

Measurably illogical

Even a minor incident handled properly at a nuclear power plant evokes reactions lacking balance and logic.

So, a nonmeasurable amount of radiation—that is, so small that it dissipated before any trace could be detected by monitors at the site boundary—was released in approximately 1 cubic foot of steam from Consolidated Edison’s Indian Point-2 nuclear power plant, in Buchanan, N.Y., on February 15 (*NW*, Mar. 2000, p. 76). According to all reports, the very minor incident was handled exactly as prescribed by federal regulations: The utility declared an alert, reported the incident to the Nuclear Regulatory Commission, and monitored the site and its perimeter. Monitoring by both the utility and the NRC continued into the next day, when normal oversight of the plant was reestablished. All steps and procedures were performed within established time limits.

From the reaction of the governor of New York, local residents, and antinuclear groups, however, you would think that a Chernobyl-like accident had occurred, even though all readings right after the incident were normal. *The utility and the industry’s regulating organization did everything they were supposed to do*, and yet are being chided for not having done enough. The alarm system in the roof vent, through which the steam escaped from the containment building, worked *exactly as it was supposed to*, causing the vent to close immediately upon detection of the radioactivity in the steam, thereby keeping the release to only a second or two. Even so, residents were quoted as saying that they were afraid to brush their teeth, or make coffee, for fear of the presence of radiation in their water.

There are a couple of interesting and pertinent facts that should be highlighted in the discussion of this incident. The alert—of which there are only a few each year among the 100-plus nuclear power plants in the United States—was *the first incident of any kind or level in 26 years of Indian Point-2’s operation*. I challenge anyone to find another industry or heavy industrial plant with a safety record that good (fortunately, the news media balanced the quotes noted above with some from citizens who could see that this safety record was quite outstanding). Also, sirens were not sounded to alert the public of the incident, because it was so minor. Nevertheless, some residents think that *any* incident should be called to the attention of the public. What? And create a massive panic over a nonmeasurable amount of radiation?

Daily, we humans participate in activities that hold far more risk than the release of this minute amount of radiation ever could. Getting into and out of the bathtub. Driving a car. Drinking alcohol. Driving a car after drinking alcohol. Smoking a cigarette. Crossing a busy street.

And then there are risks—in my opinion, quite unnecessary risks—to which some humans willingly, and even eagerly, subject themselves: Suntanning. Plastic surgery. Injections of toxic substances into their faces for cosmetic purposes. All of these in the name of vanity!

In fact, for all of you nonbelievers in the linear no-threshold hypothesis (LNTH), the injection of Botox® (“a purified protein toxin” produced by the *Clostridium botulinum* bacterium) around the eyes to reduce the appearance of wrinkles is a fine example to draw upon when trying to get the public to understand why the LNTH doesn’t make sense. Just as small amounts of the toxin produced by this bacterium—which can kill a person who ingests enough of it—can provide a “beneficial” effect (i.e., less noticeable wrinkles, albeit the tradeoff is rather an expressionless face), so are small amounts of radiation—which in large doses can be fatal—not harmful, and may even be somewhat beneficial.

Why then does there seem to be a complete absence of logic where radiation is concerned? Why can’t many in the general population of a highly educated country such as the United States balance overblown reports of truly minor incidents at nuclear power plants (has anyone heard about an incident of *any* kind at a fossil plant lately?) with a dose of reality?

It is difficult to imagine a world where balance would actually play a part in our decision-making, where people could see that there might be a good reason for the continuation and support of our system of nuclear power plants: a plentiful supply of electricity. I certainly would have had a more difficult time writing this editorial without the electricity that allows me to operate my PC—electricity that most likely is supplied (especially since we are located in the Chicago area) by one of those pesky nuclear power plants.—*Betsy Tompkins, Senior Editor*