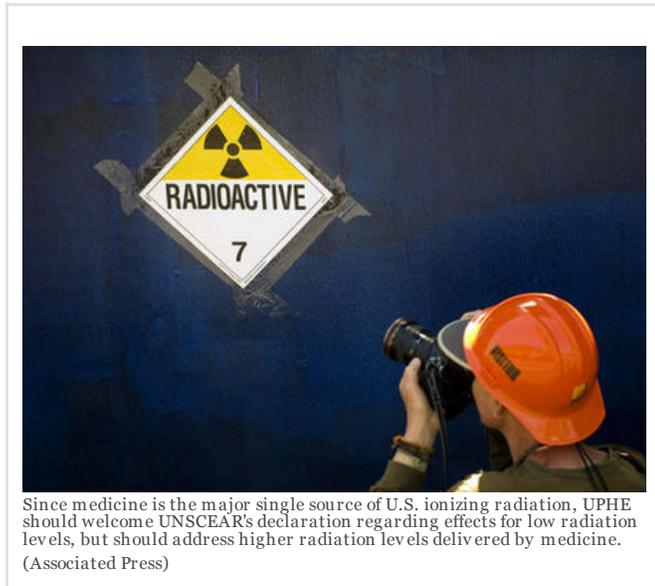


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My view: Utah nuclear power risks no big deal

By Gary Sandquist For the Deseret News

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Since medicine is the major single source of U.S. ionizing radiation, UPHE should welcome UNSCEAR's declaration regarding effects for low radiation levels, but should address higher radiation levels delivered by medicine. (Associated Press)

Utah Physicians for Healthy Environment opposes nuclear power development in Utah for many reasons, as recently reported by Ami Joi O'Donoghue ("Nuclear power: Folly, foe or friend?" Jan. 9). Let us address some of the claims.

Report 620 of the National Council on Radiation Protection and Measurements reveals that the total average ionizing (conversion to a net electric charge) radiation dose to U.S. residents in 2006 was 0.62 roentgen equivalent in man (rem, the amount of ionizing radiation required to produce the same biological effect as one unit of energy of high-

penetration x-rays). About half (48 percent) of the U.S. dose presented in Report 620 arose from medical use of ionizing radiation, and contribution is increasing yearly because of the great expansion of radiation use in medicine.

Significantly, all industrial applications of nuclear materials — including all radiation doses from nuclear power generation and disposal of radioactive waste (e.g. EnergySolutions) — were less than 0.1 percent of the total for both public and occupational workers.

The U.S. Environmental Protection Agency asserts the annual risk for cancer resulting from radiation exposure by U.S. residents is 11.6 /person-rem and 5.8/person-rem for death from cancer. Since the U.S. population is 330 million, the annual cancer induction from medical radiation estimated by the EPA is 115,000 induced cancers and 57,000 cancer deaths for 2006. Since medical application of ionizing radiation has increased since 2006, these cancer risks are greater. In view of these risk estimates, UPHE president Brian Moench should first focus its concern on the medical applications of radiation.

A Richter magnitude 9.03 earthquake and tsunami struck Japan on March 11, 2011 with devastating consequences. According to a Japanese National Police Agency report, 15,878 deaths, 6,126 injuries and 2,713 missing persons have resulted across 20 Japanese prefectures or regional land areas. The impact of this massive and rare earthquake and tsunami was unprecedented in modern history, and Japan has responded valiantly and rationally. A similar earthquake along Utah's Wasatch Fault would kill and injure tens of thousands of residents.

Six Fukushima workers received radiation doses exceeding 25 rem during the emergency, while the remaining 170 workers received doses between 10 and 25 rem. No workers have shown ill effects — they probably never will. Furthermore, radiation played no role in the coincidental deaths of another six Fukushima workers who died as a result of the tsunami.

The United Nations Scientific Committee on the Effects of Atomic Radiation has found no observable health effects from the nuclear accident in Fukushima. UNSCEAR chair Wolfgang Weiss has said that no radiation health effects had been observed in Japan among those in the area of the damaged nuclear power plants. Doses of radiation received by those near the damaged power plant were so low that no discernible health effect could be expected.

Since medicine is the major single source of U.S. ionizing radiation, UPHE should welcome UNSCEAR's declaration regarding effects for low radiation levels, but should address higher radiation levels delivered by medicine. Unfortunately, UPHE may attempt to claim that the same energy radiation photons used in medicine are somehow different from radiation photons associated with the nuclear industry.

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