

About emergency exercises:

"In 1980, the NRC required that plant owners draw up evacuation plans for the public within ten miles of each plant. (Compare that with the NRC's recommendation that U.S. citizens within fifty miles of Fukushima be advised to leave.) It also mandated that biennial emergency exercises be conducted at each nuclear plant site. During the exercise, a plant accident is simulated and the Federal Emergency Management Agency evaluates the steps local, state, and federal officials take to protect the public from radiation. In parallel, the NRC evaluates how well plant workers respond to the simulated accident and work with off-site officials.

The biennial exercises are better than nothing, but not by much. In the simulation, winds are assumed to blow in only one direction, conveniently but unrealistically limiting the number of people in harm's way. The evacuations are only simulated, so there is no way to tell if the complicated logistics of evacuating all homes, businesses, schools, hospitals, and prisons could be successfully carried out. Instead, the exercises merely verify that officials have the right phone numbers and contractual agreements for the buses to carry evacuees and the hospitals to treat the injured and contaminated.

These exercises only provide an illusion of adequate preparation. As the Fukushima experience painfully demonstrated, rapidly moving people out of harm's way in the midst of a nuclear crisis is exceedingly difficult, yet critical.

Although the various Three Mile Island reviews converged on the need for major nuclear safety upgrades, there was no consensus on how wide-ranging the reforms should be. At the heart of the safety debate were these questions: Should the reforms address only the issues raised by the last accident? Or would that be tantamount to fighting the last war? If the next accident were triggered by a completely different event and proceeded along a different track, the failure of a too-narrow approach would be evident. Because of the NRC's regulatory focus on design-basis accidents that followed a certain script, it had never taken a comprehensive look at the universe of beyond-design-basis accidents - that is, everything else that could go wrong - or the need to protect against them."

From *Fukushima - The Story of a Nuclear Disaster*, by David Lochbaum, Edwin Lyman, Susan G. Stranahan and the Union of Concerned Scientists
<http://www.ucsusa.org/>. <page 152-153>

Find a review here: http://www.ucsusa.org/nuclear_power/making-nuclear-power-safer/preventing-nuclear-accidents/fukushima-book.html#.VMjmi8adzVO