

# United States Senate

WASHINGTON, DC 20510-3001

June 14, 1994

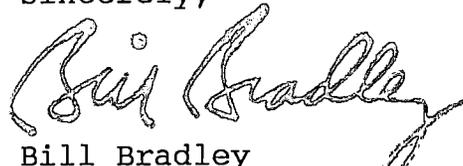
TO: Mr. Richard L. Bangart  
Director  
Nuclear Regulatory Commission  
Office of Congressional Affairs  
1717 H Street, N.W.  
Washington, D.C. 20555

RE: Marie Weller

I forward the attached for your consideration. I would appreciate receiving a written reply with regard to this matter as soon as possible. Please direct your response to the attention of the member of my staff listed below.

Thank you very much for your time and assistance in this matter.

Sincerely,



Bill Bradley  
United States Senator

PLEASE DIRECT REPLY TO:

Senator Bill Bradley  
1 Greentree Centre  
Suite 303  
Marlton, New Jersey 08053  
Attention: Gloria Robertson

9407130299 940706  
PDR ADOCK 05000272  
H PDR

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139 Somerset Drive  
Willingboro, NJ 08046  
May 27, 1994

Governor Christine Whitman  
State of New Jersey  
Department of State  
Trenton, NJ 08060

Dear Governor Whitman:

Enclosed for your review is an article which appeared in the Philadelphia Inquirer on May 2, 1994, concerning the Salem I and II reactors in Lower Alloways Creek, New Jersey.

After reading the material you can understand the horror of what might result in the event of a nuclear disaster! It is reported the reactor is being reopened after this latest shutdown. What is unbelievable is the Nuclear Regulatory Commission administers "fines" for violations too numerous to mention and allows the reactors to continue operating.

Why haven't all the people been replaced with competent personnel? Why has Public Service had no accountability for the problems and not been forced to immediately correct any and all damage? Is New Jersey going to be the site of another Chernoble disaster? Can we believe the NRC who say public safety was never directly threatened? Does anybody care???

I would appreciate a response as to who is accountable for operating safe nuclear reactors and what can be done in Alloways Creek.

Thank you for your anticipated attention regarding this matter.

Yours truly,

*Marie Weller*  
Marie Weller  
(Mrs. Edward Weller)

cc: Congressman H. James Saxton  
Senator Bill Bradley  
Senator Frank Lautenberg

# The Philadelphia Inquirer

Monday, May 2, 1994

50 cents outside the eight-county Philadelphia area

## At Salem reactors, troubling problems

Repairs unmade. Darkened warning lights unnoticed. "Stuff just keeps happening," one regulator said.

By Andrew Maykuth  
and Pam Belluck  
INQUIRER STAFF WRITERS

Inside one of the bullet-shaped Salem nuclear reactors last summer, crucial control rods that tame the atomic reaction — or halt it in an emergency — misfired again and again.

Last fall, the men in Salem's control room were caught listening to the World Series instead of paying full attention to the reactor.

In 1992, a bank of alarm lights in that same room went dark — and nobody noticed.

And the year before, a long-unrepaired valve set off an explosion that caused \$75 million in damage.

All those foul-ups, and more, occurred in the last three years — before the April 7 shutdown of the Salem I reactor that led to a seven-hour emergency alert.

A Nuclear Regulatory Commission

inspection team reprimanded the plant's manager last week for triggering the cascade of events on April 7. The inspectors said Salem I's manager, Public Service Electric & Gas Co., had failed to fix several longstanding problems and had inadequately trained reactor operators.

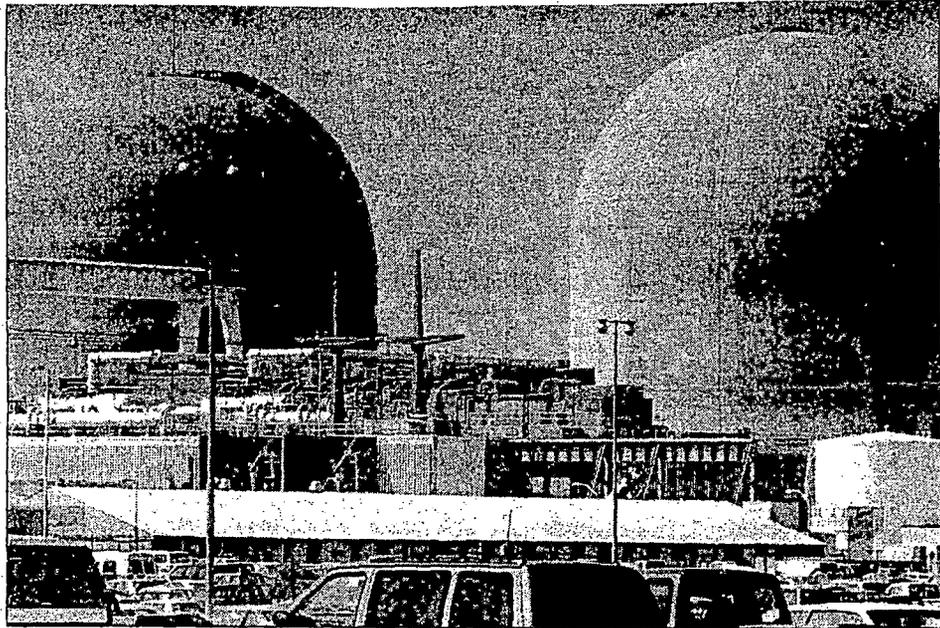
Salem has heard it all before.

