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Responsible Responsiveness:  
Accommodating Stakeholder Concerns While Maintaining a Regulatory Perspective  
Assures Safety and Reliability in a Rapidly Changing Industry

by

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at the

Institute of Nuclear Power Operations  
Chief Executive Officer Conference  
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Good afternoon. As always, I am pleased to be speaking to this forum once again. Given the level of activity in both the nuclear power industry and in the Nuclear Regulatory Commission of late, I see this as an excellent opportunity to take stock of what we have been doing, of where we are, and of the challenges before us in the near term. The theme of this conference, "Safety and Reliability in a Rapidly Changing Industry," is particularly timely, and could be applied equally well to a gathering of NRC inspectors, reviewers, or managers. I would hope that this implies that a degree of synergy exists in our respective activities. I believe it does.

Let me begin by noting that with the confirmation of Greta Joy Dicus and Jeffrey S. Merrifield, as NRC Commissioners, we now are at full complement to deliberate and to act upon the important decisions the Commission must make. Commissioner Merrifield is here today. Commissioner, would you please rise and be recognized.

Today, my comments will center on changes occurring within the NRC, on the limitations to NRC change, and on questions yet before us. I characterize what we have undertaken as "responsible responsiveness". Just as your business environment is changing, so too is your regulatory environment. In fact, the one has great impact on the other. I hope that you will find cause for encouragement in the changes the NRC is undertaking, and that I can motivate you to comment on your perceptions, and to question me, either in the period following my remarks or one-on-one as the conference progresses.

## Background

As you know, the NRC has been the subject of a number of criticisms of late from the nuclear power industry, public interest groups, and the Congress. From the beginning, I have held that these critiques provide healthy feedback to us and to our processes. In synthesizing these sometimes disparate forms of feedback, the Commission felt it important to communicate clearly with our stakeholders to refine and to “flesh out” the issues. Accordingly, on July 17, we held what has been called our “stakeholders” meeting. At that meeting, we heard from representatives of the nuclear power reactor community and the concerned public about issues important to them. I believe the meeting was very constructive and was useful to all in attendance. Discussions were very frank. In fact, I was encouraged by the level of candor. The next “stakeholders” meeting is on November 13 at NRC headquarters. It will have an expanded number of participants to allow State participation and a larger representation of public interest groups. Industry participation remains critical. If we can continue in a constructive vein, my intention is that these “stakeholders” meetings be regularized. Shortly after our first “stakeholders” meeting, on July 30, the Commission testified before the Senate Subcommittee on Clean Air, Wetlands, Private Property, and Nuclear Safety to discuss NRC programs, and criticisms which had been made of the NRC by the nuclear power industry, the financial community, public interest groups, the Government Accounting Office, and the Senate. The Senators probed wide-ranging areas of NRC involvement, and their questions and concerns were thought-provoking and, for the most part, reflective of nuclear power industry and public concerns.

To my mind, the stakeholder and Congressional perceptions can be aggregated into a number of areas: lack of clarity of NRC requirements and in NRC expectations; NRC has created an environment of regulatory uncertainty; lack of NRC predictability, objectivity, and timeliness; NRC focus is misdirected; quality of NRC-licensee interactions; implementation of NRC programs; and the size of the NRC. On August 7, I tasked the NRC Executive Director for Operations (EDO) with identifying, defining, and prioritizing items in these areas which support our long-term performance goals, and which would receive near-term attention. This “tasking memorandum” led to the development of the NRC plan and schedule for addressing areas of stakeholder concern, which we refer to as the “tasking memorandum” response. I hope that you have had an opportunity to review this document. I think you will find that it is broad in its scope, and that it covers individual items ranging from ensuring the efficiency and timeliness of processing license renewal and license transfer applications, and decommissioning decisions, to the development of a new performance assessment process for operating reactors.

As an aside, let me assure you that license renewal and license transfers have received a great deal of Commission attention. We are monitoring everything from the progress being made in the reviews of the Calvert Cliffs and Oconee license renewal applications, to the development of guidance documents for the review of license transfers. I am pleased to report that our two license renewal reviews are on schedule and that, by all reports, the reviews are being conducted in a disciplined, responsible and cooperative manner. The Commission also has focused on streamlining adjudicatory proceedings overall-including hearings-through policy guidance to the Atomic Safety and Licensing Board (ASLB), and the issuance of case-specific orders in the Calvert Cliffs and Oconee license renewal cases which lay out adjudicatory schedules aimed at completing license renewal in 30-36 months. The Commission also has promulgated an expedited rule, which allows more informal hearings for license transfers. We anticipate that this rule will become final by December 1998.

