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No. S-98-25

Re-Group and Press On  
by  
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NRC Senior Management Retreat  
Shepardstown, West Virginia  
October 14, 1998

Good morning, everyone. I am pleased to speak at this senior management retreat. While current events make this a particularly good time for such a meeting, these gatherings add value whenever they occur. Webster's dictionary defines "retreat" in a number of ways, which include: (1) "an act of going backward or of withdrawing," and (2) "a time of group withdrawal for prayer, meditation, and study." I trust that this meeting represents the latter definition—a time to re-group before pressing on.

Let me begin by recognizing and commenting on the retirement of Joe Callan. As you know, Mr. Callan has served his country for almost 30 years, with 19 of those years in the NRC. He took over the position of Executive Director for Operations at a turbulent time in our history, and he has been a source of outstanding leadership in that capacity, displaying those qualities that brought him to the pinnacle of his government career. Some of you may be familiar with the legend of the Greek hero, Ulysses, who, after many adventures on the sea, threw an oar over his shoulder and began to walk inland with the expressed intention of walking until someone asked him what he was carrying—at which point, he would settle down and begin a new life. I have a similar image of Joe, when his retirement becomes official at the end of this week, throwing a control rod over his shoulder and walking toward Texas until someone asks what that thing is. In all seriousness, let me offer my heart-felt gratitude and congratulations to you Joe, as you walk toward your new life.

My comments would be incomplete without also welcoming Bill Travers to his new position and congratulating him. I have commented before that, early in my tenure as NRC Chairman, some would comment (in reflecting upon my predecessors) that I had big shoes to fill, to which I would respond "Well, I have big feet." Therefore, Bill, on

behalf of my Commission colleagues, let me just say that we are confident that you have big feet.

The transition from one EDO to another offers us a very real object lesson in change management. While the NRC will see a new person leading its staff, the business of the agency, its directions, its plans, and its mission remain unchanged. Our goals, our strategies, and our direction transcend personnel changes. While placing the right people in key management positions is absolutely vital to our success, the definition of what success is must be well thought out and firmly established so that we remain unified and focused on achieving it. To be sure, plans will evolve over time to be adapted to current situations, but they cannot be allowed to change in wholesale fashion based on nothing more than management fiat.

In this spirit, today I would like to address the plan we have developed for change, the execution of that plan, the need for still more planning, performance metrics, and certain themes that run through these areas.

### The Plan

As you know, some time ago I tasked the EDO with assembling, defining, and prioritizing those areas that support our long-term performance improvement goals and those that would receive near-term attention. I stressed that it was important, taking account of initiatives already underway, to develop a manageable set of high priority areas and to communicate the desired outcomes throughout the NRC organization. From a list of candidate areas I provided, Mr. Callan—with your support—developed a comprehensive list of activities, both planned and underway, that represents where the agency will be positioned in important regulatory areas in the foreseeable future. Let me stress the phrase “where the agency will be.” This plan does not represent where we would wish to be, or where we want to be. We must achieve the results outlined in this plan.

In developing our plan, elements of what I have referred to as “holding the center” were applied, and I stressed the importance of that concept at the September 3 All Employees Meeting. At that time, I emphasized the need to keep our primary health and safety mission foremost in our minds as we transition from a deterministic to a more risk-informed approach to regulation. I believe that the actions planned in response to the tasking memorandum are in harmony with the concept of holding the center. However, a great many of the line items reflect works-in-progress, and works “about-to-be-begun;” and, for these items, the challenge of maintaining our position as a credible regulator is ahead of us.

Given the volume of work in the plan, and given that we are working simultaneously to increase the employee-management ratio, it is crucial that you, as managers, ensure that your personnel maintain and/or develop what I refer to as a “safety compass” to guide them through their activities. As you instill responsibility and accountability among your rank-and-file employees, your subordinates need an almost reflexive sense

of what we are about as regulators, of what we are trying to achieve, of how risk insights should direct their actions, and of how these concepts will both limit and empower their actions. All should have a sense of what is negotiable and what is not, a sense of the correct direction in which to proceed in new and changing circumstances, a knowledge of those aspects of deterministic methods that offer the best safety payback, a recognition of where risk information can be applied in specific fields of endeavor, and the courage to resist the impulse toward fighting change and “digging in heels,” on the one hand, or vacillation because of changing political climates on the other. If the staff feels that they are charged with guessing at management goals, strategies, or acceptance criteria in a given circumstance, we will not make timely progress. I hope that your discussions here will lead to methods you can employ to create a shared safety compass within the agency, and a shared sense of urgency and need for change to help us to enhance our regulatory effectiveness.

