

June, 2003

## **The Other Side of the Story About Nuclear Reactor Safety**

These are busy days for the commercial nuclear power industry. Even though a recent DOE report has stated that the economic case for nuclear power is "difficult to demonstrate," and the Congressional Budget Office has warned that there would be a high risk for financial default on any new reactor projects, the industry is planning a "renaissance." Such a renaissance would of course require taxpayer-funded subsidies galore, evisceration of existing regulations, minimization of public involvement in any nuclear-impacted community, and a high tolerance for massive quantities of nuclear waste. But one inconvenient fact seems to be raining on the nuclear industry's parade: their plants are crumbling down. Hardly a ringing endorsement for building new plants.

A telling example of this is the case of Davis-Besse, the relatively young (went online in 1978) nuclear reactor near Toledo, Ohio that developed a hole in its reactor vessel head, caused by boric acid leaking from reactor vessel nozzles. And while the industry insists that the situation at Davis-Besse was an anomaly, and continues to request (and invariably receive) permits to run their reactors for twenty extra years at increased intensities, consider the other side of this story:

- **NRC knew about the risks, but did not act.** NRC had specific knowledge of the type of problem that caused the leaks at Davis-Besse more than a year before they were actually discovered at Davis-Besse in March, 2002. There was widespread knowledge of similar problems at a French reactor, and the Oconee reactor in South Carolina was found to have such problems in February 2001.
- **NRC risked public health and safety by striking a deal with Davis-Besse's owners.** As the problem of vessel nozzle cracking was further researched, Davis-Besse was considered an "at-risk" plant, vulnerable to such problems. Rather than force FirstEnergy to shut down Davis-Besse on December 31, 2001, NRC repeatedly compromised and the plant was allowed to continue to run for six additional weeks, to February 16, 2002.
- **NRC apparently sees itself as accountable to no one.** NRC's own Inspector General released an "event inquiry" report on December 30, 2002, which not only criticized NRC's handling of the inspection and shutdown of Davis-Besse, but questioned NRC's priorities, finding that "NRC appears to have informally established an unreasonably high burden of requiring absolute proof of a safety problem, versus lack of reasonable assurance of maintaining public health and safety, before it will act to shut down a power plant." Rather than accepting the IG report as a warning sign to make urgent changes, the NRC Commissioners circled their wagons and responded with a cavalier brush-off, calling the IG report "Monday-morning quarterbacking."

- **FirstEnergy has demonstrated that it has little or no "safety culture."** In its own review of what happened at the plant, FirstEnergy flatly admitted that an emphasis was placed on "production over safety."
- **A Survey of NRC employees finds NRC's own "safety culture" to be deficient.** The "2002 Survey of NRC's Safety Culture and Climate," conducted by an outside, independent firm, found that "many NRC employees perceive a compromise of the 'safety culture...'" and that only slightly more than half (53%) of employees feel that it is "safe to speak up in the NRC." Compared to the same survey performed in 1998, there was a "significant decrease" in the percentage of employees who felt that "NRC's commitment to public safety is apparent in what we do on a day-to-day basis." Perhaps most troubling, however, was that the report found "[c]oncern that NRC is becoming influenced by private industry and its power to regulate is diminishing." In light of the situation at Davis-Besse, these findings are even more distressing.
- **The reactor problems are hardly confined to Davis-Besse.** Even more than a year after the massive damage was discovered at Davis-Besse, the NRC had hardly contained the problem. Further evidence emerged that all similar reactors (of 103 reactors in the U.S., 69 are pressurized water reactors, or PWRs, like Davis-Besse) were very vulnerable, as a leak and acid deposits were discovered at the South Texas Project 1 reactor. Apparently confident that it was a sound reactor, the NRC had granted it a power uprate to produce at greater intensity, little more than a year prior to finding the leak.

History suggests that unexpected problems at reactors are inevitable and common. The technology is inherently dangerous, and negligence, incompetence, and a regulator that is compromised by heavy industry influence only serve to magnify that danger.