

January 29, 2007

The Honorable Edward J. Markey  
United States House of Representatives  
Washington, D.C. 20515

Dear Congressman Markey:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter of November 9, 2006, regarding the incorporation of technologies and other means to mitigate the potential damages and consequences of a terrorist attack against a new nuclear power plant. In your letter, you strongly encourage the Commission to consider large truck bomb attacks and aircraft strikes in the design of new nuclear power reactors. We want to assure you that the NRC has taken significant steps to increase security at the Nation's nuclear power plants and that these lessons are being applied to the next generation of nuclear power plants.

Rulemaking activities are the principal means by which NRC will require the next generation of nuclear power plant applicants to factor security into plant designs and layouts. The NRC is conducting a series of rulemakings to establish a clear regulatory basis for the security of these plants. The pertinent rulemakings are being completed and include significant revisions to 10 CFR Part 73.1, "Purpose and Scope," and section 73.55, "Requirements for Physical Protection of Licensed Activities in Nuclear Power Reactors against Radiological Sabotage." In addition, a new section 73.62, "Security Assessment for Nuclear Power Plants," is being considered by the Commission for publication as a proposed rule.

The proposed revision to 10 CFR 73.1 describes the design basis threat (DBT) characteristics against which licensee security programs must defend with high assurance. This final rule is expected to be issued in early 2007. The proposed revision to 10 CFR 73.55 describes performance objectives and requirements for the development of licensee physical protection programs. This proposed rule would also incorporate the security requirements imposed by Commission orders issued after the terrorist attacks of September 11, 2001, into the existing regulatory framework. The proposed rule has been published for public comment, and a final rule is anticipated to be issued in early 2008. The Commission has previously concluded that existing plants need not be specifically designed to withstand fully the impact of heavy commercial aircraft.

The Commission has also directed the NRC staff to develop a rulemaking (10 CFR 73.62) to require applicants to assess specific security features that could be incorporated into the facility design (including site layout) to enhance security effectiveness. The Commission further directed that the assessment include the relevant security requirements and enhanced mitigative measures that were established by order for the operating plants. Mitigative measures are those measures licensees would have in place prior to, and execute during, a terrorist attack to minimize the potential consequences. The proposed rule is intended to ensure that security design features are assessed early in the design and regulatory review process.

Since 1994, the DBT has included a four-wheel drive vehicle bomb threat. In the proposed DBT rule, the land vehicle bomb capability would be expanded to broaden the types of vehicles and to provide for the possibility of such vehicles coordinating with an external assault. As noted above, these requirements would also apply to all future power reactor licensees. NRC considered both of the terrorist incidents you mention in your letter (i.e., the Oklahoma City and 1993 World Trade Center bombings) along with other international incidents and intelligence information in formulating the current DBT characteristics. The NRC continuously monitors the threat environment to ensure continued applicability of the DBT characteristics and to identify the potential need for re-assessment of the DBT by the Commission. In addition, the proposed 10 CFR 73.55 rulemaking includes specific requirements intended to enhance vehicle barrier system performance.

As you noted in your letter, the nuclear industry was compelled to spend considerable resources to protect against a terrorist attack. The Commission is looking at additional ways to address the threat of aircraft strikes for future nuclear reactors. The NRC has met with vendors and other stakeholders to discuss the issue. The Commission will keep you informed of its progress on this issue.

The NRC has taken significant steps to increase security at the Nation's nuclear power plants and similar steps are being taken to incorporate these lessons into the licensing of the next generation of reactor designs. The Commission is committed to ensuring the continued protection of the public health and safety, the environment, and the secure use and management of radioactive materials. If you have further questions, please contact me.

Sincerely,

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Dale E. Klein