

## Joseph J. DiNunno (1921-2012)

It is with great sadness that the Board wishes to express its sense of loss of our esteemed and treasured colleague Joseph J. DiNunno, Member of the Board 1992-2002, who died August 27. Our sympathies go out to his family and loved ones. At the same time, we believe it is proper to recall some of the events in his remarkable career.

Joe DiNunno's career was one of tremendous accomplishments and real impact in the world. Joe was present at the birth of nuclear power with the Navy program under then Captain Hyman G. Rickover. He was among the first of the remarkably competent coterie of technical experts who grew nuclear power in the U.S. and worldwide. Indeed, Joe was truly the inventor of the science of beneficial siting of nuclear installations; his methods are now the stuff of handbooks and standards. His extensive writings in refereed journals show this well.

In the area of nuclear facility safety, from 1959-1972, Joe was senior engineer for the review and evaluation of the siting and design for ten nuclear power plants and research reactors. Joe was a major contributor to the regulation of nuclear power, serving as co-author of Federal Nuclear Safety Regulations 10CFR100, 10 CFR70, and 10CFR50. At the Atomic Energy Commission (AEC), he was famous for recruiting, developing and supervising specialists in the safety review of nuclear power systems and was in charge of coordinating safety research in radioactive waste disposal. Perhaps most important of all, he was an involved mentor to dozens of the nuclear professionals who follow in his footsteps today.

Joe was the first champion of beneficial siting of nuclear facilities, including environmental engineering and site design qualification studies. He invented the multi-attribute rating and ranking methodology for power plant siting that is in use at the Nuclear Regulatory Commission (NRC) today. Joe was responsible for the site selection and environmental permitting reports for seventeen nuclear power plants, along with environmental studies for four proposed high level waste repositories.

Some measures of the professional standing of Joe DiNunno:

- Member of the Space Applications Board, (1980-85) of the National Academy of Science/ National Research Council, serving to advise NASA on practical application of earth-observing satellites for environmental monitoring.

- AEC Scientific Representative in Paris, establishing direct technical exchanges on reactor technology with ten countries.

- US representative to the European Nuclear Energy Agency Committee on Reactor Safety Research

- Chairman of Maryland's Power Plant Siting Advisory Committee.

- Appointed by the International Atomic Energy Agency to review nuclear power plant siting in Turkey, Peru and Korea.

One cannot ignore Joe's prominence in earth sciences. To establish the regulatory regime at NRC, Joe had to recruit and develop a generation of earth and environmental scientists. At AEC and Nuclear Utility Services, Inc., Joe supervised Engineers, Hydrologists, Meteorologists, Health Physicists, Demographers, Ecologists, and Socioeconomic and Land Use Specialists! He nearly invented the concept of an interdisciplinary project team for environmental work. Joe led the group that developed the method of calculating the migration of liquid radioactive effluents through geologic pathways and water seepage from on-site storage.

It is no surprise that Joe was appointed by two Presidents to serve on the Board. Joe's appointment by President George Bush in 1992 and re-appointment by President Clinton in 1995 to the Defense Nuclear Facilities Safety Board attest to the admiration and deep regard of his professional peers. Joe demonstrated a relentless pursuit for technical excellence; in fact, Joe received the Secretary's Gold Medal for Distinguished Service from the Secretary of Energy, and the Administrator's Gold Medal for Distinguished Service from the Administrator of the National Nuclear Security Administration.

At the Board and throughout the nuclear weapons complex, Joe will always be remembered as the "Father" of Integrated Safety Management. This tightly formulated discipline has, at the Secretary's order, been adopted throughout DOE and its contractors, and has proved to be an enduring and highly effective method for controlling the hazards of nuclear work.

We will deeply miss Joe, and we pledge to be faithful to his legacy.

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