An Inquirer review of NRC documents shows that the April 7 incident fits into a pattern of breakdowns at the twin Salem reactors in Lower Alloways Creek, N.J.

Just a month before the alert, the NRC fined Salem \$50,000 for maintenance violations it blamed on "continued demonstrated weaknesses" of the plant's management.

Federal investigators say public safety was never directly threatened by those violations, or by any of the other incidents at Salem in recent years. But they say the April 7 event

See SALEM on A16



For The Inquirer / MICHAEL PLUNKETT

Public safety was never directly threatened by any of the incidents at Salem I or II, investigators say.

cur."

The NRC stated its concerns again and again.

In December 1992, an operator typed some commands on his computer keyboard — and unknowingly disconnected the control room's panel of overhead alarm lights that flash when any reactor component fails. Nobody noticed for 90 minutes that hundreds of lights had gone dark.

If they'd known of this breakdown, NRC inspectors said, they would have labeled it a nuclear alert.

No one told the NRC until 18 hours later. The staff did not tell Salem's senior management until the next morning.

Five months later, at Salem II, a control-room operator noticed that a cluster of control rods was not behaving. The rods plunged into the reactor's core when operators need to halt fission.

The operator tried again and again to get the control rods to operate in unison. Once, a cluster of rods went up when it should have gone down.

An NRC team blamed the problem on a wrongly positioned circuit card. The agency cited personnel less for causing the problem than for what happened next.

"They kept trying to reinsert the rods rather than figure out what went wrong," the NRC's Wenzinger recalled last week. PSE&G promised to retrain its workers.

Last October, the NRC found Salem workers improvising again: Employees had repeatedly put the wrong labels and directions on equipment.

The lapses obliged one technician to leap from a ladder to avoid getting smacked by a whipping steam hose. Another worker accidentally sliced

into a hot electrical wire — he thought the wire was dead.

In March, the NRC fined PSE&G \$50,000 for "weak supervisory methods." It noted that similar mislabeling had occurred before.

Once again, the company pledged to do better.

NRC officials who have observed Salem for years are confounded.

They have considered the age of the reactors. (Salem I is 17 years old; Salem II is 13.) But other U.S. reactors of the same vintage have better records.

They have looked at PSE&G's management. But the same utility operates the Hope Creek reactor next door to Salem. Hope Creek has one of the best records in the nation.

They have looked at the labor unrest of Salem's early years, but that has given way to what all sides say is stability.

The NRC considered some workers' complaints that they were mistreated for raising safety concerns. But officials concluded that personality clashes were to blame.

They even wondered about drugs and alcohol. Last year, three Salem supervisors failed routine drug and alcohol tests. But NRC officials saw no link to the reactor's problems.

"It may be a combination of all these things," Wenzinger said last month. "I wish I could figure it out."

The problems are a concern to PSE&G. Steven E. Miltenberger, the utility's senior nuclear officer, told the NRC in July that he was studying whether "any commonalities" linked

them.

One theme runs through interviews with NRC officials: attitude.

Martin, the NRC's top regional official, said a month before the April 7 shutdown that Salem's "cultural" problem was ingrained.

Salem's management, Martin said, "has done all the easy fixes, the hardware things. Now they have to take on the hard issue: people's hearts. It's a touchy-feely kind of thing."

At the same time, NRC officials say, the company's documented inattention to certain equipment repairs makes life harder for the operators.

For management, "it's hard to take a look in the mirror and realize that what you're actually doing is setting your operators up," said Barr.

The workers aren't blameless. "There are operators who have been there for nearly 20 years," Barr said. "They get a little vain. They know better, they can do this without that equipment."

NRC officials said the baseball incident underscored that cockiness. Radios are banned from the control room. But during the playoffs and World Series, some control-room operators rigged a speaker phone to listen to the games — and a supervisor allowed it.

Management, when it learned of the incident, fired a control-room trainee and "counseled" others.

NRC officials approved.

"People who are operating a nuclear power plant," said Wenzinger, "need to pay attention to what they're doing."

