Keynote Address

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Good morning. On behalf of Secretary of Energy Watkins, it is a pleasure to welcome you to PATRAM '89. I welcome the opportunity to address a group where my primary message is, "Keep up the good work!" Transportation of radioactive materials is one element of the energy effort where the operational experience is proficient and the safety record is outstanding.

In reflecting on what I might say to you today, I want to share some of the Department's new policies and plans for nuclear energy. A number of our projected activities will certainly have implications in the radioactive transportation area. And though my remarks will be directed to circumstances in the United States, the problems and decisions we're facing today may be ones other countries will encounter tomorrow.

First, let's take a step back and look at the progression of the nuclear option since its discovery some 50 years ago. In the early days—in fact, up until the mid-1970's—nuclear technology enjoyed widespread acceptance. In the civilian sector, energy planners marvelled at the efficiency and cost-effectiveness of nuclear technology and predicted a rapidly expanding contribution to electric power. Utilities jumped on the nuclear bandwagon and placed more and more orders for nuclear power plants. For a time, even environmentalists were pleased there were no belching smokestacks. During the oil crisis of 1973-74, Americans everywhere were thankful we had a clean, viable option to fossil fuels. And, at the growing complex of facilities administered by the Atomic Energy Commission, nuclear scientists and engineers went quietly about the business of fulfilling the Nation's defense requirements—with the full and enthusiastic support of Congress.

As almost always happens for technologies, as well as relationships, the honeymoon came to an end. Despite the undeniable benefits to mankind in the fields of energy, medicine, industry, and agriculture, the expectations for the new technology had been too high—the claims too exorbitant. As a complex technology matures, unexpected problems always arise—in nuclear development, we had reached our midlife crisis. We had not planned well enough for our mature years. No well-defined solution to the accumulating waste inventory was in place. If we had initiated a program to effectively manage and dispose of the waste at an earlier time, the public and political climate might have been far more favorable.

In the United States, the nuclear enterprise has been hit particularly hard. On the commercial side, a confluence of circumstances and events—lower than expected energy demand, increasing lead times for bringing a nuclear plant on line, extremely large capital costs, backfitting and other changing regulations, and the Three Mile Island accident—have caused utilities to retreat from the nuclear option. Today nuclear electricity provides 20 percent of the energy in this country—but, no

new plant orders have been placed since 1978. Initiatives have been introduced to design smaller, more standardized plants with passive safety features. Recently, the Nuclear Regulatory Commission has taken some very positive steps to streamline the licensing system. But the solution for permanently isolating spent fuel and high-level waste is bogged down in a quagmire of parochial politics. We must make progress in that area before we can expect a renewal of utility interest and support.

At the Department of Energy, we too have had our share of woes. As anyone who reads, listens to, or watches the news is aware, the DOE defense nuclear complex has been the focus of much publicity, most of it critical, witness the events at Rocky Flats this past week. The media have presented a litany of safety and environmental concerns, some are valid and others are not. Public understanding and acceptance of our mission and activities are not very high right now, and neither is our credibility.

The environment of suspicion and fear has recently begun to focus on transportation of radioactive materials. This is not surprising, since transportation has the potential for bringing the radioactive material into the vicinity of the greatest number of citizens.

As a case in point, the Department will soon complete its campaign to ship TMI debris from the reactor site in Pennsylvania to Idaho National Engineering Laboratory. In a less volatile political environment, this would have been a routine campaign, much like similar ones in the past that have caused little public interest or concern. Despite the fact it was carefully prepared for, all regulations were followed, and the movements to date have been virtually incident free, it has been labeled by both local and national politicians as a threat to public health and safety. Governors stopped the trains and other politicians insisted on schedules that kept trains away from cities at peak traffic.

As we prepare to open WIPP, and we are still planning on September, the issue of transportation is beginning to move to the forefront. We are dealing with issues that range from certification of Trupact II to by-pass highway construction in New Mexico to much concern from all the "corridor states" that may result in some sort of financial assistance to them. And needless to say everyone is concerned that what is done regarding WIPP will be precedental for how high-level repository waste is handled and transported.