In responding to stakeholder input, we found that a great deal of activity that addressed stakeholder concerns already was underway. In the course of developing its response to my tasking memorandum, the NRC staff was able to prioritize existing tasks and to accelerate schedules in certain key areas. While stakeholder input definitely opened our eyes to a number of concerns (for example, the unnecessary burden associated with Severity Level IV violations), it had a concurrent benefit in that it allowed us to prioritize certain activities in ways that provided the best mutual benefits to ourselves, licensees, and the public. This, in my estimation, underscores the importance of frequent and candid communications across every level of our respective organizations. I am confident that, as a result of our interactions with our stakeholders, we have developed a series of actions which will result in efficiencies for both the NRC, and its licensees, in a way that does not diminish (and which, in fact, should enhance) the level of safety afforded the public. We now are in the process of executing our plan and, through effective management attention to its milestones and the continued participation of all those affected by our actions, we will produce meaningful, tangible, perceptible results in the field. Our focus in all of this is on outcomes, not outputs.

I mentioned the importance of management oversight of our plan for change at the NRC. I would be remiss if I did not highlight the fact that we recently have undergone a change at the highest level of our staff. As you may know, L. Joseph Callan recently retired as Executive Director for Operations (EDO), after almost 30 years of government service. I regret, but I respect, his decision, and I will miss his presence at NRC. The Commission concurred in my selection of Dr. William Travers to replace Mr. Callan, and Dr. Travers has been in his new capacity as EDO since October 19, 1998. Dr. Travers brings with him a wealth of experience in many aspects of the NRC mission. He most recently served as the Deputy EDO for Regulatory Effectiveness, and before that headed the Millstone Special Project Office. Bill is here with me today, and I would encourage those of you who have not met him to do so. Bill, would you please stand?

For the past three years, the NRC has been assessing systematically its programs and improving and streamlining its processes. From our Strategic Assessment and Rebaselining efforts beginning in 1995, in which we defined what the NRC does and how those things are aligned to our mission, to our current Program, Budgeting, and Performance Management (PBPM) process, we have refined the planning and execution of activities. Part of this improvement and streamlining has included the development of Standard Review Plans (SRPs) for many aspects of NRC review activities. These documents are “procedures,” if you will, that direct NRC staff efforts in reviewing licensing submittals. We often are asked “Why use SRPs anyway?” “Why put so much effort into developing them?” The importance of SRPs in improving and streamlining NRC processes is three-fold:

1. The very process of developing an SRP focuses the NRC staff on the issues in the area under review that are important from a regulatory perspective; that is, those issues with a connection to public health and safety. This begins to establish the appropriate scope of regulatory activity in the area under consideration, and serves to focus, streamline and strengthen subsequent reviews performed under the auspices of the SRPs.
2. In documenting the SRP, (or developing associated regulatory guides (RGs)) and placing it in the public domain, clear regulatory expectations are established for the entity that is preparing a licensing submittal in the areas covered by the SRP. This offers the potential for streamlined review (as applicants are fully informed about the type of information that is required in an application) and makes the outcome more

predictable and defensible (as NRC has already defined what is important from a regulatory perspective).

3. The level of regulatory activity described in the SRP can be resource-loaded to provide an estimate of the demands which will be placed on the NRC and the applicant for a given class of licensing actions. This has obvious planning benefits for the NRC, and offers applicants an opportunity to estimate costs before choosing to prepare and submit applications.

For example, an SRP developed recently following these precepts guided the review conducted to support privatization of the United States Enrichment Corporation. Its development and use resulted in praise for the efforts of the NRC staff for completing a necessary review under the privatization act of 1996 in a timely fashion without impacting the business transaction. SRPs play a pivotal role in keeping license renewal reviews focused, on track, and in-scope, and in the application of risk-informed methodologies in regulatory decision-making.

Other improvement and streamlining efforts under way by NRC include the use of outside expertise (Arthur Andersen) to strengthen NRC skills in mapping certain key processes and identifying opportunities for efficiency, and effectiveness improvements. We started with the functions within the reactor program, and we intend to take the same disciplined reviews to all NRC functions. Additionally, we have looked into the organizational structure of the NRC and determined that certain changes are necessary. As a result, NRC has extended buyout offers to certain groups of managers and supervisors with the intent to achieve an overall manager-to-employee ratio of 1:8.

#### Assessment, Inspection, and Enforcement

The NRC staff currently is working very closely with stakeholders in the development of new assessment, inspection, and enforcement processes.

In improving the NRC performance assessment process, our goal is to make the process more risk-informed, efficient, scrutable and effective. The new assessment process is being formed around the concept of “cornerstones” of reactor safety. “Cornerstones” are those fundamental elements of reactor plant design and operation which ensure public health and safety, such as the minimization of plant transients, the prevention of accidents, and the ability to mitigate accidents should they occur. The assessment process will take advantage of risk-based performance indicators, inspection findings, and reported events and conditions.