Before I elaborate, I would note that, during my tenure at NRC, I have noticed that, compared to my Chairman/staff dialogues with non-managers, my meetings with you are much less interactive. You ask fewer questions. You make fewer comments. It is difficult for you to understand the message, or for me to know if you understand the message, without two-way communication. So when I am done with my remarks, please ask me questions. Ask to understand. I will surely ask you questions.

### Execution

To accomplish the task of holding the center in this time of change, we must remain mindful of these fundamental precepts:

1. We are not the Atomic Energy Commission. Neither are we the Department of Energy. It would be improper for us, under the Atomic Energy Act, to promote nuclear technologies. It is imperative that you and the personnel in your organizations internalize the fact that we are still health and safety regulators. That is our statutorily defined role.
2. We will not knowingly, and without cause, represent a death knell to the industries we regulate. We will impose no less, but no more, burden than necessary to ensure adequate protection of the public health and safety. Regulation, by its nature, is a burden, but one where the burden must be made clear, based on risk insights, with performance expectations clearly defined. We will seek to eliminate burden wherever that burden is unnecessary. Our role in ensuring licensee success is to focus on the issues of greatest risk, or safety benefit, to the public, with clear performance requirements. Doing so is the right thing for a responsible regulator to do, not only for the regulated community, but for the public we are charged with protecting, in the civilian use of nuclear energy and materials in this country.
3. Many of the initiatives we are undertaking are, by nature, cooperative with the regulated industry, and they will be successful if the regulated community is an

active, willing participant. Success, and our public trust, also requires the meaningful participation of our other stakeholders. As we go forward to identify effective tools that further our mission, we must be clear on what our fundamental requirements are - to have our cornerstones of safety clearly defined - to develop our own proposals (or “strawmen,” so to speak) to bring to the table.

To successfully implement change while adhering to these precepts, we must develop programs that (1) identify the safety objectives to be met and (2) employ methods that demonstrably meet those objectives. This development effort should:

- begin with a clear articulation of vision and goals
- emphasize teamwork within and among offices
- encourage agency-wide thinking that places premiums on pro-activeness, outcomes-oriented mindsets, and timely and cost-effective actions and products.

The programs we develop must be the result of risk-informed thinking, and should be structured in such a way as to maximize efficiency and reduce duplication of effort. Finally, these programs should build on the strengths we currently possess and must enjoy buy-in at both the management and staff levels. I cannot overemphasize the importance of the credibility and defensibility we achieve through a sound development process, delivering on what we have committed to, and measuring outcomes.

We must know why we do the things we do. When subjective judgment must be applied, we should acknowledge and document it. But judgment and subjectivity cannot be the central feature of any program. I would hope that recent events and criticisms would make this point self-evident. Some of the most energetic criticism we have received of late, and the criticisms that, in my estimation, have been the most difficult to address, involve regulatory activities that rely heavily on judgment. Historical examples of applying this type of judgment have included our selection of sites for inclusion on the NRC Watch List, our issuance of Confirmatory Action Letters, and our use of “discretion,” “regulatory concern,” and “sending the appropriate message” in the enforcement process. Judgment is always required in our role as regulator, but where it is required, it should be clearly identified, and we should be working on plans to train the staff in the exercise of that judgment. I ask you, where in our current program have we provided staff training on “sending the appropriate message?”

I was encouraged to find an objective approach being employed by the team developing our new plant assessment process and risk-informed baseline inspection program. Those of you who attended the most recent Senior Management Meeting will recall my describing, schematically, such an inspection and assessment development process. The satisfaction I sense in the work of this team is not the result of the team using phrases like “cornerstones” or “baseline,” which I used in my talk at the Senior

Management Meeting. It is the result of the team thinking, at a very fundamental level, about our mission and our needs, and laying out an understandable, credible program. As a point of fact, the currently proposed approach differs from my own in several ways (as would be expected and as I stated might be the case), and it grapples with issues in much greater breadth and depth than any “straw man” I might have proposed. The fundamental point is what the team brings to the table. While much work remains to be done on the project, the organized, logical and scrutable methods employed thus far are cause for praise. I commend you for the work you have done thus far.

