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DISTINGUISHED PUBLIC SERVICE AWARD

Presented to
PETE V. DOMENICI
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SENATOR PETE V. Domenici is one of the greatest champions of the safe use of nuclear materials and technology for the benefit of the nation. He has worked to fulfill the vision of President Dwight Eisenhower in the Atoms for Peace Initiative and the Atomic Energy Act of 1954. Throughout the Senator's endeavor to develop nuclear power as a strategic resource for the nation, he stridently labored to ensure that it be developed as a safe resource as well. As part of his heartfelt

contribution to America that our nation should continue to compete safely in the volatile future world market with the help of nuclear power, the Senator has worked to see that the health physics profession has benefited immeasurably.

During his six terms as a United States Senator from the state of New Mexico, Senator Domenici has always believed in the power of science and technology to improve lives and make the world safer. Based on this

conviction, the Senator took specific actions: to address the human capital crisis in the health physics profession that started in 1999 and continues today; to champion the Waste Isolation Pilot Project (WIPP) in order to protect the public and environment from transuranic and other hazardous waste generated by the country's defense and nuclear weapons programs; to create a scientific program dedicated to studying the effects of low-dose and low-dose rate radiation for the purpose of setting appropriate radiation protection standards; to create non-proliferation programs to increase the security of the world from malicious use of radiological materials; to participate in Health Physics Society (HPS) programs and radiation safety related conferences; and to maintain a line of open communication with the HPS leadership on legislative radiation safety issues.

In 1998, the Department of Energy's (DOE) Assistant Secretary for Environment, Health and Safety (EH&S) terminated the Applied Health Physics student scholarship and fellowship program and the faculty grant program that had been funded through the DOE EH&S office for a number of years. As a consequence of this action the health physics university programs were left without any dedicated federal sponsorship programs, thus ending more than 40 years of federal support for the professional education of health physicists. At the same time, large environmental clean up projects for the DOE, a renewed interest in nuclear power production of commercial electricity, and an aging of the health physics community started to place a demand on the need for professional health physicists that could not be met. A human capital crisis in the health physics profession followed. The actual and projected shortage of professional health physicists only got worse as the demand for professional health physicists continued to dramatically increase following the events of September 11, 2001, and the rapid increase in the use of new radiation techniques for medical diagnosis and treatment in the health care industry. In April 1999, Senator Domenici's staff met with HPS leaders to learn about this human capital crisis. Senator Domenici immediately understood the significance of this issue and took a role as one of the leading champions in the Congress for health physics academic support using his position as Chair/Ranking Member of the Senate Energy and Natural Resources Committee and as a Chair/Ranking Member of the Senate Appropriations Energy and Water Development Subcommittee. The Senator sponsored or co-sponsored at least 9 different pieces of legislation that specifically authorized the funding of university programs in health physics. These culminated in the Energy Policy Act of 2005, which is now law and which directs the support of health physics academic programs through the DOE Office of Nuclear Energy.

In addition, in his role as Chair of the Senate Appropriations Energy and Water Development Subcommittee, Senator Domenici directed the funding to support health physics academic programs despite the inaction of the DOE to do so. Specifically, in Senate Report 108-105, which appropriated funding for Energy and Water Development for fiscal year 2003, the Senator "... strongly [encouraged] the Department [of Energy] to request sufficient funding in future years to fund all meritorious proposals, *including appropriate proposals to support health physics university programs*" (emphasis added). This direction resulted in the continuing appropriations of funding for students in health physics academic programs.

In addition to his commitment to supporting the survival of the health physics profession, Senator Domenici has been actively involved in the regulatory and scientific basis for radiation safety and radiation safety regulations. In 1992, the Senator was a principal sponsor of the legislation that enabled the construction and operation of the Waste Isolation Pilot Project (WIPP). From his experience the Senator saw the development of the WIPP site as necessary to properly protect workers, the public, and the environment from the radiation hazards that could be associated with improper care and disposal of highly radioactive wastes generated by the country's defense and nuclear weapons programs. The Senator understood that his state of New Mexico had participated in, and benefited from these programs, thus incurring a share of the responsibility to address the issue of safe disposal of these materials. He also understood the science of disposal and isolation of these materials that pointed to New Mexico as having favorable geological and demographic characteristics for siting a geologic disposal facility. Therefore, he used his leadership to legislate and oversee the development and operation of WIPP in New Mexico for the protection of the public and environment from radiological hazards.

Senator Domenici has also been deeply interested in the most fundamental scientific question for the health physics profession—what is the effect of low-dose and low-dose rate radiation exposure? The Senator's interest was generated from a realization that the scientific debate over this question was affecting the reasonable regulation of radiation and was resulting in inconsistent and inefficient regulations as demonstrated by the dispute between the Nuclear Regulatory Commission and the Environmental Protection Agency over nuclear facility clean-up standards. Consequently, the Senator used his leadership position as Chair of the Senate Appropriations Energy and Water Development Subcommittee to direct the establishment of a Low-Dose Radiation Research Program at the DOE Office of Science. Through appropriations funding for fiscal year 1999, the DOE was directed

to “develop a program with the goal to determine the biological effects of exposure to low doses of ionizing radiation by 2008.” The fruits of this intensive research effort are now starting to give new understanding and insight into the mechanisms of cancer production as well as the mechanisms of low-dose radiation exposure.

It is due in great part to Senator Domenici’s support of nuclear nonproliferation that the United States developed programs for the exchange of research, development, and commercial activities with scientists of the former Soviet Union. Under the Initiative for Proliferation Prevention (IPP) Program, the DOE and the Department of State worked with the former Soviet republics to divert scientists, engineers and technicians away from developing weapons of mass destruction (WMD). Senator Domenici has also used his position as a leader on the Energy and Water Appropriations Subcommittee to fund and equip the DOE national laboratory system to ensure these world-class scientific facilities can carry out their nuclear deterrent and scientific missions.

Senator Domenici has also contributed to the profession of health physics by participating in HPS and radiation safety related meetings. In January 1999, Senator Domenici provided the Keynote Speech for the plenary session of the HPS 32nd Midyear Topical Meeting on “Creation and Future Legacy of Stockpile Stewardship.” Later that year, the Senator provided the Keynote Speech at the Airlie Conference Center international conference titled “Bridging Radiation Policy and

Science.” In keeping with the Senator’s continued open communications with the HPS, HPS leaders have had more than 25 visits with the Senator’s staff members. During these visits there has been a dialogue on the wide spectrum of issues the HPS has brought to the Congress.

The profession of health physics has gained a valuable visibility through the efforts of Senator Domenici. For example, in December of 2005, the Senator sponsored Senate Resolution 335, titled “Honoring members of the radiation protection profession by designating the week of November 6 through November 12, 2005, as ‘National Radiation Protection Professionals Week’.” This resolution stated, among other tributes, that it be “Resolved, That the Senate . . . encourages all citizens to recognize the valuable resource provided by professional scientific organizations such as . . . the Health Physics Society.” In addition, in June 2002 Senator Domenici rose in the Senate to pay tribute to the 100th birthday of one of the health physics profession’s greatest founders, Lauriston Taylor.

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