

Newly-released documents on safety culture:

U.S. Nuclear Regulatory Commission ignored evidence to OK Davis-Besse start-up

April 7, 2004

Sandy Buchanan, Executive Director
Ohio Citizen Action

- [Davis-Besse Nuclear Power Station, NRC Special Inspection, Management and Human Performance, Corrective Action Effectiveness](#), Report No. 05000346/2004003 (DRP), *U.S. Nuclear Regulatory Commission*, dated March 31, 2004, released April 6, 2004, 130 KB pdf.

The U.S. Nuclear Regulatory Commission has presided over two near-meltdowns at the Davis-Besse nuclear power plant, in 1985 and 2002. Each endangered the largest freshwater system in the world, the Great Lakes, and the 40 million people who depend on it.

One would think that this would give the NRC decisionmakers pause to reflect, but one would be wrong. Internal documents just released show that in approving FirstEnergy's restarting Davis-Besse, the NRC acted as recklessly as ever.

On March 8, in announcing the go-ahead, NRC Regional Administrator James Caldwell told reporters that NRC's safety-culture assessment found that 100% of Davis-Besse employees said (1) they would raise safety issues, and (2) they thought management would deal with those issues promptly.

That the employees would raise safety issues was no surprise.

The second claim -- about what employees thought management would do in response -- was completely at variance with previous evidence. Caldwell and his staff did not make public the basis for this claim, and said the report was still being written.

Yesterday, almost a month after the decision, the report quietly appeared in the NRC's document system. No evidence to support Caldwell's claim is in it.

To the contrary --

- The Commission failed to do the most basic assessment: whether what it calls "HIRD" -- harrassment, intimidation, retaliation, and discrimination -- was actually continuing at this workplace.
- The minimal investigation they did was so skewed as to rule out finding out what was going on.
- Even so, the employees, as always, took advantage of every opportunity to try to get through to the Commission that something is very wrong at this plant. As before, they provided disturbing new evidence.

1. The Commission didn't find out whether harrassment, intimidation, retaliation, and discrimination were continuing at this workplace.

Imagine the following exchange at the local hospital:

Doctor: Where's Mr. Davis?

Intern: We released him this morning.

Doctor: Why? I'm looking at his chart and he's been getting sicker by the day. There's no evidence he had recovered.

Intern: Yes, but we got all the medical monitoring equipment working properly.

Doctor: Did it show that he had recovered?

Intern: We were so anxious to release him, we didn't bother to check.

As absurd as this conversation is, it captures the approach of the NRC study group. Rather than seeing whether harrassment, intimidation, retaliation, and discrimination was occurring, it dwelt on process: paperwork, meetings, procedures, in-plant emails, and so on.

The most minimal assessment of safety culture would have had two steps:

First, the Commission would have repeated the individual surveys of May and November, 2003, which showed actual conditions in the plant bad and getting worse. The Commission would have conducted these surveys with necessary safeguards to guarantee the confidentiality of employee responses.

Second, where employees reported management misconduct, the Commission would have investigated, and taken necessary action against those responsible -- again, with

all necessary whistleblower safeguards.

The Commission did neither.

Instead, it looked at, and ratified, the company's process: paperwork, procedures, charts, and so on. Where employees raised management misconduct, the Commission reported it as "actions. . . taken as retaliatory," "statements. . . taken as derogatory, intimidating," (page 1 and throughout).

Such statements and actions either were retaliatory, intimidating, etc, or they weren't. It is a legal matter. If so, they were violating the *Atomic Energy Act of 1954* and the *Energy Reorganization Act of 1974*. It the Commission's responsibility, under the same laws, to investigate and take appropriate action.

Instead of investigating the alleged illegal management activity, the Commission examined what was wrong with employees that might have caused them to answer surveys in such a negative way. They concluded, at great length, that the employees were tired and frustrated.

Another explanation is possible: that the employees were telling the truth about the misconduct. The Commission didn't bother to pursue that possibility.

2. The survey the Commission approved was so skewed as to rule out finding out what was going on.

The NRC Inspection Team reviewed a survey conducted in December, 2003, by a contractor working for FirstEnergy and concluded --

"The licensee's contractor interviewed 100% of plant staff, from Quality Assurance, Chemistry, Plant Engineering, Operations, and Maintenance who were onsite and available to be interviewed during the last week of December 2003. The interviews were conducted in group sessions referred to as focus groups. This was an adequate sample based on time and staff availability," (page 5).

First, these were not "focus groups."

A focus group is something completely different: it is a small group selected from a wider population for an open discussion of its members' opinions about or emotional response to a particular subject. It is used at the preliminary or exploratory stages of a study to explore or generate hypotheses and develop questions or concepts for future systematic, scientific research.

