

NRC report downsizes estimates of deaths from nuclear plant meltdown

August 3 2011, by Bob Yirka

The U.S. Nuclear Regulatory Commission (NRC) in conjunction with Sandia National Laboratories has been working on a report to update and revise estimates of the number of people that would be killed or harmed as a result of a nuclear core meltdown at a plant in the United States. While currently still unavailable to the public, a copy of the report was obtained by the *Union for Concerned Scientists*, under the Freedom of Information Act; the group then gave a copy to the *New York Times*, which then ran a story on its findings.

In the report, a work in progress over the past six years, the research team finds that previous estimates of the number of deaths likely to occur due to a meltdown, to be much higher than new evidence suggests; this because they believe the amount of [cesium 137](#) released would be far less than was last estimated by the agency.

After much study, the report suggests that only 1 to 2 percent of the cesium 137 in a reactor's core would escape in a meltdown, as opposed to previous estimates of up to 60 percent. This finding has led the researchers to believe that rather than 1 person in 167 (within a ten mile radius) likely developing a latent cancer over time, the number should be more like 1 in 4,348; and 1 in 6,250 for those within fifty miles, rather than 1 in 2,128.

These projections are based on a complete blackout leading to a reactor core meltdown, which means a total loss of power from the grid, and the exhaustion of backup power from generators and batteries. They are also

based on best-case scenarios and come from studying over a hundred reactors in the United States of two basic kinds, boiling water and pressurized.

In short, the report concludes that the number of deaths that would result from a nuclear plant core meltdown in the United States would be far lower than all other previous estimates, due to both the revised estimates of how much cesium would be released and the slow moving nature of such a disaster. The team suggests that because it takes time for a meltdown to occur as a result of a plant losing power, most people would have plenty of time to evacuate before being exposed to seeping radiation; though it doesn't address the big question of when exactly people might be told to evacuate in light of a power outage; a big concern in light of allegations about the timeliness of evacuation calls during the Fukushima disaster in Japan.

The report is due to be officially released to the general public some time next spring.

Via [New York Times](#)

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