I trust that you were encouraged, as I was, by the progress and buy-in achieved at the recent NRC workshop on the performance assessment process. My initial reaction to what I have seen is that a logical, risk-informed, and performance-based process is being developed, by which the NRC can predictably and scrutablely assess power reactor licensee performance and take appropriate regulatory actions. I believe that the process will significantly reduce the subjectivity involved in previous assessment processes, and will provide another barrier to the potential for regulatory excess. However, all should understand that such a performance-based process will be unforgiving for us and for you. Performance expectations will be established, and predetermined regulatory responses will be developed for instances in which these expectations are not met, resulting in significantly less room for discussion when regulatory expectations are exceeded, or not met, respectively. Judgement will always play a role, but the

basis on which judgements are made will be considerably tightened -- leading to a more disciplined, objective, and scrutable regulatory process.

In the context of assessment, I would like to touch on the subject of nuclear power industry performance. Of late, much note has been taken of the improvements that have taken place in the performance of the nuclear power industry, with improved performance cited as a basis for NRC significantly reducing its oversight of operating reactor facilities. While a number of performance indicators bear out the contention of an improved nuclear power industry, two important points deserve discussion:

- NRC regulates “one facility at a time” - An industry-averaged index of performance has limited worth when one considers the range of performance that exists at individual nuclear power facilities. NRC assessment, inspection, and enforcement processes must be able to identify and respond to performance levels which range from consistently superior to very poor. Our programs must provide tools which effectively deal with performance levels which are as poor as those the nuclear power industry exhibited ten and twenty years ago. Not because the nuclear power industry is performing at that level, but because individual licensees may.
- Performance indicators do not “cover the waterfront” - There are significant areas of safety focus that do not lend themselves well to performance indicators. Examples of such areas include the maintenance of design bases (both in the field and in the traceable documentary record), establishing and preserving a safety conscious work environment, and the quality of licensed operators.

Thus, as with all averages, nuclear power industry-averaged performance levels are of limited utility in the regulatory process. While they can and do provide an indicator of the appropriateness of regulatory oversight levels overall, they cannot define the depth to which NRC must probe at any given facility, or the tools which may be required to ensure public health and safety. I applaud the improvements in nuclear power industry performance which have occurred over the last two decades. I want to encourage you, as a group, to ensure that the licensees among you which display the poorest safety performance improve to a level that allows their regulatory burden to reach a baseline level.

As currently envisioned, the “baseline level” to which I have referred, would be applied through a “risk-informed baseline inspection program,” which would define the minimum level of inspection performed at any power reactor facility. This inspection program would include a scope which would be defined primarily by those areas that are significant from a risk perspective. The inspection methods used, and the population to which the inspections would be applied, would include those areas for which either performance indicators, licensee self-assessments, or reporting requirements would not reflect the level of safety existing at a given facility. They also would serve to validate the performance indicators. The inspections will take advantage of both generic and plant-specific risk insights. They would be performed at the baseline at all plants -- the good, the bad, and the ugly. Inspection beyond the baseline would be for cause or in response to an emergent safety issue.

Our activities in the area of enforcement have been broken down into short-term and long-term actions. In the short term, it is our goal to reduce the level of unnecessary licensee and NRC staff burden associated with responding to violations of low risk significance. In the longer term, we plan to improve the use of risk information in assessing the significance of violations,

both in determining whether escalated enforcement or discretion is warranted, and in determining the appropriate sanctions which are to be associated with enforcement actions. We intend to ensure that changes to the enforcement process are fully integrated with the changes being made to the assessment and inspection processes.

### Limitations to Change

As I have said, and as our plan for change indicates, we have a great deal of work to do and we have established change -- controlled change -- as the order of the day at the NRC. However, while the time is ripe for change, it would be unrealistic to expect that every change desired by every stakeholder will come to fruition. The NRC is, first and foremost, a health and safety regulator. Our desire to be responsive to our stakeholders cannot override our responsibility to ensure that public health and safety is maintained. As we pursue change, we remain mindful of the limited resources we have available to coordinate and to develop changes while simultaneously executing our public health and safety mandate. There still are inspections to perform, events to analyze, licensing actions to review, and, yes, enforcement cases to address.

One goal of changing our processes, programs, and regulations is to remove unnecessary burden from both NRC licensees and ourselves. Regulation by its nature, is a burden to those who are regulated. The question is "What is the appropriate, necessary burden?" How do we define, and impose this necessary burden, but no more than that, except for cause? We will achieve this goal through the application of risk-informed thinking and performance-based approaches. It is important for all involved to understand that these concepts offer the possibilities of both relief and burden. Risk-informed approaches frequently identify situations in which safety can be enhanced, while producing regulatory relief as a byproduct, or in which relief can be allowed without a significant increase in risk.

