National Academy of Sciences Starts NRC- Sponsored Cancer Risk Pilot Study

The National Academy of Sciences (NAS) has started the initial planning step of the Nuclear Regulatory Commission-sponsored pilot study of cancer risks in populations around six U.S. nuclear power plants and a nuclear fuel-cycle facility. The NRC is asking the Academy to carry out this pilot to help the agency determine whether to extend the study to additional U.S. reactors and fuel-cycle facilities.

NAS staff will be holding meetings in the next few months regarding the pilot study; meeting information will be posted on the Academy website 10 business days before a meeting. The pilot study, described in the staff’s update (SECY-12-0136) to the agency’s five Commissioners, will examine cancer risks around each of the seven nuclear sites using two types of epidemiological studies. The first will examine multiple cancer types in populations of all ages living near the nuclear sites; the second will be a record-linkage-based case-control study of cancers in children born near the sites. The six nuclear power plants are:

- Dresden Nuclear Power Station, Morris, Ill.
- Millstone Power Station, Waterford, Conn.
- Oyster Creek Nuclear Generating Station, Forked River, N.J.
- Haddam Neck (decommissioned), Haddam Neck, Conn.
- Big Rock Point Nuclear Power Plant (decommissioned), Charlevoix, Mich.
- San Onofre Nuclear Generating Station (permanently shut down), San Clemente, Calif.

The Dresden and Millstone sites include both operating reactors and a decommissioned reactor. The pilot effort will also study Nuclear Fuel Services in Erwin, Tenn. NAS recommended these sites because they provide a good sampling of facilities with different operating histories, population sizes around them, and expected levels of complexity in data retrieval from the relevant state cancer registries.

The NAS study aims to update and improve information on potential cancer risks around nuclear sites from the 1990 U.S. National Institutes of Health – National Cancer Institute (NCI) report, “Cancer in Populations Living Near Nuclear Facilities.” The NRC has used the 1990 NCI report as a primary resource when communicating with the public about cancer risks in counties that contain or are adjacent to nuclear sites.