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Rules for the Road...  
Improving Regulation Through Regulator-Stakeholder Communications

by

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Good morning. As always, it is a pleasure for me to address this assembly and to bring to this gathering the perspective of the regulator. Inasmuch as this is my final attendance at this forum as the Chairman of the U.S. Nuclear Regulatory Commission (NRC), I thought this would be a good opportunity to reflect on the performance of the NRC over the last four years, and the reliance of the NRC on meaningful and constructive stakeholder input. Stakeholder participation has contributed significantly and successfully to resolving key regulatory issues, to re-engineering our regulatory programs and policies, and to developing a framework and procedures that enhance our effectiveness and efficiency, all in accordance with the Government Performance and Results Act.

At the NRC, we are focusing on performance and results, not unlike the comparable focus in a business or a not-for-profit organization. Performance counts and results speak louder than words. In other words, we have to “walk the talk.” Of course, defining success criteria and measuring results have been and remain a challenge. As you might guess, we have almost as many definitions of success as we have stakeholders. It is all a matter of perspective.

Today I will address the theme of stakeholder involvement and how such involvement has contributed to improvements that have occurred in the NRC over the last several years. I have titled my speech “Rules for the Road,” because my experiences at the NRC over the last four years have taught me some valuable lessons about the importance of meaningful, and timely, stakeholder involvement.

### Engaging Stakeholders

Several years ago, the concept of “stakeholders,” as such, was relatively foreign to the agency. Today the NRC recognizes that there are many stakeholders, representing a wide variety of interests: researchers who aspire to keep our nation’s scientific and technological capabilities

at the cutting edge; States who expect and demand virtual autonomy in deciding what is best to protect the health and safety of their citizens; nuclear power plant operators who desire to provide safe and clean electricity to fuel American growth and prosperity; mothers and fathers who rightfully wish to ensure the safety and health of their children and grandchildren; statesmen (and women) who want America to flourish well beyond the 21<sup>st</sup> Century and to transfer a proud legacy to our descendants; citizens who are concerned about the hectic pace of modern life and who seek a more idyllic coexistence with the environment we share; medical professionals who tirelessly labor in laboratories and clinics, searching for cures and answers to ancient, and not so ancient, diseases; and government employees who genuinely seek to serve and protect the Constitution and to ensure nuclear safety and security. The list goes on and on.

In our American democracy, each person has the right to be heard and the right to present his/her suggestions and recommendations for how best to ensure the “maximum contribution to the general welfare,” to provide “the maximum contribution to the common defense and security,” and “to promote world peace, improve the general welfare, increase the standard of living, and strengthen free competition in private enterprise” as stated in the opening declaration of the Atomic Energy Act.

Today, at the NRC, we almost reflexively think of involving stakeholders in a meaningful way in planning changes to our practices, rules, or processes. We try to engage stakeholders in an active manner through various modes of communication and involvement:

- Informal drop-in meetings with members of the Commission, senior NRC management, and regional and headquarters personnel;
- Involvement at Commission briefings, staff workshops, public round tables, hearings, and public meetings of all kinds;
- Access to websites and the agency through E-mail and the Internet;
- Participation in meetings of State and local government and civic associations;
- Outreach to educators and students;
- Review of white papers, reports, and letters to the NRC on particular subjects;
- Floating “straw men” proposals to explore ways of resolving individual issues;
- Comments in response to a formal solicitation for a particular issue;
- Petitions for NRC rulemaking changes or enforcement actions; and
- Congressional oversight and inquiry, both on global matters of NRC operations and on individual issues.

While each mode of communication offers the potential for beneficial and constructive exchange of information and views on important issues, care must be taken to guard against detrimental and inappropriate exchanges of counterproductive criticism and false expectations. Our licensees often point out NRC actions they believe distract attention from safety-significant issues. The same potential for distraction exists within the NRC when a stakeholder lashes out nonconstructively, or employs tactics designed to stall the regulatory process, demanding NRC staff time and attention that otherwise would be devoted to more safety-significant pursuits. Healthy communications, on the other hand, have contributed greatly to a number of important NRC activities over time. They have brought important issues to the attention of the agency, have resulted in proposed solutions to problems before the agency, and have helped us to assess and enhance our effectiveness and efficiency.