At the Executive Council Meeting on September 17, you heard Mr. Callan state that the burden reduction the nuclear industry seeks is not primarily the reduction of financial burden. While stating that financial savings are a part of what the industry hopes to achieve, Mr. Callan stated that the most significant burden the industry feels is related to “intangibles”—specifically, the desire for consistency, predictability, and performance-based approaches. This sentiment is perhaps best brought out in a recent report by the Indus Energy Group entitled “Lost Generation—The Risk of Regulatory Shutdown Poses Significant Asset Management Challenges for Nuclear Plants.” The paper asserts that regulatory-related shutdowns “have become the single largest contributor to unplanned loss of nuclear generation.” To a degree, this would seem intuitive—that is, as industry performance improves (i.e., greater hardware reliability), a higher percentage of the significant shutdowns that still occur will be the result of regulatory limitations. But the major thrust of this report is that such regulatory limitations are unpredictable. Consider this quote from the report: “The risk of regulatory shutdown may need to be treated similarly to other risks to generation—through specific risk management programs and even insurance.” The position articulated in this paper speaks as dramatically as any could to the need for predictability and consistency in our regulation of the nuclear industry. Let me reiterate—it is my position that such attributes can be achieved only through programs developed logically, beginning with our mission and linked directly to advancing that mission.

Beyond understanding what is at the core of our mission and embodying our programs with clear ties to our mission, we also must remain true to our plan for change. We have planned the work. Now we must “work the plan.” In recent weeks, I have received feedback from stakeholders offering “improvements” to process changes we began, with the involvement of the same stakeholders, months ago. At times, these “improvements” begin to sound like changes in course rather than minor enhancements. We must not fall victim to the human tendency to improve a project that is under development to a degree that precludes completion.

Several references were made at the recent stakeholders’ meeting about accepting “good enough.” I interpret that concept as being applicable to this area. We have identified discrete activities that require completion on a defined time line. Will the products of those activities be of such perfect quality that we never revisit them? Of course not. Our processes will require fine tuning and adaptation to changing environments over time. But accomplishing what we can in a reasonable amount of time is preferable to accomplishing nothing for a protracted period. Having said that, it

is still my expectation (and it should be yours) that, within the scope of what we have planned to do, we do the very best job we can. Consider “good enough” to apply to scope, not quality. In my tasking memorandum, I referred to this as “doing a few things well.” Given the volume of work we have “on our plate,” I may have taken liberty with the phrase “a few things,” but the concept remains valid.

Hand-in-glove with the goal of producing the very best products possible is the concept of ensuring that interrelated programs undergoing change are integrated in the change process. Changes to one process cannot be allowed to adversely impact dependent processes. We must ensure that we take a holistic approach to our activities and seek out the issues which crosscut programs. An excellent example of where this has occurred is, again, in the plant assessment and inspection program changes currently being developed. It is clear that the programs are linked conceptually, that the staff has acknowledged the interdependencies, and the two are moving forward in unison. However, an opportunity exists to structure that same linkage between the enforcement program and inspection and enforcement. A further opportunity is before us to ensure that the risk-informed treatment of design basis issues in inspection, assessment and enforcement is reflected in the work on definition of design basis information. I am sure other examples exist, and you should be looking for the interdependencies comprehensively.

Finally, our plans for change are not aided by having employees or supervisors running out ahead of the change, based on either anticipation of the change or oversimplification of the desired outcome. An example of this point is our recent activity in the area of reducing the burden associated with Severity Level IV violations. It was our intent to reduce burden, not numbers per se (the Enforcement Policy definition of a violation remains valid until we choose to change it). Enforcement guidance was promulgated to achieve the goal of burden reduction. Yet the goal was oversimplified in the minds of some, and certain inspectors were led to believe that they should severely limit the number of violations they identified. The number of violations identified should be consistent with the Enforcement Policy definition of a violation, and should decrease in a manner consistent with the recently promulgated Enforcement Guidance Memorandum. When the policy changes, concomitant changes in the field should follow. Fortunately, we were able to remedy this situation before it got out of hand, but the example illustrates the importance of management oversight in the change process. There continues to be a tendency to over-react or to under-react to change. A contrasting example is evident in our license renewal process, in which supervision and management, through effective oversight, have limited the NRC requests for additional information from Baltimore Gas and Electric to those requests germane to the license renewal process. By all accounts, this was an excellent case of supervision and management driving change through their organizations.