Protests over these and other shipments have taken the form of proposed legislation for increased restrictions on transport of radioactive materials and lawsuits prohibiting shipments through particular jurisdictions. The record of radioactive transportation does not justify or deserve such treatment. It, like numerous other nuclear activities, is not being judged on the basis of its merit or the actual risks it entails.

The problems confronting us, by and large, are complex and don't lend themselves to easy solutions. Quite simply, incremental changes are not going to be good enough. We need to—and plan to—reorient our entire way of doing business. Let me describe briefly some of Admiral Watkins' new initiatives.

SAFETY

In the area of safety, we have experienced unacceptable management practices at a few of our reactor and processing facilities. In some instances, inadequate procedures were in place to accommodate abnormal operating occurrences. In others, clearly defined procedures were simply not followed. The Department's immediate response to these shortcomings was to temporarily shut down facilities. They will remain shut down until adequate corrective actions can be designed, reviewed, and implemented to assure DOE managers—and the American people—these facilities are being operated in a safe manner. This will entail complete investigation of records, audit of procedures, and implementation of thorough programs of quality control and assurance. We

welcome and endorse outside oversight, John Ahearne and his Advisory Committee on Nuclear Facility Safety have been key during the past year or so.

ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT

As in commercial activities that have generated waste, activities associated with national defense have also contributed to the mounting inventory of radioactive waste. In the past, a variety of industrial practices have been used to manage these wastes. By today's standards, some of those practices should have been different—for others, the technology and knowledge to manage the wastes were not available. In some instances, the applicability of new environmental statutes to the Department's facilities and operations was not clear. To provide an integrated approach to this problem, a Five Year Plan for environmental cleanup has been drafted. The Plan is still undergoing Departmental review, and will not be in final draft until August 31. I can, however share a few of the general objectives and strategies it contains.

First, a priority system has been established to ensure the most serious environmental concerns and problems are addressed first. Corrective actions will be taken to bring active and standby DOE facilities into compliance with air, water, and solid waste regulatory requirements. In addition, remedial actions will be pursued at all inactive and surplus facilities and sites contaminated with radioactive, other hazardous, or mixed wastes.

A complementary effort will conduct activities to minimize the future waste streams resulting from operations at active facilities. In addition, enhanced methods of waste treatment, storage, and disposal will be pursued. The ongoing transportation cask development programs for shipping wastes to the WIPP facility in New Mexico and to the national spent fuel and high-level waste repository are examples of the type of development that can be expected under this initiative.

Longer range cleanup activities will apply science and engineering to conceive, develop, test, and demonstrate technology advancements are useful for environmental restoration and waste management. This research effort will utilize the capabilities and expertise of DOE's national laboratories, industry, and the universities.

A major thread through everything we will do over the next few years is to correctly utilize the vast R&D technology that we have available. This is particularly important in areas such as:

- Waste Minimization
- Waste Disposal and Storage
- Reducing Costs
- Technology Transfer from DOE to Industry
- and most importantly, Transportation Cask Development

There is no question that the Achilles heel of WIPP and the national repository is the transportation issue. A very strong technological base for containers and casks is critical to our ability to deal with the political problems.

CONCLUSION

In my remarks this morning, I've identified the primary challenge for DOE as forging a sensible and safe balance between production of required nuclear materials and concern for safety and the environment over the lifetime of those materials. Unless we can manage our nuclear operations in a more enlightened way, we could lose the nuclear contribution to a secure energy supply. If that happened, we would forfeit an option that can be environmentally benign for other options that carry far greater environmental penalties.

DOE is introducing a significant attitude change about the need to communicate with the public. We will admit our mistakes and openly discuss our plans for correcting them. Our programs and

activities must be able to withstand the cold spotlight of the public eye. Only then can we regain the credibility needed to achieve our civilian and defense goals for energy stability and security.

We recognize this conference is a viable forum for helping us achieve our technical and institutional objectives. We wish you a successful meeting and look forward to hearing a progress report on its conclusion.

Thank you very much.