National work for building a post accident management policy

Work carried in the USA

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I will discuss the American response to nuclear accidents and how we approach all three phases. Within the Department of Energy, the mission is to administer and direct emergency response programmes that provide the capability to respond to and mitigate a nuclear or radiological event within the United States and, upon request, abroad. This can range from a source problem to the detonation of dirty bombs, improvised nuclear devices or transport accidents. Within the department, we look after our own facilities, where we are responsible for the response, consequence management, recovery and cleanup phases. In other nuclear incidents, we are only responsible for the response and consequence management phases.

Our authority is derived from the US Atomic Energy Act, which describes nuclear responsibilities, and Executive Order 12656, which covers responsibilities for emergency response, consequence management, recovery and cleanup for all the various federal agencies. The National Response Plan, under the Department of Homeland Security, lays out the structure for crisis and consequence management for all the US agencies. In addition, we are governed by Presidential Decision 39 and 62, for responding to nuclear terrorism within the US. Our National Security Council issues national security policy directives and the homeland security policy directives.

Within our department and the national response to any type of emergency, a number of assets are available. In our department, we control response assets as well as consequence management assets. Other departments and agencies control the recovery and cleanup assets. For the purposes of this presentation, I will cover consequence management. The radiological assistance programme (RAP) is multi fold and can respond to crisis as well as consequence management. They set up the response structure. Usually, under the RAP, the first responders are on site within two to four hours and set up the response structure.

The Department of Energy has the lead to establish the Federal Monitoring and Assessment Centre, which would bring together all the federal agencies within the US and would provide information on monitoring and assessment to the federal, state and local authorities. The department has a 32 person team to lead this centre and the number of people involved can amount to hundreds. Among our activities, we set up field teams to look at offsite consequences and the distribution of information. In addition, we conduct atmospheric plume modelling that would be coordinated through the response organisations.

Within the international community, we participate in the international exchange programme (IXP), where anyone can gain access to plume modelling data in the event of an emergency. In addition, we provide an aerial measuring system, which provides the deposition of dose on the ground, and this service can be deployed internationally. At the radiation emergency assistance centre and training site, we train hospitals, doctors and nurses on how to handle radiation contamination patients. In the past, we have been well served by our communication network, our response assets and our facilities throughout the country.

In summary, the Department of Energy is ready with versatile emergency response teams that are highly motivated and trained. We exercise routinely on a national and international level and are ready to provide support when required.