. We also took aggressive action to reduce the commercial contracts closeout backlog to acceptable levels. Both of these actions saved the agency over \$10 million dollars. The last area where sizable dollars have been saved is in carefully reviewing funds

tied up in old DOE laboratory agreements. By challenging whether the funds were needed and closing out these old agreements, another \$1.4 million was saved.

Our request before Congress for FY 1996 is essentially the same as FY 1995 or approximately \$525.6 million; which is \$15 million dollars less than FY 1993. This has resulted in lower fees being charged to our licensees. OMB has issued budgetary guidance for FY 1997 through FY 2000. The guidance is a progressive reduction to each year's budget based on our FY 1996 level. Our budgets are slated for a 3% cut in 1997, 5% in 1998, 7% in 1999 and finally 9% in FY 2000. These are very severe reductions considering that they do not allow for inflation or cost of living allowances. To give you some perspective, our previously projected budget for the year 2000 would be reduced by \$111 million to achieve OMB's target. We are currently developing our FY 1997 budget which is projected to be \$31 million less than what we would have asked. What does this mean to you? It means that as our budget is reduced, the amount of fees that we are required to collect from you also goes down.

The third mandate was the National Performance Review. Time today does not permit much discussion of this. Suffice it to say that the NRC is in an active role to create a government that works better and costs less.

Towers-Perrin Report

Let me turn to another topic that may be of interest to you - the Towers-Perrin Report and subsequent staff actions. When the NRC received the Towers-Perrin Report, we initiated an evaluation of the report to determine what actions would be appropriate to address the industry's concerns. We provided this report, in its entirety, to all NRC employees who interact with power reactor licensees. We did this to allow the staff to develop personal insights based upon an introspective evaluation of the report. As you may know, the Commission met with representatives of the industry on December 5 and 21, 1994, in public meetings to discuss the report's conclusions. This report was discussed at the January 1995 senior management meeting. I add this as preface to tell you that we have taken this report, and the implications of perceived inappropriate regulatory actions by the staff, seriously, and desire to improve our actual performance.

Previously, prior to Towers-Perrin, the NRC received input from Regulatory Impact Survey in 1989. As a result of this, the NRR staff issued a procedure to improve regional management's oversight of inspector actions and increase management emphasis on activities intended to ensure performance and objectivity of inspectors. Subsequently, the staff initiated an assessment of

the effectiveness and implementation of the operating reactor inspection program. Still later, the Regulatory Review Group was established to conduct a disciplined review of power reactor regulations and make recommendations to increase the use of performance-based regulations.

While we believe that changes made to our regulatory programs, policies, and practices have resulted in measurable improvements, we also acknowledge that the Towers-Perrin report presents indications that additional changes are needed, particularly in the area of communication between the staff and the regulated community.

As a result, we developed a policy statement that establishes the expectation that the industry report inappropriate regulatory actions by individual NRC staff. The policy informs our staff that retaliation or threat of retaliation by the NRC as a result of such communication will not be tolerated. This policy incorporates a process for managing concerns involving inappropriate regulatory actions by the staff within my office. I note, however, that these initiatives complement our existing policies and programs. This new process provides an important avenue for licensees to raise concerns, and is in accordance with NRC Principles of Good Regulation.

This process involves four basic steps:

Upon receipt of information from a senior licensee official, which must be at the level of plant manager or above, regarding inappropriate regulatory actions by the NRC staff, the Deputy EDO will elicit and record as many specifics as possible about the claim; inform the licensee that while the concern will be handled discreetly, the review will likely make it necessary to further involve the official, the affected NRC employee, and other NRC personnel; inform the licensee that the EDO will provide written feedback on disposition of the issue; and, prepare a file using the information supplied by the licensee.

The Deputy EDO will coordinate resolution of the issue. This may involve precluding the NRC employee from participating in any activities related to the licensee, and includes prohibiting the NRC employee from contacting the licensee to pursue this issue. The Deputy EDO will obtain the NRC employee's version of the event, and will consult with other staff and licensee representatives to resolve the concern.

The Deputy EDO will complete the review and determine what subsequent actions are appropriate. If found to be without merit, a written statement will be generated to the NRC

employee to that effect. If substantiated, recommendations and an action plan will be developed, and the employee will be so advised. The Deputy EDO will initiate any remedial actions that are deemed necessary.

