



NRC NEWS

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THE DECISION TO GO FORWARD

REMARKS OF

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before the

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It is a great pleasure as well as an honor to take part in this conference, marking the 50th anniversary of President Dwight D. Eisenhower's epochal "Atoms for Peace" speech before the United Nations General Assembly.

Not long ago, in an opinion piece in the *New York Times*, William Safire lamented that people have fewer and fewer opportunities to hear and read Presidential speeches in their entirety. Major Presidential addresses, he said, are constructed like symphonies; they are meant to be experienced in their totality; and all too often, what the public receives is reduced to a catchy sound bite, or one or two striking phrases.

President Eisenhower's speech of December 8, 1953, is a good illustration of Mr. Safire's point. The address is commonly remembered by the catch phrase of "Atoms for Peace," though the speech itself did not contain those exact words. The phrase is an accurate reflection of the theme, to be sure, but the speech offers much more than that, and anyone who has taken the time to read it from beginning to end has been well repaid for the effort. By turns it is personal and statesmanlike, visionary and practical, and it is infused throughout with the intense conviction of a man for whom peace and war were anything but abstract concepts. Let me quote just a few lines from early in the speech:

I feel impelled to speak today in a language that in a sense is new, one which I, who have spent so much of my life in the military profession, would have preferred never to use. That new language is the language of atomic warfare.

He went on to describe the capacity of the two superpowers to devastate each other's countries. Though the United States, if attacked, could lay waste the aggressor's land, he said that:

... all this, while fact, is not the true expression of the purpose and the hopes of the United States. To pause there would be to confirm the hopeless finality of a belief that two atomic colossi are doomed malevolently to eye each other indefinitely across a trembling world. To stop there would be to accept helplessly the probability of civilization destroyed, the annihilation of the irreplaceable heritage of mankind handed down to us from generation to generation, and the condemnation of mankind to begin all over again the age-old struggle upward from savagery towards decency, and right, and justice.

Later in the speech, he offered the vision of an international atomic energy agency, to which governments would contribute quantities of fissionable material, with a view to applying atomic energy to peaceful activities, including medicine and agriculture, and also "to provid[ing] abundant electrical energy in the power-starved areas of the world." This international agency would be given the responsibility of developing means for the safe storage and protection of the materials, including protection against theft.

Even at the time, it was evident that the President's address was no common event. I believe it should be seen as a hopeful event, at a time when hope was needed, as it is now. Extraordinarily for those times, Moscow Radio quoted it at great length, and the official Soviet response referred to President Eisenhower as "an outstanding military leader in the last World War." Prime Minister Winston Churchill told the House of Commons that he believed it "might prove to be a turning point of our destiny." There were even rumors that Churchill himself had helped write it. (Parenthetically, there could be no higher tribute to the eloquence and power of the President's words than the suspicion that he used Sir Winston Churchill as a ghost-writer.) In any event, the Prime Minister felt the need to set the record straight. He said:

I can assure the House that I would never presume to write a speech for the President. I have quite enough trouble to make up my own.

It is noteworthy that just a week after the President spoke at the United Nations, the *New York Times* reported that the Administration was planning to warn the American public of the danger of sabotage from so-called "valise bombs" -- small nuclear devices, smuggled into this country in suitcases, by mail, or through the diplomatic pouch. According to the newspaper, "officials regard the possibility of atomic sabotage as the gravest threat of subversion that this country, with its virtually uncontrolled borders, has ever faced."

Needless to say, the use of "valise bombs" in an attack never materialized, although the issue

has been resurrected in the last year or two. I mention this not to deride those concerns of 1953 -- far from it -- but to make the point that the issues of nuclear terrorism and nuclear sabotage are not new. Of course, we are all aware that these issues are now a concern for the world at large. President Eisenhower and his advisors, in proposing to go forward with developing the peaceful uses of atomic energy, did not do so because they were *unaware* that an array of difficult issues lay ahead, but rather because they were confident that these issues could be dealt with appropriately. There is all the difference in the world between the two.

