

As Japan struggles to contain radiation from the nuclear reactors damaged in the double whammy of a massive earthquake followed by an even more devastating tsunami, the political consequences of the accident are already being felt around the globe. Germany has [apparently](#) put on hold, at least for now, plans to extend the operating lives of its nuclear power plants. Switzerland [has suspended](#) new plant building plans. And Austria is [calling for](#) a review of the earthquake safety of its existing plants. In the U.S., speculation [is building](#) that recent enthusiasm for the first domestic expansion of nuclear power plants in 30 years will quickly fade in light of the Japanese disaster.

Meanwhile, Will Saletan of Slate [published](#) an article today, *Nuclear Overreactors*, in which he argues that the predictable panic over nuclear energy as a result of the Japanese crisis is wrongheaded. His argument is twofold. First, he argues that — at least so far — the damage from the Japanese plants is relatively small: the only person to have died was hit by a crane; workers exposed to radiation appear to have received relatively low doses; and the containment systems themselves have not ruptured. The amount of radiation released so far also appears to be modest. Second, Saletan argues, we don't come close to applying the same level of regulatory rigor to other energy sources like oil drilling. Moreover in the face of the Deepwater Horizon oil rig explosion — in which 11 workers died and the Gulf of Mexico was inundated with oil — we never seriously contemplated eliminating oil drilling. Instead, as he says, in the oil business:

Accidents happen. People die. Pollution spreads. We don't abandon oil. We study what went wrong, try to fix it, and move on.

With nuclear accidents, by contrast, our reaction at least in response to Three Mile Island was to get out of the business altogether (although after the far deadlier Chernobyl accident, European plans to [expand](#) nuclear power went forward). Saletan also says that the predictable path if we abandon the move to nuclear power will be a heavier reliance on fossil fuels, a vastly more dangerous proposition:

The rate of direct fatalities per unit of energy production is 18 times worse for oil than it is for nuclear power.

Saletan's article raises implicitly but doesn't attempt to answer why the public reaction to nuclear accidents is so much stronger than its reaction to deaths that result from the fossil fuel industry. The question, in my view, is a really interesting one. Surely, one reason is the

world's history with nuclear weapons and the horror they inflicted on two Japanese cities. The U.S. [inflicted more casualties](#) on Tokyo in the 1945 carpet bombing raids during World War II than it did in dropping an atom bomb on Hiroshima but the Hiroshima deaths are seared in the world's collective memory much more deeply. Perhaps the atomic bomb deaths were more shocking because caused by a single bomb, but perhaps the long term effects of radiation exposure and the fears of cancer those effects invoke also explain our more intense reaction. Social scientists who study risk perception also know that we [tend to fear and overestimate risk](#) from unfamiliar and catastrophic events more than we fear risk from more ordinary activities (deaths by automobile v. deaths by nuclear meltdown). That doesn't entirely explain the differential response to oil drilling as opposed to nuclear accidents but again the long term unknowns of radiation exposure seem more exotic than the immediate effects of a drilling accident. And splitting atoms to create a nuclear reaction seems in some ways the stuff of science fiction (though deep water drilling requires scientific and technological prowess largely unknown to the public — see [here](#) for a graphically terrific explanation). Finally, the fact that radiation can spread across huge areas and expose population centers to potential risks that can't be seen, while the results of a drilling accident are for the most part highly visible, again might explain our differential reactions. Oil contamination and radiation exposure both can create long term and largely hidden harms but radiation exposure somehow seems more insidious because its effects are largely latent and invisible for many years.

These are my initial thoughts about what I think is the interesting contrast Saletan identifies. What else might be going on?