Let me touch upon some important rules for stakeholder engagement. NRC and its stakeholders need to recognize and respect the different roles and perspectives of each

participant in the regulatory process. We need to be careful not to dwell on the motives of stakeholder, but to focus on the specific suggestion or criticism. Would adoption of a comment be legal, ethical, and helpful in contributing to the NRC mission of ensuring protection of public health and safety, security, and the environment? How does a new direction, approach, or idea stack up against goals the agency has set for itself: to maintain safety, to enhance public confidence, to increase effectiveness and efficiency, and to reduce unnecessary regulatory burden?

Stakeholders views should be used to inform NRC decisions, but not dictate them. Our governmental structure rests on a system of checks and balances. The same is true for our stakeholder interactions. The NRC must provide equal access to stakeholders and impartial consideration of their views. If we go too far in accommodating one stakeholder group, another group may raise legitimate concerns that we are out of balance, which prompts heightened Congressional oversight, Inspector General investigations, lawsuits, and public controversy. The agency has a fundamental obligation to perform the work of the government, making management decisions on how to implement our programs consistent with our mission and Congressional mandate.

This means that the NRC must “hold the center,” keeping our focus on how best to carry out the mission of the agency to protect public health and safety. If we make a change that diverts us in any way from this paramount mission, we need stakeholders to point out, promptly and constructively, our misjudgment and the need for realignment. I will say more about “holding the center” in a bit, but let me first elaborate on how the NRC has leveraged stakeholder views into action and enhancements.

### Leveraging Stakeholder Views

When one considers NRC achievements of the last four years, one can see a distillation and application of stakeholders views throughout our regulatory programs. This has helped us to resolve specific issues, to put into place programmatic and process changes, and to develop elements of a fundamentally new regulatory framework, all undergirded by a new vision - one embraced both by the NRC staff and the Commission. There are numerous examples:

- Resolving numerous safety problems identified at Millstone and other facilities;
- Ensuring stabilization and improvement in the cyclic performance demonstrated at Commonwealth Edison facilities;
- Assessing generic spent fuel pool design and operating issues;
- Tackling the technical challenges presented by digital instrumentation and control;
- Addressing Year 2000 issues at nuclear facilities, within the NRC, and in the international nuclear community;
- Ensuring a proper emphasis on maintaining safety conscious work environments;
- Managing NRC oversight of the certification and privatization of the United States Enrichment Corporation (USEC) facilities;
- Ensuring safe and timely dry cask storage methods for spent fuel;
- Embracing a more integrated review of safety at fuel cycle facilities;
- Adjusting our oversight of medical uses of radioactive material;
- Establishing a sensible regulatory position on radiological criteria for decommissioning;
- Determining the applicability of the backfit rule to decommissioning; and
- Anticipating and dealing with issues associated with economic deregulation, including decommissioning funding assurance, grid reliability, cost-competitiveness, and changes

in industry business relationships (i.e., new ownership configurations, foreign ownership, increases in license transfers, and a possible increase in decommissioning).

The NRC successfully evaluated and resolved these issues in an open environment rich with stakeholder input and suggestions. Each issue came alive because of stakeholder concerns, or involved extensive dialogue with stakeholders on the solutions to the question at hand. In many cases, the agency benefitted from a combination of the two.

When viewed from a distance, collections of individual issues frequently have pointed to the need for more integrated and coherent program or policy solutions. For example:

- The specific issues uncovered by the NRC or raised in stakeholder concerns at Millstone and Haddam Neck led the NRC to: (1) our more comprehensive oversight of Final Safety Analysis Report accuracy and completeness, and the implementation of NRC requirements in 10 CFR 50.71(e); (2) our ongoing revisions to 10 CFR 50.59, and the wide range of actions we have taken to improve NRC methods for dealing with facility changes, temporary modifications, and degraded equipment; and (3) the architect/engineer inspections and the incorporation of design basis issues into routine inspections.
- In license renewal, we issued a Commission policy statement and Standard Review Plans for 10 CFR Parts 54 and 51, and developed an expedited, predictable, and fair process, currently being implemented successfully in the two reviews that are well underway. We are beginning to hear more stakeholder concerns that the agency appears to have gone too far in expediting the process at the expense of public involvement. This warrants continued attention by senior management at the NRC to ensure that our processes allow for balanced participation, and opportunities to surface and resolve legitimate safety concerns raised by members of the public.
- To improve reactor performance assessment, we began with focused attempts to improve the objectivity and transparency of the Senior Management Meeting—which led, in turn, to developing improved performance indicators and the broader attempt to integrate our reactor assessment processes—which then led to a more fundamental and global effort to re-think and integrate our inspection, assessment, and enforcement processes.
- In enforcement, stakeholder concerns crescendoed in 1998 with concerns from all sides that our enforcement program needed revisions to improve its objectivity, transparency, and predictability, and to reduce unnecessary regulatory burden. The NRC heard these concerns and initiated a programmatic review drawing on long-held NRC staff concerns, which led to a reduction of the burden associated with the less important Severity Level IV issues and the consideration of a new overall approach for the enforcement program, better integrated with reactor oversight.
- We are re-engineering our decommissioning program to enhance its effectiveness and efficiency, and to have requirements that are both commensurate with the level of risk involved and responsive to the concerns of the public. Stakeholder concerns continue to surface and develop in this arena, helping the agency to shape and revise our decommissioning programs. Some of these concerns are emerging in external fora like the Keystone Policy Dialogue.