I would like to address the application of risk insights and performance-based approaches in the execution of our plan. As the industry has pressed for risk-informed and performance-based changes to our regulatory structure, I have cautioned them that this approach is a double-edged sword; that while burden relief certainly is expected,

some burden may have to be assumed in areas heretofore untouched from a regulatory perspective. I want to extend a similar caution to you. An example of this concept is the recent work done in the area of reactor vessel Inservice Inspection; while a risk-informed approach indicated that circumferential welds in Boiling Water Reactor Vessels did not warrant the inspection attention they currently were receiving (thus confirming industry assertions), the same effort identified the fact that cold over-pressure transients represented a significant risk contributor in Boiling Water Reactors, and this will require additional attention .

At the same time, we must be ready to let go of that which is not risk-significant. When a licensee comes to us in licensing space, or during the inspection process, or in enforcement proceedings, and contends that a given activity or issue is of low risk significance, and we cannot refute the contention, we must be prepared to let go. Our programs must require a rigorous challenge to licensee contentions, but when a risk-informed review indicates that no significant risk is presented, we should not resort to subjective judgment, management sensitivity, or personal preference to resuscitate a dead issue. Recognize that I used the phrase “risk-informed,” not “risk-based.” Deterministic methods are still valid and are balanced against, or informed by, risk information in this approach. I am not asking that the NRC fold its tents in the face of small risk numbers. But we must recognize that some closely held beliefs may be challenged and may fall with the increased application of risk information to our regulatory program. Remember, “sacred cows make great hamburgers.” On the other hand, when a member of the staff or an intervener identifies an area of significant or misunderstood risk, we must be prepared to pursue the issue aggressively to wherever the risk insights lead us. Rigor and discipline are the keys to successfully implementing risk-informed regulation.

### Continual Planning and Culture Change

The EDO response to the tasking memo has established our plan, which was reviewed and concurred in by the Commission. Some would argue, therefore, that our detailed planning effort is complete, at least until the second quarter of 1999. Execution, ideally, is in the hands of your subordinates, and it would seem that we need only to meet our milestones to declare victory in the battle for change. But as I see it, you, as managers, still have a formidable planning task ahead of you. We have, to this point, grasped at the low hanging fruit, at least in terms of identification of those improvements that are required. You need to be planning today for the 24 months following the 8 months ahead of us. Consider these questions:

- What other improvements are required? Is there a second tier of improvements that will be advisable after the current generation is made? A third?
- When one considers the planning horizon employed by our licensees, one sees refueling activities being planned two fuel cycles ahead. Does a regulatory analogue exist? If so, how can we employ it?

- What is your vision for the NRC in 2003? 2008? Where would you take the agency?
- Are we to the point in risk-informed regulation that we should take on the question of requiring living PRAs? Will we possess the infrastructure to regulate in such an environment? Will such an approach be cost-effective to us if moving to risk-informed regulations is optional and only a few licensees respond?
- Will we be fluid enough to deal with the changing business environment brought on by deregulation and plant sales?
- Will we have the talent and infrastructure to meet our mission as the agency “grows more gray” and seasoned professionals move on? Can we ensure against a significant loss of historical knowledge? This question is more than just a matter of who will manage the agency. It extends to “who will do the work?”

By raising these issues, I do not mean to imply that you have not considered them, or even that you have not begun to plan around them. The question is, are these issues planned for in the level of detail presented in the tasking memo response? That is the level of planning toward which we should be working today.

There is an equally formidable challenge of culture change. In the course material for NRC training on “Supervising Human Resources,” there is a graphic that depicts the skill set required for differing levels of an organization. The skills are broken down into “Technical Skills,” “People Skills,” and “Conceptual Skills.” As you might imagine (or as some of you might remember), excellent job performance by the working-level staff generally depends on almost equal parts of technical and people skills, with just a modicum of big-picture conceptual skills. Executives, on the other hand, rely on large portions of conceptual and people skills, with only a modicum of technical skills (organizational and planning skills also are paramount). I believe this succinctly implies how you should be spending your time—developing a vision derived from Commission direction, driving it through the organization, and managing its execution. The recent Inspector General survey of the NRC workplace climate indicates that many workers feel this approach has not been taken, that management is too involved in the day-to-day work of the staff, reserves too much decision-making for itself, and does not appreciate staff opinions.

