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CAN THERE BE EXCELLENCE THROUGH COOPERATION?

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DOE ENERGY FACILITY CONTRACTOR GROUP CONFERENCE ON EXCELLENCE THROUGH COOPERATION LEXINGTON, KENTUCKY FEBRUARY 21, 1991

It is a real pleasure for me to be invited to meet with such distinguished group from a sister agency with close ties and mutual interests with the NRC. On many occasions during my professional career I have had the pleasure of working with several of your major facilities--five, to be specific: the Oak Ridge National Laboratory, Argonne National Laboratory (both East and West), Idaho National Engineering Laboratory, Savannah River Laboratory (and Site), and Hanford Nuclear Reservation.

I've also had some interactions with Brookhaven, Sandia, the Nevada Test Site, the WIPP site and the Yucca Mountain site. Recently, through my positions as NRC Commissioner, University Vice President, and Chairman of the Advisory Committee on Reactor Safeguards, I've had some involvement with DOE programs under the Assistant Secretary for Nuclear Energy; Office of Energy Research; Assistant Secretary for Defense Programs; Assistant Secretary for Environment, Safety, and Health; and the Office Civilian Radioactive Waste Management.

So I think that I know "you" fairly well. I think I can identify with you and where you have been, what you have been, what you are, and what you are facing today. I've been your supporter and sometimes your constructive critic. In fact, I've even been "blackballed" for speaking in your defense. I welcome the opportunity to be with you today as a friend, a colleague, a believer, a sympathizer, a supporter and, hopefully, someone to share some helpful thoughts with you. Our National Laboratories are composed of some of this country's brightest scientific minds. This is something you can take pride in.

I'm sure that many of you felt pride when the news media recently identified some of the advanced military systems being used in the Desert Storm operation as "Star Wars" technology. Some of your laboratories or facilities more than likely provided significant input to those technologies. However, it shouldn't take a war or a disaster for the public to recognize one of our most valued national resources--our bright scientists and engineers and their unique facilities.

Recently, some of our National Laboratories' activities have been severely criticized. I am sure no one here appreciates seeing the Exxon commercial with a tiger on the prowl. That symbolism probably has less than desirable connotations for some of you today.

That reminds me of what happened in the Kremlin several years ago. Then-party boss and President Konstantin Chernenko and his colleagues were atop the Lenin Mausoleum watching the annual May Day military display. Over the hours waves of tanks, howitzers, vehicles, soldiers, sailors and missiles rumbled by. At one point a group of people dressed in business suits trundled by. Chernenko leaned over to Defense Minister Dmitri Ustinov and asked, "Dmitri, who are they?" Ustinov replied, "They are our tiger teams." Puzzled, Chernenko barked, "What are they doing in our military parade?" Ustinov replied, "Mr. President, you'd be surprised at the amount of damage they can cause."

I find the theme of your conference, "Excellence Through Cooperation," to be one I can readily associate with. I was involved in interdisciplinary research activities during most of my career at Penn State. It is not easy to accomplish cooperative research approaches in universities with their rigid disciplinary structure and competitiveness--not unlike what you experience, I'm sure. However, the benefits of interdisciplinary approaches to research are extensive and well worth the extra effort it sometimes takes to make them work.

As a charter member of the National Nuclear Accrediting Board I saw first-hand the benefits of one nuclear utility helping another in meeting the training program accreditation commitments made by the nuclear utility industry in an effort to head off what they saw as more onerous Congressional and NRC action.

There is no question in my mind that entities in similar situations, when faced with the implementation of new regulations, or faced with orders from Headquarters, can produce more effective and efficient solutions and conserve valuable resources if those entities work together cooperatively. There

is no question in my mind that effective interaction amongst various DOE contractors and facilities could reap considerable benefits for you.