### Salem I and II are ranked among the worst of the nation's 109 commercial reactors.

# A review of Salem plant data shows pattern of breakdowns

**SALEM** from A1  
eroded the reactor's safety systems, and that continued problems at Salem could put the public at risk.

And Salem's mediocre lifetime performance — the plant has produced power at less than 57 percent of its capacity — is one reason that electric rates in the Philadelphia region are among the nation's highest.

NRC officials say the Salem Generating Station, which is part-owned by Peco Energy Co. and serves four million customers in and around Philadelphia, is the most troublesome nuclear facility in a region heavily dependent on nuclear power.

Salem I and II are ranked among the worst of the nation's 109 commercial reactors. The units have spent 22 percent of their lives shut down for unplanned repairs. Only 10 other reactors have spent more time idled for that reason.

"Stuff just keeps happening at Salem," said Edward C. Wenzinger, an NRC branch chief. "We're all sort of puzzled about it."

The NRC's theory is that Salem suffers from an ingrained culture of complacency: passive management and an indifferent workforce.

"These kinds of problems you can't fix overnight by putting a wire somewhere," said Stephen Barr, an NRC inspector who has been involved with investigations at Salem for four years. "They're mind-sets you're dealing with — attitudes, and a culture."

PSE&G officials say they, too, are displeased with Salem's record. The company has shuffled its management and committed \$300 million to "revitalize" the reactors. It is improving training, procedures and hardware.

"Let me state clearly," PSE&G chief executive E. James Ferland told stockholders on April 19, "that Salem station has not met the high expectations we have for ourselves."

Despite the utility's efforts, the government's last three comprehensive assessments of Salem "haven't seen much change," said Thomas T. Martin, the NRC administrator responsible for 11 Northeastern states. "This is kind of surprising."

It is just a small device. An MS-10 controller, to be exact.

Its job is to open and close valves in the pipes that carry high-pressure steam from a nuclear reactor to the huge turbines that generate power.

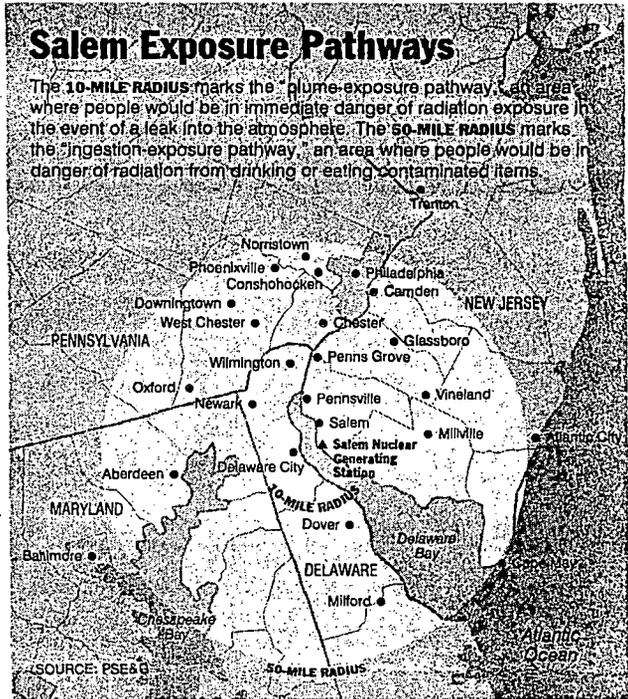
At Salem, the MS-10 had been malfunctioning for at least 10 years. Management knew, and did not fix it. Operators compensated by operating it manually.

Until April 7.

On that morning, operators struggled to regain control of the reactor amid a flurry of events that began when sea grass clogged water in-

## Salem Exposure Pathways

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The Philadelphia Inquirer

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Salem has been bitten before.

In 1983, two circuit breakers designed to shut down Salem I jammed. It was a complete failure of the automatic system designed to shut down the reactor in an emergency.

The incident went unreported.

Three days later, both breakers failed again. They hadn't been properly lubricated. The NRC, distressed to learn of the earlier failure, fined the plant \$850,000 — a record for the NRC. The agency called it the worst incident since Three Mile Island.

PSE&G promised to do better. The NRC believed the cause was partly growing pains — Salem I was only six years old then. There was criticism, too.

"We'd prefer it if they were a little more aggressive," Thomas Murley, the regional NRC administrator, said in 1984.