Dwight Eisenhower, of course, was not a stranger to difficult decisions. Indeed, just one of them -- the go-ahead to the Normandy landings, when the all-important weather forecast was still doubtful -- would have been enough to ensure his place in history. The General knew that the risks of going forward were immense; but at the same time, he understood that delay and hesitation presented their own risks. The decision to go forward was his alone. Prime Minister Churchill, who appreciated the magnitude of that solitary burden, paid special tribute to him on D-Day. Though hard fighting lay ahead, he told the House of Commons, "General Eisenhower's courage is equal to all the necessary decisions that have to be taken in these extremely difficult and uncontrollable matters."

The central issue that President Eisenhower's speech to the United Nations raised could be put this way: how do we allow responsible parties to have the benefits of the peaceful uses of atomic power, including the necessary technology, and at the same time prevent the world-wide proliferation of atomic weapons?

The international framework that was established to advance these dual goals was a reflection of an age in which nuclear expertise was possessed by only a very few nations. Today it belongs to many. Though the fundamental principle remains unchanged -- the goal is still to foster peaceful nuclear development while preventing nuclear proliferation -- time has not stood still, and the specific problems we face today are very different from those of past decades. As Assistant Secretary of State for Arms Control, Stephen G. Rademaker recently stated: "In evaluating the Atoms for Peace model, the question before us is whether this basic tradeoff has fulfilled its promise. In particular, is it workable; that is, can we in fact draw an effective line between military and peaceful work on the atom, as well as on chemicals and biological agents? Further, is access to peaceful uses a necessary or effective incentive in the battle against WMD proliferation?" I don't pretend to have answers to all these questions, and I'm not sure anyone does. I think that the international community needs to be open-minded about the pursuit of practical and implementable solutions.

Dwight Eisenhower was fond of quoting a saying of the 19th Century Prussian general von Moltke: "Planning is everything, plans are nothing." Von Moltke explained: "No battle plan survives contact with the enemy."

Consistent with that approach, we need to be willing to adjust our strategies, and perhaps our organizational structures as well, in order to cope effectively with the evolving issues that confront us. We cannot afford to be so wedded to existing plans that we fail to adapt to changing needs. In this respect, we have made progress, especially in recent years.

Some 25 years ago, President Jimmy Carter sought to address the problems of non-proliferation

and nuclear terrorism by banning the reprocessing of spent nuclear fuel and the use of mixed oxide fuel in nuclear power plants. At that time, it seemed to many as though plutonium itself were the problem, not only because of the risk of nuclear proliferation, but also because of nuclear terrorism involving an explosive device or a mechanism for dispersing plutonium particles. By renouncing commercial reprocessing unilaterally, the United States hoped to set an example to the world, though this meant sacrificing the energy value of the plutonium present in spent reactor fuel.

Whether this was a good idea or a poor one is something we need not argue today. We must remember, however, that at that time, the international regime for controlling nuclear non-proliferation was still in its formative stages, both in an institutional and a technological sense. Budding or suspected weapons programs in a number of countries seemed to raise the specter of atomic warfare on a regional level, and there was concern that with delivery systems also proliferating, the creation of transcontinental nuclear weapons could be possible.

By the late 1990's, the landscape had changed significantly with regard to weapon grade materials. With the United States and the nations of the former Soviet Union committed to large-scale reductions of nuclear weapons stockpiles, the principal focus of concern had become the enormous amounts of plutonium in the weapons and enriched uranium stockpiles to be used peacefully or be disposed of. There were essentially two major options for plutonium disposal: either to vitrify it in glass or ceramic material and bury it in a geologic repository or to burn it in nuclear power plants for its energy value. The decision was easier for the very valuable enriched uranium.

As you know, the decisions were made in favor of two approaches: to convert the plutonium to mixed oxide fuel and to down blend the enriched uranium for utilization in reactors. I believe that was wise and prudent, though it meant redefining the line that has long separated military and civilian nuclear materials. The old dividing line had outlived its usefulness. It was a relic of a time in which the public horror of nuclear war was such that even *materials* derived from the weapons programs were tainted. In reality, using plutonium from weapons or down blending enriched uranium for generating energy, like beating iron swords into plowshares in the Bible, has both economic and symbolic value. Human beings make wars; metals do not. Burying usable plutonium or uranium, only because it was made for bombs, makes no more sense than burying a sword because it was forged with battle in mind.

