

Reagan: 'Move forward with nuclear power'

From the remarks of President Reagan at the Department of Energy's Enrico Fermi Award Ceremony on April 25. The remarks were blacked out in the national media.

... On Dec. 2, 1942, James Conant, the Science Advisor to the President of the United States, received a coded message during a phone call from Arthur Holly Compton. "The Italian navigator has landed in the New World," Compton said. Conant inquired, "How were the natives?" And Compton answered, "Very friendly."

Well, ladies and gentlemen, that coded message signaled to President Roosevelt that the first demonstration of a sustained nuclear reaction had taken place. The Italian navigator referred to was Enrico Fermi. And on that day, the whole of mankind landed in a new world.

The two individuals that we honor today played significant roles in the early exploration of the atom. I understand Dr. Anderson was present in Chicago at the time of the first sustained reaction. Dr. Neddermeyer was also involved conducting his research in another part of the country. Wartime necessity focused that early research on the production of a weapon—a weapon that, once brought to bear on the enemy, effectively ended the conflict that then engulfed the world. This development 40 years ago forever changed the world and our perceptions of the consequences of conflict, which is why 40 years later we continue to search for surer ways to control and reduce nuclear weapons and eventually better ways to defend against them.

While we might speculate on what the world would be like had nuclear weapons never been developed, we can't wish them away. And that's why I have challenged America's scientists and engineers to search for ways by which these weapons systems might eventually be rendered obsolete.

But while we're understandably caught up in our concerns for control of nuclear weapons, we mustn't lose sight of the tremendous peaceful benefits that nuclear science has brought us over the decades. These benefits were also a gift from nuclear explorers like the men we honor today.

Nuclear energy now plays, and will continue to play, an important role in meeting our nation's energy needs. Today, nuclear plants generate more electricity for the American people than oil-fired facilities. I noticed a story in the paper the other day about air pollution in a Colorado mountain resort. Apparently, wood-burning fireplaces were used so extensively that this beautiful mountain retreat is developing a smog problem—a reminder that there is a cost to every form of energy.

We do know that the complete fissioning of a single

pound of uranium, a single pound, provides two and half million times more energy than the burning of a pound of fossil fuel. This form of energy has tremendous potential for mankind. And we mean to plan—and plan to move forward prudently and systematically to ensure that the people of the United States are able to use it safely and keep warm, provide light, and to serve as a vehicle for a better life.

Energy production, while one of the most significant uses of nuclear power, is certainly not its only peaceful application. More than 40 million Americans each year receive medical treatment using radioactive isotopes and radiation therapy. In industry the essential task of construction testing is tied to the use of nuclear material, ensuring the quality of welds and the strength of building materials.

The concern over this awesome power is understandable, but we must not let this concern deter us from harnessing it to peacefully serve mankind.

In his article, "Fermi's Own Story," Fermi wrote: "Perhaps a time will come when all science and technical progress will be hailed for the advantages that it may bring to man and never feared on account of its destructive possibilities."

Well, the two men we honor today, like Enrico Fermi, are part of that small band of explorers that discovered, in a new world, a world where potential is limited only by our imagination. They represent the best traditions of American science. They are a tribute to our freedom and to our security. We are proud of them. And it is with great pleasure that I will present the awards.

First, there is Dr. Herbert L. Anderson. And Doctor, this citation is signed by Secretary Hodel and myself. It reads: "For his pioneering collaboration with Enrico Fermi in demonstrating the emission of neutrons in fission at Columbia University, for his essential role in constructing the first chain-reacting piles, for his work on production and determination of the properties, tritium and helium-3, for his collaboration with Fermi in detecting the first hadronic resonance at the University of Chicago, and for his continuing contributions to understanding the nature of strong and weak nuclear forces. . . ."

And then, there is Dr. Seth H. Neddermeyer. Doctor, your citation reads: "For participating in the discovery of the positron, for his share in the discovery of the muon—the first discovered of the subatomic particles, for his invention of the implosion technique for assembling nuclear materials and for his ingenious foresight and perseverance in finding solutions for what, at the time, seemed to be unsolvable engineering difficulties."

Thank you very much.