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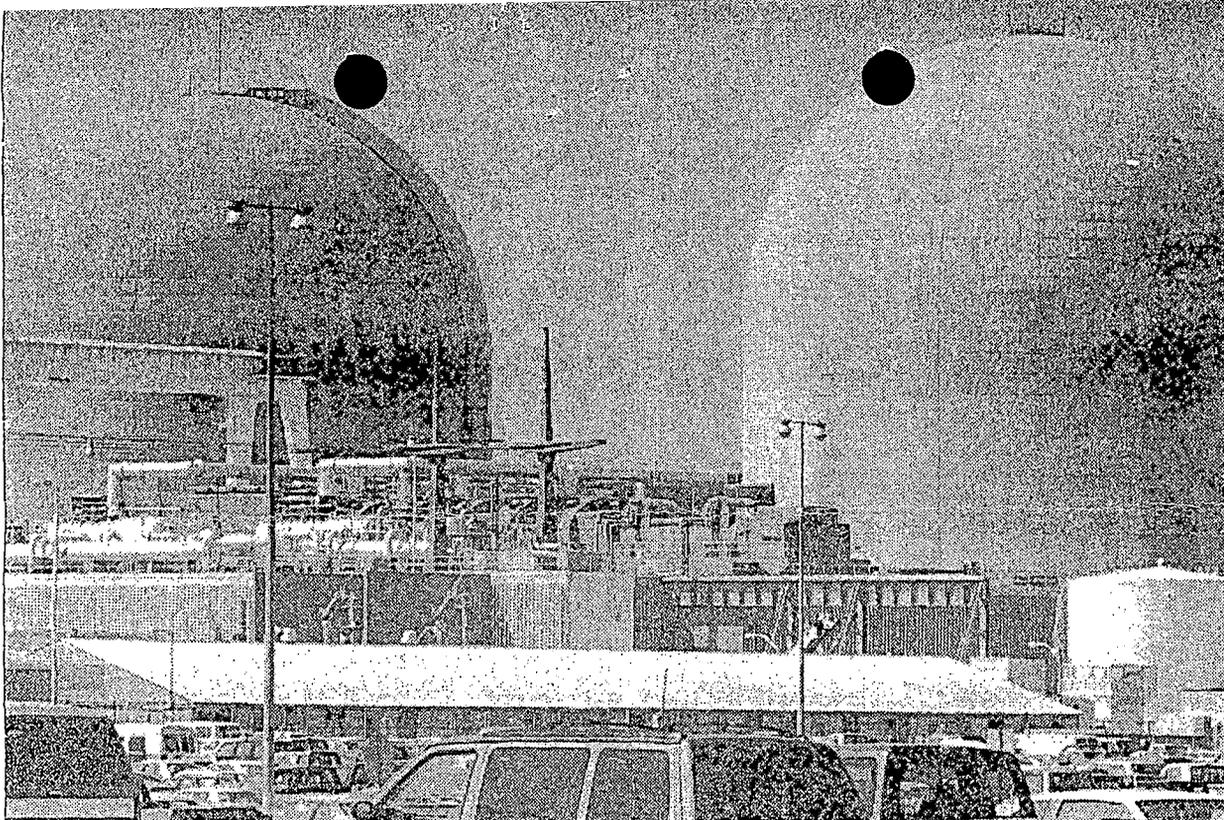
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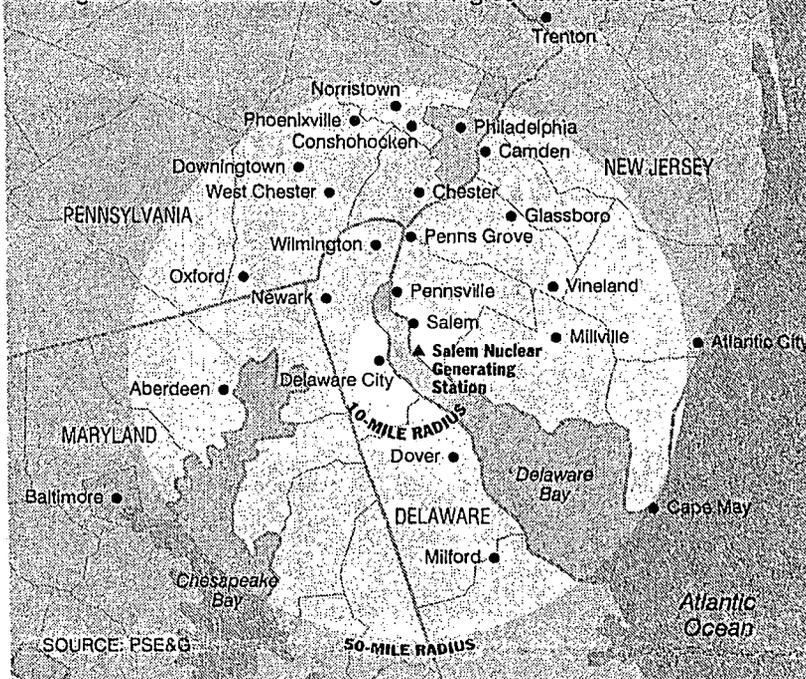
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