The cooperative approach of which I speak is in contrast to an approach where each individual contractor closely guards its information, its knowledge, its experience, and its approach lest a perceived competitor get some advantage, or possibly look better as a result. It is also in contrast to the case in which one contractor thinks that it has the only pertinent expertise, knowledge or experience to find a solution, or does not want to take the time or effort to work with other contractors to seek an optimum, or better solution to the problem at hand. On the other hand, I can think of several examples in the licensed nuclear facility regulatory arena, as well as in the DOE arena, of organizations that have been established to stimulate and better enable cooperation amongst various entities with common interests in order to better reap the benefits of cooperation. Some of these

o The Institute of Nuclear Power Ocerations (INPO)

organizations are:

The mission of INPO is to ensure the highest levels of safety and reliability and to encourage excellence in the operation of nuclear electric generating plants. In carrying out its mission, INPO extensively and effectively involves member personnel in INPO programs and activities in order to promote the exchange of information, and in order to ensure that INPO efforts meet the current needs of its members.

o The Nuclear Management and Resources Council (NUMARC)

NUMARC is the organization of the nuclear power industry that is responsible for coordinating the combined efforts of its members in all matters involving generic regulatory policy issues and on the regulatory aspects of generic operational and technical issues affecting the nuclear power industry. Every utility responsible for constructing or operating a commercial nuclear power plant in the United States is a member of NUMARC. In addition, NUMARC's members include major architect/engineering firms and all of the major nuclear steam supply system vendors.

Organization of Test Research and Training Reactors (TRTR)

TRTR is a voluntary forum for issues relating to the utilization and operation of non-power nuclear reactors. TRTR conducts information exchange programs for members and studies and responds to government rules and regulations concerning non-power reactors. Amongst other services, they provide peer review panels to members on request. I'm pleased to note that a number of DOE facilities participate in the TRTR organization and activities.

O Operations and Training Technology Applications Unit (OTTA)

OTTA manages the DOE Reactor and Nuclear Facility Training Coordination Program and administers the DOE Training Accreditation Program. A significant objective of this Unit, located at the Idaho National Engineering Laboratory, is to assist DOE contractors in the development and evaluation of systematic, performance-based training programs.

There are other examples, such as the Low-Level Radioactive Waste Forum, utility owners groups and the nuclear procurement issues committee. However, I have mentioned these four examples because they are organizations of which I have extensive personal knowledge.

Basing myself on my knowledge of these organizations, their programs and their experiences, I see several benefits which I believe would also accrue to DOE contractors and to DOE itself if you were to cooperatively seek solutions to common problems.

First, however, I should explain a term I will be using frequently in what follows. I realize that individual contractors are subject to the terms of their contracts and to Department orders. I also realize that you have numerous and complex responsibilities to program offices and field offices. Further, you have responsibilities to various federal and state regulatory bodies and important commitments and understandings with local community bodies. For simplicity, I will refer to these various bodies as "the regulator" in what follows. You will need to translate my terminology to mean the appropriate entities in your working environment.

The benefits I see are three-fold. The first, and most valuable, is that cooperation among entities having diverse expertise leads to better answers.

Interaction of experts with diverse capabilities helps stimulate the development of more innovative and balanced solutions. Interaction, including interaction with the regulator, enables you to achieve more satisfactory solutions than individual contractors might achieve on their own. By combining expertise from a variety of contractors, various concepts, ideas and impacts can be considered more extensively. A more panoramic view of the problem at hand will result.

If everyone speaks in unison, or as one, the fact that the message has been critically reviewed by diverse experts with varying experience, interest and concern can result in the message being clearer and more generally responsive to the regulator and more readily and feasibly implemented by contractors. Further, the message is stronger than if everyone speaks separately.

One of the best examples with which I am familiar, where cooperation led to the achievement of more satisfactory solutions than individual licensees might have achieved on their own, took place in 1984, when a large group of industry leaders stood up and spoke in unison and effectively headed off the promulgation; of a training regulation which industry found duplicative of, and damaging to, their jointly developed training program accreditation initiative. This success led to the formation of NUMARC which has made major contributions to the NRC's formulation of many policy statements and rules and regulations, including those on training, degrees for senior reactor operators, maintenance, fitness for duty, station blackout, plant life extension, and standardization.

Personally, I encourage interested and affected groups to make constructive comments and suggestions on what we do, and to stand up and speak out when they think we are off-base. Factual information on potential impacts of agency action and constructive counter proposals for alternative approaches which could also accomplish the intended purpose of the agency's proposed actions do contribute to a more effective regulatory process.