I would like to talk briefly about one component of the "Atoms for Peace" program in the United States. As you know, in 1974 the United States Atomic Energy Commission was divided into the Nuclear Regulatory Commission (NRC) and the Energy Research and Development Administration (whose functions were transferred a few years later to the Department of Energy (DOE)). The mandate of the NRC is to regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment. The terrorist events of September 11, 2001, added new dimensions to these three interrelated parts of the NRC's mandate. The Commission is now summarizing the NRC's strategic goal as "to enable the use and management of radioactive materials and nuclear fuels for beneficial civilian uses," subject to the provisions of ensuring safety, promoting the common defense and security, and protecting the environment. This, of course, relates directly to "Atoms for Peace."

And how do we measure up? Using the standard of reasonable assurance of adequate protection as the basis, the NRC and its licensees have lived up to the task of ensuring safety, protecting the common defense and security, and protecting the environment. Let me summarize my perspective: nuclear power plants are as safe as they should be, they are as secure as they should be, and are as prepared for an emergency as they have to be. In exercising its responsibility for safety, safeguards, and security in respect to civilian nuclear materials, the NRC also works closely with the Departments of Energy and Homeland Security for control of radioactive sources.

From a broader perspective, where do we stand today, half a century after President Eisenhower stood before the General Assembly? The energy from the nucleus, and uses of radiation, are integral and necessary components of this day and age. Unheralded, nuclear energy serves the needs of millions and millions of people worldwide, safely and reliably. From an overall energy and economic perspective, nuclear electricity supply can be a major stabilizing force in energy markets, and I believe especially so if coupled with hydrogen production. We have seen decades in which nuclear energy has been used to generate electricity in many countries, with only a single major accident in a production reactor -- and there, better emergency planning could have reduced the resulting health effects to a fraction of what they were. Overall, the safety record of nuclear power has been excellent; the economic benefits have been substantial; the environmental effects, in terms of pollution and greenhouse gases, far less than those of fossil fuels. We have seen enormous strides in the diagnosis and treatment of disease through the use of nuclear materials. A half century after the President expressed his hope that two atomic colossi would not "eye each other malevolently" forever, the United States is buying enriched uranium from the Russian Federation, down blending the enriched uranium, and using it to manufacture new fuel. I strongly believe that the approach of technological compatibility -- dealing with problems within the technology itself -- is the preferred way of resolving these and other emerging issues, as demonstrated by the plutonium and enriched uranium disposition programs.

Fifty years ago, nations first developed weapons programs that evolved into peaceful uses of nuclear energy and radiation. The swords came before the plow shares. There is no longer a need for this path! In fact, this is the wrong pathway to reap the plentiful benefits of atomic energy and be a participant in the global market place.

It is tempting, when facing the unknown, to stick with an existing plan, rather than to acknowledge that it is no longer current, and rethink it. I believe that Dwight Eisenhower understood that, and that is why he reminded his subordinates of the danger of being locked into outdated plans.

Likewise, it is tempting, when facing a risky enterprise, to hold off, and hope that a more propitious time will come. I believe that Dwight Eisenhower understood that too. It was his willingness to balance risks and make the decision to go forward, notwithstanding the uncertainties, that marked him as a leader, both in war and in peace. We can all benefit by his example.

In conclusion, the 50 years since the Atoms for Peace address have seen, as we know, all too much strife, and all too many wars. Nevertheless, it has been a half century without a nuclear war and without a malevolent RDD-type use of radioactive materials resulting in public hazards; a half century in which, as Dwight Eisenhower so fervently hoped, the enmities of the Cold War era have given way to friendship and cooperation on our common problems; and a half century of extraordinary progress for mankind through the peaceful use of the atom. It is up to all of us to ensure that in the next half

century, his vision continues to be fulfilled, for the preservation of world peace and the betterment of people's lives the world over. The principles are clear; their implementation needs to be assured.

I would like to give the last word to Prime Minister Winston Churchill -- soldier, statesman, and sometimes prophet. Just a week after the address we commemorate today, he declared: "I consider that this speech of the President's is one of the most important events in world history since the end of the war."