The final step will involve the EDO notifying the licensee official in writing of the outcome. While remedial actions may be discussed in the letter, specific personnel actions will not be.

I believe we have listened to your concerns as expressed in the Towers-Perrin report. I also believe that with open and frank communication, we can reduce the negative perception that the Towers-Perrin report has created.

RPV Annealing

Let me switch and speak about a technical issue for a moment. As someone with a special interest in reactor vessels, I would like to talk to you about an area that I am currently following closely - reactor pressure vessel annealing. The integrity of the reactor pressure vessel is essential in assuring long term safe operation of nuclear power plants. NRC has been actively pursuing clarification and resolution of issues pertaining to reactor pressure vessel integrity for many years. This pursuit has involved long term research efforts, formulation of rules and regulatory guides and implementation and interpretation of regulatory policy in this area.

As you know, reactor pressure vessels become embrittled due to neutron irradiation with increased time of operation. RPVs constructed of materials with high traces of copper and nickel are especially susceptible to this phenomena. This combination of susceptible materials and accumulated increase of neutron fluence can lead plants to reach, or exceed, embrittlement screening criteria set forth in 10 CFR Section 50.61. Some plants may reach the screening criteria before EOL. With irradiation embrittling of vessel steel over time of operation, certain licensees are left with two options. These options are either complete a detailed probabilistic fracture mechanics assessment, or perform thermal annealing of the reactor pressure vessel.

The NRC recognizes the viability and worth of the probabilistic assessment approach and has undertaken efforts to clarify what is required for approval of such analyses. However, it is also noted that such analyses require consideration of state-of-the-art issues in thermal hydraulics, fracture mechanics and non-destructive evaluation. Reaching a quantitative consensus on a specific licensee's evaluation in this area can be a difficult and time-consuming process. This type of assessment

also suffers from the fact that, assuming adequate protection can be demonstrated, nothing may have actually been changed in the materials or hardware of the system to increase plant safety.

In contrast, thermal annealing has the potential for restoring the toughness of the vessel steel to very near the original, unirradiated condition. This would effectively enable licensees to "reset the clock" on vessel irradiation embrittlement, and potentially increase the safe operating life of the reactor vessel. However, thermal annealing of a nuclear power reactor is a complex process which has not been previously attempted at a commercial nuclear power plant in the U.S., and involves significant engineering issues and potential financial risk to utilities.

NRC recognizes that a key element of facilitating thermal annealing as an option for restoring the toughness of nuclear power reactors is the success of the DOE Annealing Demonstration Project. DOE intends to award two contracts for the project. One contract will be awarded to a Westinghouse-led consortia that will conduct a demonstration on the Marble Hill reactor using a gas-fired methodology. The second consortia, led by MPR Associates, would demonstrate an electric resistance methodology on the Midland Unit 2 reactor. Both demonstrations are projected to take place in the 1996/1997 time frame. These annealing methods are projected to have temperature ranges for the anneals between approximately 427°C to 482°C. The primary objectives of the Annealing Demonstration Project are:

- To determine RPV dimensional stability - is there distortion during and after annealing?

- To verify lack of damage on key components, such as the RCS piping and concrete reactor cavity wall,

- To instrument and gather data for model verification, and

- To develop and verify 3-dimensional thermal/stress models.

I want to emphasize the importance of the Annealing Demonstration Project to NRC, and I have assigned appropriate NRC technical resources for participation in the Annealing Demonstration Project. I see the NRC's role as providing technical review and comment on the annealing demonstration process, and this role will be delineated in a memorandum of understanding between DOE and the NRC.

I see this project and our interaction with DOE as having the goals of reducing technical uncertainty and validating NRC's proposed rule and regulatory guide on thermal annealing. I view this project as key to demonstrating the engineering feasibility

of annealing. It is hoped that this will identify the mechanism and the processes by which the industry and NRC can most productively cooperate on this issue. Furthermore, I see a need for the formation of an industry working group on annealing. An industry working group would help to ensure that the application of the information obtained from the Annealing Demonstration Project could be effectively utilized by licensees and interaction with the NRC could be more productive. Parenthetically, I might add that an industry working group should be set-up for another important area - the multi-purpose canister project.

Concluding Remarks

Finally in closing, I am convinced that we have many common goals and interests - we both have a large stake in protecting the public health and safety, and in the safe operation of commercial nuclear power plants. This will remain the number one priority at the NRC. Thank-you.