- Focus group members have never met one another.
- Focus group members will not see one another again except by rare coincidence.
- Focus group facilitators have never met the group members.
- Focus group facilitators do not have a past power-relationship with the group members.
- Focus group facilitators are not under contract to the group members' employer.
- Focus group topics do not include possible revelations of criminal activities by the company that hired the facilitator.
- Focus group comments cannot lead to members being harrassed, intimidated, retaliated against, or discriminated against by the company that hired the facilitator.
- The results of focus group discussions are never presented as a representative sample of anything; they are ideas, clues, hypotheses to be tested by future research.

So, whatever the FirstEnergy contractor was using, it wasn't focus groups.

What does it matter what they called it? It matters because it illuminates why these group interviews are so wrong for the intended purpose:

"The method of focus group discussion may also discourage some people from trusting others with sensitive or personal information. In such cases personal interviews or the use of workbooks alongside focus groups may be a more suitable approach. Finally, focus groups are not fully confidential or anonymous, because the material is shared with the others in the group," ('Focus Groups,' Dr. Anita Gibbs, Research Officer, Probation Studies Unit, Centre for Criminological Research, Oxford University, Oxford, England, 1997).

Second, the most forthright and critical workers were left out of the group-interviews. As above, the group-interviews were of "100% of plant staff, from Quality Assurance, Chemistry, Plant Engineering, Operations, and Maintenance, who were onsite and available to be interviewed during the last week of December 2003."

The report does not mention something that the Commission officials must have known: In the spirit of the season, FirstEnergy had laid off their contract-employees before the holidays, only to rehire them after New Year's. Why? So the company wouldn't have to give them paid holidays.

Previous surveys had shown that the contract-employees at Davis-Besse were much more likely to give straight answers to questions about FirstEnergy management

misconduct. This stands to reason, since the contractors were not dependent on management for the long-term.

This means that FirstEnergy's consultants chose to do their interviews during the one week in the year when they could be sure that the most critical employees would not be around.

3. The NRC itself ignored disturbing news from the employees

The NRC Inspection Team conducted its own interviews of 120 people, including 118 FirstEnergy employees and 2 contractors, during its Jan 12 - Feb 12, 2004 visit:

- In general, more negative comments about management than they had seen before: "Throughout the interview process, the Inspection Team, in general, noted a more negative tone in responses to questions dealing with management behavior and effectiveness than during similar interviews in May 2003. When concerns were raised, the responses were often considered to be presented in an intimidating manner or the individuals did not believe the issues had been satisfactorily addressed," (Enclosure, page 9).
- A continued management emphasis on schedule over safety: "In response to a question about management caring about safety versus cost and scheduling the majority believed that the recent focus and push on the schedule and scheduling problems had led to the decline in responses," (Attachment 3, page 2). ". . . those who could provide explanations described examples of inappropriate management behavior and issues with scheduling pushes," (Attachment 3, page 3).
- An exhausted and frustrated staff: 81% indicated that they had been affected by the scheduling of six 12-hour shifts, or more, per week (Attachment 3, page 4). Some haven't been paid for the extra work (Attachment 3, page 4), some admit to making errors (Attachment 3, page 4), others are taking "self-styled mitigation measures of which their management was unaware," (Enclosure, page 6), half answered that the ability to perform their job had been affected (49%), and the other 51% also admitted to being less efficient (Attachment 3, page 5).
- Continued references to management intimidation and retaliation against employees: "In the area of management comments, the Inspection Team received information regarding manager comments that the staff considered to be inappropriate or degrading," (Enclosure, page 8). "A few examples were

also provided about what some individuals perceived to be punishment," (Attachment 3, page 2). "Some examples of what could be viewed as retaliation were also provided," (Attachment 3, page 3).

- Lessons unlearned: 10% of the people interviewed believe there is potential for "an event of the same magnitude as the vessel head corrosion" to happen again, "the most common explanation offered for that view was the potential for management to lose focus in the future or having inadequate management returning to positions in charge," (Attachment 3, page 7).
- Errors doubling: " Another supervisor suggested that fatigue had begun to affect worker performance, noting that the rate of minor errors doubled late in the outage," (Attachment 4, page 1).
- Lack of credibility: "Regarding schedule credibility, one individual expressed frustration with the schedule, describing it as needlessly cycling people. Others expressed similar views, noting that restart was always 1 - 2 months away," Attachment 4, page 2).
- Safety slighted: ". . .the group [from the Quality Assurance/Quality Control Department] indicated that the staff believed management had been less conservative as recent milestones approached, such as for the auxiliary feed pump, containment spray pump breaker, and under-vessel inspection, as well as during the Normal Operating Pressure testing. Long work hours were also discussed, and a worker who was fired for refusing to work more than 40 hours a week was mentioned," (Attachment 4, page 4).