Incidentally, the benefits of cooperation are not limited to licensees or contractors. I'm extremely pleased to be able to report that the NRC and the Environmental Protection Agency are cooperatively working together to resolve some regulatory duplications and inconsistencies. We have initiated cooperative efforts to avoid duplicative regulation and to develop a mutually agreeable approach to risk assessment for radiological risks. If these efforts are successful, other organizations, including DOE and its many facilities, could benefit.

o The opportunity to work more closely with field, program or headquarters personnel enhances the potential for understanding of one another's operational environment, concerns and perspectives. This will lead to a better appreciation of the issues and to solutions that more directly address those issues.

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o Focusing clearly on the issues is always a good starting point. Not surprisingly, an effective and mutually understood definition of the problem is one of the most crucial elements in the successful resolution of any problem.

o The opportunity to work with other experts on problems of major national and perhaps international significance can enhance the morale and broaden the insight of contractor experts. I have found that broader exposure to issues sometimes enables one to see that some issues are more complex than one initially thought them to be, and that there are different perspectives on some issues than one may see at first blush.

o Also, I think cooperation leads to better answers by avoiding the expenditure of effort on competition. By not working together cooperatively, those contractors with ; limited resources might be put on the defensive on an issue-by-issue basis and be forced into expedience over excellence when reacting to each issue.

o Focus on finding the best solution as viewed from the perspective of the total set of contractors and the regulator. A particular solution to a specific issue might not be the best one for each individual contractor or facility, but when viewed from a broader perspective, it may be the preferred solution. The optimum benefit will derive from your unity of purpose and effort.

o However, it is essential that your cooperative efforts are directed to seeking good solutions, to seeking excellence, and not directed to stonewalling, obfuscating, or unnecessarily delaying resolutions.

The second benefit I see is that cooperation among entities with common goals facilitates the exchange of information.

o If you work as individual organizations, the resulting myriad views, opinions and positions will contribute to ineffective communications within your industry, with all levels of the Department, and with others.

o Further, if through lack of cooperation you do not have an effective system for the collection and broad assessment of information concerning regulatory matters, the resulting deficiency will contribute to unplanned, uncoordinated and perhaps incomplete responses. It will also result in late, divergent, and reactive positions on regulatory initiatives, which will contribute to polarizing the positions of the regulator and the DOE related industry, and will leave the regulator no alternative but to question the effectiveness of your commitment to safety and excellence.

o The interaction of experts from different facilities, contractors, field offices, programs and other entities in seeking solutions to issues often paves the way for future communications between these individuals. Knowing your counterparts at other facilities and bodies is extremely important. It enhances your awareness of other approaches and solutions to common matters, and it eases the solicitation and sharing of information in the interest of finding what is good for everybody.

The TRTR is a good example of an organization that facilitates the exchange of information. Recently, at the TRTR annual conference at Penn State, I shared with TRTR members some of my views on the regulatory issues most likely to affect the nonpower reactors. Due in large part to the work of TRTR, the NRC over the past year has made significant changes in its programs for the regulation of non-power reactors.

INPO sponsors many conferences and workshops to encourage interaction, awareness and communication. INPO also encourages the exchange of information through both its Loaned Employee and Liaison Engineer programs and its extensive use of peers in its assistance, accreditation and evaluation programs.

Both INPO and TRTR encourage communication outside of conferences as well, through the use of newsletters and journals. And INPO has established its NUCLEAR NETWORK, an international electronic massaging system for the timely communication and cooperative exchange of nuclear plant information.

o Lack of communication, I think, including communication with regulators, can lead to relationships marked by confrontation, in contrast to the preferable "arms-length" but cooperative relationship. Relationships marked by confrontation lead to mistrust, and produce barriers to collaboration between those who are the most knowledgeable regarding their facilities' operational safety matters.

o I am by no means suggesting that you not stand up and challenge the regulator if you are convinced that the regulator is off base. However, when you challenge the regulator I suggest you do it in a professional, factual manner after you have carefully considered your motivation. Is it purely reactionary, or is it based on principle and reason?

The third benefit I see is that cooperation among entities responding to the same demands helps conserve resources and is a good defense against wasteful bureaucracy.

