WRITTEN STATEMENT

BY GREGORY B. JACZKO, CHAIRMAN

UNITED STATES NUCLEAR REGULATORY COMMISSION

TO THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

AND THE

SUBCOMMITTEE ON CLEAN AIR AND NUCLEAR SAFETY

UNITED STATES SENATE

March 15, 2012

Introduction

Chairman Boxer, Ranking Member Inhofe, Chairman Carper, Ranking Member Barrasso, and Members of the Committee, on behalf of the Commission, I appreciate the opportunity to appear before you to provide an update on the NRC's implementation of safety enhancements based on our review of the Fukushima Dai-ichi nuclear accident. I am pleased to report on the significant progress that we have made toward strengthening the safety of nuclear power plants in the United States.

With everything that we have assessed to date, the Commission continues to believe that there is no imminent risk from continued operation of nuclear power plants in the United States. At the same time, the NRC's assessment of insights from the events at Fukushima Dai-ichi leads us to conclude that additional requirements should be imposed on licensees to increase the capability of nuclear power plants to mitigate beyond-design-basis extreme natural phenomena.

When we last appeared before you in December, the Commission was considering the staff's report on prioritizing the recommendations of the Near-Term Task Force ("Task Force"). That report prioritized the Task Force recommendations into three categories, or tiers. Tier 1

consists of actions to be taken without delay, and for which sufficient resource flexibility, including the availability of critical skill sets, exists. Tier 2 comprises the next set of actions that can be initiated as soon as sufficient resources or critical skill sets become available. Tier 3 recommendations require further staff study or shorter-term actions to be undertaken first.

The staff's paper also included two other important components: schedules, milestones, and resources associated with Tier 1 and Tier 2 activities; and the identification of a number of additional issues with a clear nexus to the Fukushima Dai-ichi event that may warrant regulatory action, but which were not included with the Near-Term Task Force recommendations. Those additional issues have been prioritized by the staff and, where appropriate, folded into the existing three tiers of recommendations.

The staff has been conducting frequent public meetings with stakeholders, including the industry and the public, and with the Advisory Committee on Reactor Safeguards (ACRS). In conjunction with those meetings, the staff developed a process for reviewing any new recommendations from stakeholders and the ACRS to ensure a disciplined approach was applied for identifying lessons learned from Fukushima.

As a result of this input, there have been enhancements to Tiers 1, 2 and 3 recommendations that revise or expand the scope of those recommendations.

In February, the staff provided the Commission with draft Tier 1 orders. The orders require several things:

1) Licensees must develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis extreme natural event.
2) Licensees with BWR Mark I and Mark II containments must have a reliable hardened vent to remove decay heat and maintain control of containment pressure within acceptable limits following beyond-design-basis events that result

in the loss of active containment heat removal capability or prolonged station blackout.

3) All operating reactors must have a reliable indication of the water level in associated spent fuel storage pools capable of supporting identification of certain specified pool water level conditions by trained personnel.

For all three of these orders, licensees are required to submit their plans for implementing these requirements to the NRC by February 28, 2013, and complete full implementation no later than two refueling cycles after submittal of a licensee's plan or December 31, 2016, whichever comes first. Additionally, licensees are required to provide periodic status reports so that the staff can monitor their progress in implementing the orders and take prompt and appropriate regulatory action, if necessary.

The Commission issued these orders on Monday, March 12, 2012.

In addition to the three orders, on March 12, licensees were also issued a "request for information" that includes the following:

1) Licensees were asked to perform and provide the results of a reevaluation of the seismic and flooding hazards at their sites using present-day NRC requirements and guidance, and identify actions that are planned to address vulnerabilities. The results will determine whether additional regulatory actions are necessary (e.g., ordering plant modifications).

2) Licensees were requested to develop a methodology and acceptance criteria and perform seismic and flooding walkdowns. We expect any performance deficiencies identified would be addressed by the site's corrective action program. Licensees were asked to confirm that they will be using the walkdown procedures jointly developed by the NRC and industry or provide alternative, plant-specific procedures.

3) Licensees were requested to assess the ability of their current communications to perform under conditions of onsite and offsite damage and prolonged loss of alternating current (AC) electrical power. Licensees also were requested to assess the plant staffing levels needed to respond to a large-scale natural event and to implement strategies contained in the emergency plan.

The remaining Tier 1 recommendations comprise two rulemakings addressing station blackout and integration of emergency procedures. The Commission directed the use of an Advance Notice of Proposed Rulemaking for the station blackout rulemaking to allow for early stakeholder involvement and formal comments. The Commission also designated the station blackout rulemaking as a high-priority activity with a goal of completion within 24-30 months from October 2011. The emergency procedures integration rulemaking also will use an Advance Notice of Proposed Rulemaking to solicit early stakeholder input.

Going forward, we will continue stakeholder interaction to support any necessary guidance development activity. Beyond that, we will continue our ongoing efforts on the highest priority, near-term rulemakings.

Regarding Tier 2 recommendations, we anticipate beginning that work once we collect information from Tier 1 activities that is required in order to address Tier 2 recommendations, and we are able to free up critical resources previously devoted to Tier 1 activities. For example, the review of other external hazards will begin when resources currently being applied to the flood hazards assessments become available.

Chairman Boxer, Ranking Member Inhofe, Chairman Carper, Ranking Member Barrasso, and Members of the Committee, this concludes my formal testimony today. On behalf of the Commission, thank you for the opportunity to appear before you and for your continued interest in our work on these important issues. We look forward to continuing to work with you to advance the NRC's important safety mission. We would be pleased to respond to any questions you may have.