I would offer as a prime example the NRC staff activities in the area of risk-informed diesel generator allowed outage time extensions for power reactor licensees. In considering this issue, risk information showed that diesel generators could remain out-of-service for a significantly greater period of time than was currently allowed without unacceptable risk increases. This creates advantages both in terms of outage schedules and safety, in that diesel generator inspections and maintenance can be removed from outage schedules and performed on-line, and diesel generators can be maintained available throughout outages, when the availability of standby power is highly desirable. We are pursuing other appropriate burden relief opportunities.

As we become more risk-informed, we may identify areas in which risk information dictates that additional regulatory controls be applied due to pre-existing, but as yet unidentified, risk contributors. If you join me in the desire to see our regulatory structure risk-informed to the extent allowable by the state of the art, you must accept this possibility. In the same vein, it is the goal of the NRC to "let go" of that which is not risk significant as we conduct inspections, review licensing actions, assess licensee performance, and take enforcement actions. We intend to reduce, to the extent possible, but certainly to clarify, the use of "regulatory significance" factors in our decision-making, and to focus our attention on those areas which offer the greatest demonstrable safety payback.

A final point on the limitations of what we are doing involves the execution of our plan. We have made every effort to consider the needs and concerns of our stakeholders as we have

developed our plan for change. Some of the items in the plan have been under development for considerable periods of time, allowing adequate opportunities for stakeholder interaction in the development of the individual products. We now are focusing on the execution of the plan. For those items which are mature, and for which the major development is complete, it will be very difficult to consider last minute, incremental, “improvements” prior to implementation. It is my judgement that the scope of our plans must be very tightly controlled if we are to make timely progress, and we cannot succeed if we continue to “tweak” the changes indefinitely. I am sure that you understand this concept, as it is central to any successful planning effort. It provides for regulatory stability and reliability which are key to having a regulatory environment in which businesses can plan. Having said that, we do not intend to work the existing plan and just stop. Change and challenge are ever with us. As I indicated earlier, our intention is that the stakeholder meetings be regularized, and used both to monitor progress against existing plans, and, importantly, to help decide: “Whither to now..?” What are the next big thrust areas or opportunities for continued improvement?

### Metrics

As many of you know, I have advocated the use of metrics as a central part of NRC activities throughout my tenure as Chairman. As we, the NRC and our stakeholders, work through change, it is important for us to establish the standards by which we will judge our success. While timeliness is directly measurable, it is not the only performance goal or area in which we intend to make progress. Further, focusing on the line items of our plan and ensuring we meet completion milestones is not enough. That will not show us the worth of what we have done, nor will it monitor our performance for signs of trouble. We must consider how to measure performance attributes such as clarity of expectations, objectivity, predictability, quality of product, quality of interface, and safety focus. In point of fact, these areas, while being central to recent criticisms of NRC, cannot be the only areas we intend to measure. To limit ourselves to these areas would create the possibility of falling behind in other areas, such as streamlining NRC work processes, financial management, the use of information technology, and training.

The question thus becomes “What collection of metrics will indicate the continuing improvement and health of the regulatory structure?” Related questions include:

- Would it be advisable to perform periodic surveys of stakeholders to ascertain their perceptions of NRC performance in selected areas?
- Should the NRC consider the use of some sort of “customer satisfaction survey” for inclusion with every regulatory product?
- How can we reduce subjectivity in the assessment of NRC processes?

This is an area in which I especially am interested in your feedback. The development and use of indicators is both mature and extensive in the power reactor community. I would welcome your thoughts directly, or perhaps through a proxy at the upcoming NRC stakeholder meeting, on this subject.

### Conclusion

In closing, I would reiterate that this is a time of fundamental change for the NRC. I believe that change is a necessary and healthy endeavor for any organization and, to the extent the

regulated community has aided in identifying areas for NRC improvement, it has my gratitude. While the Commission intends to take the actions we can to reduce unnecessary burden for NRC licensees, those licensees must understand that we are, first and foremost, a health and safety regulator, and that we will impose the burden required (but no more) to satisfy our legislative mandate. In this regard, I believe the Commission is in agreement with the comment made by Mr. Erle Nye at the NRC Stakeholder Meeting on July 17, 1998. Mr. Nye said “Strong, effective, and credible regulatory oversight is [essential] and not subject to compromise, but safety is not inconsistent with efficiency, nor is regulatory assurance inconsistent with innovation and flexibility.” It is our intention to be true to this sentiment.

Finally, we will seek to work in cooperation with all of our stakeholders to establish a set of metrics which can be used both to define success in our efforts to bring change to the regulatory environment, and to ensure the highest levels of regulatory performance in the future. Thank you again for your attention. I would be happy to address any questions you may have at this time.