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A good example of how cooperation between licensees and regulator is helping to guard against wasteful bureaucracy is the NRC's Regulatory Impact Survey. I'm pleased to say that the NRC recently conducted a survey of a number of nuclear power plant licensees, and a number of its own staff, to better understand the impact our various regulatory programs have on licensees. One very pointed criticism we received concerned the NRC's lack of control of both its Regionaland its Headquarters-initiated inspections.

This Regulatory Impact Survey was recently published, and we are seeking public comments on our proposed follow-up recommendations on how we might improve our actions. The Commission also recently developed and published a set of "Principles of Good Regulation" to help ensure that our regulatory activities are of the highest quality, appropriate and consistent. The survey effort is a good example of the cooperative, but "arms-length," manner I have urged you to adopt with your regulator, so that ; your efforts complement one another and optimum, practical solutions can be developed and implemented. The results will not only enhance public health and safety but will also give the public greater confidence in the contractors, the Department and other regulatory bodies.

o Frequent opportunities to exchange information encourage understanding of the experience and expertise of other contractors, and a certain amount of appreciation of their ability to develop worthy solutions to common problems. In this way you have a better chance of heading off the "Not Invented Here" Syndrome, where one contractor thinks that it is the only one that can find the best solution to the matter at hand. I trust that you are finding that the Training Assistance Program group at INEL is effectively helping you to develop or obtain training information and materials. It would be extremely wasteful for each of you to develop these materials independently.

o Ultimately you will find that these materials will greatly assist you in attaining your training program accreditation objectives. Without such extensive cooperation and the sharing of materials and information through INPO, the nuclear utility industry would not have been successful in meeting the commitments it made in heading off NRC and Congressional actions which the industry felt were duplicative of, and damaging to, its training improvement initiatives.

o By working together on common problems or needs, the workload for each individual contractor will be reduced. In fact, the total effort integrated over all contractors will be significantly reduced from what it is when each contractor works independently to solve a problem or develop a course of action.

o By cooperatively seeking excellence and soundness of solutions, and not mere expedience of resolution, and by speaking in unison when appropriate, you will enhance the credibility of your organizations in the eyes of the regulator and the general public.

Incidentally I note with some enthusiasm and some chagrin that the principle of excellence has become the ethic of other government regulated industries as well. In a recent issue of Heritage Today I learned that Congress, in an effort to encourage the agricultural industry to strive toward the same superior standards of performance upheld by the nuclear industry, appropriated \$3.8 million for Arkansas' "Poultry Center of Excellence."

I now return to the title of this presentation, "Can There Be Excellence Through Cooperation?" It has been my intent to outline some of the benefits I have gleaned from my knowledge of the experiences of several organizations functioning in the nuclear arena. I'm sure that the benefits I've outlined are only a few of the many potential benefits. It has not been my intent to imply that cooperation is new to you. I served as a member of the Advisory Committee at INEL, established by Troy Wade and continued by Don Ofte, one purpose of which was to encourage the various contractors at INEL to work more closely together in order to be a more cohesive national laboratory. I observed communication and cohesiveness growing as a result, and hope that it is continuing. Further, as a member and chairman of the Reactor Safety Advisory Committee at the Savannah River Laboratory (now Site), I saw other DOE contractors ably come to the assistance of Savannah River personnel with valuable and unique expertise. Those and other experiences, however, also taught me that much more needed and could be done to improve communication--up,-down and across the entire DOE organization.

The AEC, DOE and its numerous contractor-operated laboratories and facilities have made many unique contributions to the security and well-being of this nation. Many of your contributions have been shared with other nations, and this sharing has contributed to international security and well-being. You have good reason to be proud of your efforts and to hold your heads high.

However, there is no question that your working environment is changing and that you will need to change with it--even beyond the many changes you have already made. In making these changes, we must all ensure that your unique potential and capabilities are preserved and your valuable national assets enhanced.

Therefore, perhaps, as at no time since the days of the Manhattan Project, it is essential that all of you--including all levels of the Department--work together constructively to preserve and enhance the national asset you represent. This DOE Energy Facility Contractor Group Conference is an important step in that direction.

I strongly believe that cooperatively working together, jointly finding optimum solutions, speaking in unison, and minimizing wasteful bureaucracy will reap untold benefits for you and this nation. In short, I strongly and firmly believe that, not only can there be Excellence Through Cooperation, cooperation may be the only way to achieve excellence.

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