As we reorganize and move to a greater ratio of employees to supervisors, understanding this skills ratio and its implications will become more and more important. As you might expect, within this model, your supervisors and middle managers need almost equal parts in the three skill areas. These are the individuals who will take your vision and turn it into reality. In commercial nuclear organizations, these also are the individuals that licensees have found most resistant to change when turning problem plants around—in other words, the individuals most likely to wonder if change is really necessary or advisable. Your plans must include methods for achieving buy-in from



these important personnel in our agency. I believe that the dialogues that were begun by Mr. Callan, and the communications plan spearheaded by Dr. Travers, are excellent ways to inform the staff of goals and upcoming actions. I also believe that they should continue and even be institutionalized. But care should be exercised to ensure that these are dialogues, not monologues. The staff must be accessed for ideas on how to proceed, and the resultant feedback must be recognized, appreciated, and acted upon.

### Performance Metrics

I have spoken before on the importance of developing metrics to chart performance. In tasking the EDO with developing our plan, I listed a number of areas into which I felt our important stakeholders' comments fit. They were: the predictability, objectivity, and timeliness of NRC decisions; the focus of NRC activities; the quality of NRC-licensee interactions; the implementation of NRC programs; and the size of the NRC staff. I would argue that, if these are the principal areas of concern, and if our objective is to correct these areas explicitly, then we should be able to develop metrics which align to these areas that will indicate how we are doing. Let me leave you with this question: Can a set of indicators for NRC performance be established around these areas of concern and, if not, how will know if we have improved? Keep in mind that the absence of criticism is not necessarily success.

I would also note with interest that these areas fit rather neatly within the Principles of Good Regulation. If one refers to the Principles of Independence, Openness, Efficiency, Clarity, and Reliability, one finds phrases such as:

#### EFFICIENT:

- “regulatory activity should be consistent with the degree of risk reduction they achieve,” (focus of activities, size of staff), and

#### CLEAR:

- “[t]here should be a clear nexus between regulations and agency goals and objectives,” (focus of activities), and

#### EFFICIENT:

- “decisions should be made without undue delay,” (timeliness, implementation of programs), and

#### EFFICIENT:

- “the option which minimizes the use of resources should be adopted,” (staff size) and, finally

#### RELIABLE:

- “Once established, regulation should be perceived as reliable and not unjustifiably in a state of transition,” (predictability, implementation of programs),

This is just meant to show that a mapping from areas of stakeholder concerns to the Principles of Good Regulation is possible.

I challenge you to establish metrics which align to these principles, so that we will solve our problems as they arise.

### Conclusion

In conclusion, let me reemphasize the importance of holding the center - we are still a health and safety regulator, and we are changing to enhance our effectiveness-while being responsive to objective critiques. We will impose necessary burden, seek to reduce unnecessary burden, and we will do so in an interactive way with all of our stakeholders. The enhancements we make must be risk-informed and, where possible, performance-based.

I am confident that we have established a sound and ambitious plan for how we will enhance our effectiveness, and we will remain faithful to that plan. It is my expectation that you will focus on the outcomes of the change process, developing the metrics necessary to ensure that our changes are having their desired effects, and recognizing the interdependencies between programs. And, even as we execute the current plan, we must expand its horizon, working within the existing Planning Budgeting and Performance Management system which includes the Strategic Plan, Succession Planning and Operating Plans, to give greater definition to our shared vision.

This has been a time of extraordinary challenge for the NRC. I want to make it clear to you that I believe we are approaching it in a very healthy way thus far. I would caution you not to overcorrect, not to take on a fortress mentality, and, above all, not to lose sight of our mission.

As a final thought, I would point out that current events offer you a rare opportunity to plan for your own succession. Look around you in this time of stress. Who among your subordinates is energized? Who among your staff views this as a time of opportunity for improvement? Which members of your group possess a clear safety compass? This is your opportunity to identify our leaders of tomorrow, and to cultivate them.

I want to thank all of you for your hard work and leadership. We are on the right track—we need only execute. Thank you for your attention, and I would welcome your questions at this time.