

**Committee on Consumer Protection and Professional Licensure  
Committee on Veterans' Affairs and Emergency Preparedness  
Pennsylvania Senate  
Joint Hearing on Nuclear Preparedness and Energy  
Thomas Fidler, deputy secretary  
Department of Environmental Protection  
October 16, 2007**

Chairpersons Tomlinson, Baker, Boscola, Dinniman, and members of the committees, thank you for the opportunity to speak to you this morning. My name is Thomas Fidler, and I am the deputy secretary in the Department of Environmental Protection overseeing the waste, air and radiation management programs.

The department's role in Pennsylvania's nuclear power industry is primarily one of ensuring public health and safety during normal plant operations and in the event of an incident that may result in the release of radioactivity off the plant site. After the TMI Unit 2 accident in 1979, this role was mandated in the Radiation Protection Act (Act 147 of 1984) and DEP was authorized to maintain nuclear safety, emergency response and environmental surveillance capabilities. I am pleased to report that within the department's Bureau of Radiation Protection (BRP), we have one of the most skilled state radiation control programs in the country, with state-of-the-art radiation monitoring assets.

In the event of a radiation release or uncontrolled exposure incident, BRP has trained staff ready for deployment to the state's Emergency Operations Center (EOC), utility emergency operations facilities, and into the field equipped with the latest instruments to measure radiation. Teams can be dispatched relatively quickly, and the equipment can measure the amount and specific type of radiation present in the air. The department has hand-held radiation detection equipment that can be used by field personnel and drop-off radiation monitors that can be deployed in an area where radiation is believed to be located or is migrating. The data can then

be relayed via satellite to mobile vehicles and the state EOC where the information can be gathered and analyzed.

Acquired through federal homeland security funds, BRP has three large vehicles for monitoring and communications, as well as seven modified F-150 pick up trucks, which can monitor radiation in the field and feed that information immediately to the state EOC for analysis. These capabilities enable the department to provide well-informed recommendations to the governor and the secretary, as well as emergency personnel in the field, on what, if any, actions should be taken to protect the public.

To ensure Pennsylvania is prepared fully in the event of an incident, DEP—along with the Pennsylvania Emergency Management Agency the departments of Health and Agriculture, the state police, other state and county emergency agencies, and the three nuclear utilities operating in the commonwealth—participate in two to three exercises each year that are graded by the Federal Emergency Management Agency. That is in addition to many non-graded drills throughout the year.

Further, for the past 30 years, the department has maintained a comprehensive radiological environmental surveillance program in place around the five nuclear power plant sites in the commonwealth. DEP monitors routine low-level emissions of radioactivity from the nine active nuclear power plants on these sites. This includes off-site air, water, soil, sediment and foodstuff sampling, as well as passive direct radiation monitoring with special dosimeters. Given the threat of a terrorist attack or unmonitored release during the early phase of an accident, at some point in the near future, the administration believes the utility owners of nuclear plants should install active real-time radiation monitoring systems to improve off-site monitoring and response capabilities.

The department's level of preparedness for and response capabilities to a nuclear power plant accident or other radiological incident will be enhanced thanks to passage and signing of House Bill 496 earlier this year. This legislation updated the Radiation Protection Act by increasing the fees paid by the nuclear power industry to fund DEP's nuclear safety, emergency response and environmental surveillance work, and updated the fees paid to PEMA, the state police and counties. This was the first fee increase in 15 years, and will ensure the department's ability to monitor nuclear power plant operations, train and prepare for emergency response actions, purchase and maintain new equipment, and coordinate protection measures when nuclear materials are transported, as the law directs.

In terms of on-site plant security, DEP's role is strictly advisory and in support of the Nuclear Regulatory Commission and the plant operators. The department does have a safety specialist assigned to each of the five nuclear plant sites in Pennsylvania. Since February 2006, at the direction of Governor Rendell, DEP safety specialists have been conducting unannounced visits during off-hours to observe security at these plants.

Governor Rendell ordered these random security checks as a way to provide an extra measure of security for the public after reports of inattentiveness by a supervisor at Three Mile Island. Following the recent events at Peach Bottom, DEP's nuclear safety staff participated in the special NRC inspection, and will continue to perform random and unannounced plant checks to ensure maximum effectiveness. Since initiating these inspections, only one situation was discovered and reported to the utility and the NRC; a guard at TMI was found playing a video game while on duty and failed to acknowledge the safety specialist on numerous occasions. Following DEP's report, the utility operator Exelon changed its policy.

Nuclear power currently provides about 35 percent of the electricity generated in Pennsylvania. Governor Rendell has committed Pennsylvania to creating more energy at home, and reducing our dependence on foreign supplies. Nuclear power certainly needs to be part of that discussion, and an additional nuclear generating facility is being discussed at PPL's Susquehanna Steam Electric Plant in Luzerne County. Should plans move forward for the construction of a new nuclear generating facility in Pennsylvania, DEP will provide input to the NRC during its licensing hearings, urging all appropriate security measures be required as part of the plant's license.

Nuclear power generation is free of the significant emissions associated with conventional coal combustion plants and reduced the threat of climate change, however, the spent nuclear fuel (SNF) issue must be addressed. The federal Department of Energy has failed to license and bring the SNF disposal site at Yucca Mountain on-line as required. The administration believes this is a tremendously important issue that must be addressed soon. Specifically, the federal government should fully fund this site and complete it, or provide a central SNF storage facility for the nation. America's nuclear power plants are not suitable for long-term SNF storage.

As the discussion of the commonwealth's energy future unfolds, DEP's Bureau of Radiation will continue to work with the NRC, the utilities, PEMA, and other state and local agencies to make sure Pennsylvania's citizens are protected with the best trained, best equipped staff possible.

I thank you for the opportunity to speak to you today.