- Outside of the nuclear safety programs, we have streamlined our procurement process and enhanced our capital planning process for information technology to ensure that the resources appropriated by the Congress are put to their best use to advance the mission of the agency in an effective and efficient manner.

Building on these and other program and policy achievements, the NRC has made fundamental framework changes. Again, internal and external stakeholder input has informed our decisions on new directions, priorities, policies, and schedules.

- The first and perhaps most obvious framework change is the movement to risk-informed, performance-based regulation. We could recite a litany of achievements in this area, but perhaps the best summary is that the NRC staff, at all levels, now has a much-improved focus and understanding of the applicability of risk information and risk assessment to regulatory functions and processes. We are considering ways to risk-inform the entire body of reactor regulations in 10 CFR Part 50, medical regulations in Part 35, fuel facility regulations in Part 70, spent-fuel storage requirements in Part 72, and high-level waste disposal requirements in Part 63. Although the rulemaking is not yet complete, the interactions between the NRC and stakeholders in the 10 CFR Part 70 rulemaking provide a compelling example of how stakeholders with different views can come to a common understanding through effective and open communication.
- A second framework achievement is, in fact, the topic I have been emphasizing today - the increased involvement of stakeholders in a meaningful and timely manner in the regulatory process. Clear communication and the enhancement of public confidence are elements of this framework, as well as our stakeholder meetings, our public workshops, and our general efforts to be more open to constructive criticism. As with risk-informed regulation, I believe this acceptance of, and appreciation for, stakeholder involvement has become a way of thinking at the NRC. We still have much to do before we can claim victory in this area, but we clearly have continued to make progress over the last several years.
- The final fundamental framework element is the basis for our confidence that these changes will endure. I am speaking of our revised approach to planning and budgeting. Once again, this new framework has been built slowly and steadily over time, is not yet complete, and has taken the involvement of all of our stakeholders—from the Strategic Assessment and Rebaselining begun in 1995, to our multi-year Strategic Plan, agency-wide Performance Plan, and office-level Operating Plans, to our present Planning, Budgeting and Performance Management (PBPM) process.

But framework derives from vision. The vision I have held for the NRC involves basic concepts of regulatory excellence.

- The first is an emphasis on performance—what we sometimes refer to as an “outcomes” orientation. We have become unapologetic in demanding a bottom-line focus on results, both from our licensees and from ourselves. This has increased our emphasis on developing and implementing metrics. Stakeholder comments and suggestions have embraced this orientation to results. Although there is some difference in views on how to define successful outcomes, all parties seem to agree that safety, security, and environmental protection should be our primary focus.

- Closely linked to this is a second concept, which is a new standard for NRC effectiveness. We have become far more introspective and self-critical in the way we examine our own regulations, programs, and processes. To a degree, we have our external stakeholders to thank for this, as selected weaknesses have, of late, been communicated to us with great zeal. I have the confidence that, at this point, I could call on nearly any high-level NRC manager to examine nearly any NRC program and certain yardsticks would be used: consistency, objectivity, predictability, timeliness, defensibility, scrutability. The fact that these words have become so familiar in the vocabulary of the agency bodes well for our future success, as we continue along the path we have embarked upon.
- The third concept is anticipating and adapting to change—such as our efforts associated with electric utility restructuring, our regulatory oversight of the privatization of the U.S. Enrichment Corporation (USEC), and the possible external regulation of certain Department of Energy nuclear facilities.

Stakeholder interactions provide early signals of the need for change. By remaining receptive and responsive to these signals, the NRC will continue to prepare for the future, while ensuring the predictable and stable regulatory framework demanded by those same stakeholders.

To illustrate more deeply the effect of stakeholder involvement, let me now be a little more explicit about it with respect to reactor oversight. The NRC initiated work to improve the reactor assessment program in 1996. Under contract to the NRC, Arthur Anderson was asked to review the senior management meeting (SMM) process. Congressional interest, stakeholder comments, and budgetary concerns informed the NRC of the need to accelerate progress in this area approximately one year ago. The stakeholder interest that brought focus and acceleration to these activities was far more, however, than simply a catalyst for change. Stakeholder involvement not only helped the NRC to define the problems, but also to identify workable solutions. For example:

- Senate oversight identified reactor oversight as an area for improvement, confirming NRC self-assessments and Commission opinions in this area, and providing oversight to subsequent NRC actions. While our short-term interactions with our Congressional oversight bodies were, to a degree, painful, I believe that long-term interactions with Congress have been and will be of great benefit.
- In a speech to NRC senior management in the summer of 1998, as a deeply interested internal stakeholder, I offered a straw man of a risk-informed baseline inspection program, centered around what I then called the “cornerstones of safety.”
- Shortly after this, the Nuclear Energy Institute (NEI) wrote to the NRC, describing what they referred to as a risk-informed oversight program for power reactors, composed of an assessment process with predefined agency response bands tied to predefined levels of assessed performance, which related to areas very similar to the cornerstones of safety.
- The NRC staff had been working for some time with both internal and external stakeholders to develop an integrated reactor assessment program (IRAP) under parameters established by the Commission, and reacted positively to the ideas expressed on the new oversight process. Within weeks, the staff integrated and

fleshed out many of the concepts offered in various strawmen, and conducted a very well-attended workshop to further develop the program. I consider the participation and cooperation displayed at this workshop and throughout this process to represent the epitome of constructive communications between a regulator and its stakeholders.

## Holding the Center

So, where does all of this leave us? I often am asked, what can and should the NRC do to ensure the success of the commercial nuclear power industry. As health and safety regulators, we will best serve all by ensuring that public health and safety is held paramount. We cannot ensure the success of any of the industries we regulate. It is not our job to do so. But what we can do is to be as safety-focused as we can be - through risk-informed regulation and through improving our internal operations, maintaining an outcomes focus and working toward greater efficiency and accountability. We can facilitate the continued operation of existing, safely operated plants, by allowing for disciplined and timely license renewal, while continuing to improve the objectivity, predictability, and scrutability of our reactor oversight program. We can position ourselves to respond to the changes in the industries we regulate, much as we have done vis-a-vis license renewal and license transfers. Finally, we can be prepared to license new plants, taking advantage of the significant work which has been accomplished to date in advanced reactor design certification, and drawing on lessons learned from our work in other areas. But in these and all our activities, we must proceed in a way which is responsive to our stakeholders - all of our stakeholders - and, most importantly, protective of public health and safety.

## Conclusion

Summarizing, then, how can the NRC and our stakeholders (including, of course, the regulated industries) work together to address regulatory issues as we both change? The answer is communication. Open, candid communication. From the examples I have cited, I would say that the keys to enhancing communication are:

- Candor in raising concerns over NRC oversight both at the individual and industry level. Fears of regulatory reprisal should be overcome, and I believe the NRC has shown the ability to accept, and to act on, constructive criticism. I believe in the integrity of NRC managers. You should, too.
- Proposing solutions to specific problems brought forward in the spirit of cooperation and exploration. Do not simply identify problems. Offer suggestions and remain open to considering other possibilities.
- Remaining as timely as you expect the regulator to be. When discussing options for regulatory actions, do not protect your ace-in-the-hole until the eleventh hour. Show it while there is still time to act on it.
- Entering into discussions with the NRC staff and the Commission in good faith, recognizing that we will not necessarily be of one mind at the end of the day, and that we cannot continue, ad infinitum, to consider every clause and twist of phrase, and that, ultimately, the responsibility for making the hard regulatory decisions rests on our shoulders.

Having said all that I can say and having done all that I can do, my final message to you is this. It has been a distinct privilege to have served in the Federal government and to interact with you these last four years. While we have not always seen eye-to-eye on every issue, that is to be expected in a regulator-licensee relationship. I firmly believe that I leave the NRC a strong, independent, and right-minded organization, capable of providing the regulatory oversight of



civilian nuclear safety that this country demands and has a right to expect. I would like to close by borrowing once more from the words of Earl Nye, who, at the NRC Stakeholders Meeting on July 17, 1998, 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.” I am confident that the NRC will remain true to this sentiment.

Thank you very much for your attention. I would be happy to answer any questions you may have at this time.