

In 1987, PECO was ordered by the Nuclear Regulatory Commission (NRC) to shutdown Peach Bottom-2 and -3 on March 31, 1987 due to operator misconduct, corporate malfeasance and blatant disregard for the health and safety of area. This was the first and only occasion that the NRC ordered a nuclear power plant shut down. Zack Pate, President of the Institute for Nuclear Power Operations, declared that Peach Bottom "was an embarrassment to the industry and to the nation...The grossly unprofessional behavior by a wide range of shift personnel...reflects a major breakdown in the management of a nuclear facility."

### **Background:**

- December 1985 - An INPO study (as reported by The Nuclear Monitor) concluded that PECO's performance continued to decline. A subsequent letter written in January by Zack Pate, President of INPO, to PECO Chairman John Everett, said "standards of performance at the station are unacceptably low."

Problems were identified in operations and maintenance, radiological protection, material condition and housekeeping. INPO also identified several non-licensed operators reading unauthorized materials. A total of 431 shortfalls were identified; 141 involved personnel performance. Pate noted, "and "we ... have considerable concern that the station's substandard radiological control practices may lead to the spread of contamination off-site, or some other serious radiological event.

Pate concluded, "From my assessment, this pattern will not change, and personnel performance at Peach Bottom will not improve, until you personally acknowledge the need and communicate the need, for real change to your organization."

- February 1, 1986 to May 31, 1987 - The SALP for this period indicated PECO's performance was "**unacceptable**" because of the operators' inattentiveness and management's "inability to identify and correct operator conduct in other areas."

Among the incidents cited by the NRC: **security guards were overworked, and one guard was found asleep** on the job; **36,000 gallons of "mildly radioactive water" leaked into the Susquehanna River**; PECO mislaid data on radioactive waste classification causing misclassification of a waste shipment; at the turbine building on March 4, 1987, Unit 3 a major fire occurred at the maintenance cage.

- June 1986 - **The NRC's annual report concluded that Peach Bottom**

**was "operated by well qualified individuals with a positive attitude toward their positions for nuclear safety."**

- June 11, 1986 - **A \$200,000 fine** for failing to pay attention to detail was issued. The incident involved the withdrawal of control rods. A high-level, NRC administrator noted that these violations indicated a continued "pattern of inattention to detail" and "a general complacent attitude." The original fine was set at a \$100,000, but doubled because of PE's history. In addition, the NRC reported 17 violations.

- July 16, 1986 - While testifying before Congressman Markey's Committee, the NRC revealed that Peach Bottom was one of the **10 most hazardous plants in the country**. The underlying reason appeared to be that PECO's attention was focused on the construction and startup of Limerick, rather than the safe operation of Peach Bottom.

- August 1986 - The NRC reported that there were 26 cracks in Peach Bottom's two op

- March 31, 1987 - **Peach Bottom was indefinitely shutdown. Operators were found sleeping on the job, playing video games, engaging in rubber band and paper ball fights, and reading unauthorized material.**

- October 1987 - An INPO visit (as reported by The Nuclear Monitor) found that since shutdown, "**little clearly demonstrable action has been taken regarding corporate management's accountability for conditions at the station.**"

"Control of drawings, procedures, and other documents used by operations personnel was identified as a problem at Peach Bottom ... in 1980. During the recent plant evaluation, 22 of 23 drawings reviewed in the radwaste control room were out of date by as many as 15 revisions. Outdated or unapproved drawings and procedures were also noted at various locations in the turbine building and the auxiliary room."

"[T] here were more than 6,000 open maintenance requests, 300 outstanding money tickets (minor maintenance requests), and 1,200 additional items requiring maintenance on various lists ... 586 preventive maintenance activities ... have been outstanding since June 1986."

- October 5, 1987 - A loss of Power at Unit-3 resulted in a containment isolation and a loss of shutdown cooling.

- October 8, 1987 - The NRC deferred a review of PECO's reorganization plan because of their failure to address corporate weaknesses.

- October 9, 1987 - Philadelphia Electric announced a corporate reorganization plan.

- October 29, 1987 - The forced shutdown is costing Philadelphia Electric an additional \$5 million a month for replacement electricity. ("Patriot News".)

- November, 1987 - **A report published by Public Citizen revealed that \$400 million was spent on repairs at Peach Bottom between 1981 and 1985. This amount was the highest expended at any of the nation's nuclear power plants.**

- November, 1987 - The **FBI discovered a drug distribution ring** at Peach Bottom.(For more details see: January 8, 1988; February, 1988; May 2, 1988; November, 1989; and, May 10, 1999.)

- January 8, 1988 - A maintenance sub-foreman pleaded guilty to involvement in a **conspiracy to distribute methamphetamine**. He is one of six who were indicted last year in a conspiracy to distribute methamphetamine. (For more details see: November, 1987; May 2, 1988; and November, 1989.)

- January 11, 1988 - **INPO President Zack Pate strongly criticized Philadelphia Electric's management and their revised reorganization plan.**

Pate noted that, "The fundamental approach to nuclear operational management at Philadelphia Electric Company has not changed and is unlikely to change noticeably in the foreseeable future." He added, "success ultimately depends on the individual managers in key line positions. Since for the most part, the same managers who have been ineffective in this area for years are in the key line positions in the new organization, substantial improvement is unlikely." Pate concluded, "Major changes in the corporate culture at PECO are required. The recently announced reorganization plan will not achieve this" (The Nuclear Monitor, February 22, 1988, pp.1-2).

- January 26, 1988 - Governor Robert P. Casey formally petitioned the NRC for public hearings on PECO's management.

- January 27, 1988 - PECO reportedly lost \$58 million due to the NRC's shutdown of Peach Bottom. Earnings per share were shaved from \$2.60 a share in 1986 to \$2.33.

- February 3, 1988 - John H. Austin resigned as president of PE after a unusually critical report by the Institute of Nuclear Power Operations (INPO)

was published. The report asserted that Peach Bottom "**was an embarrassment to the industry and to the nation.**" Zack T. Pate, president of INPO, added, "**The grossly unprofessional behavior by a wide range of shift personnel ... reflects a major breakdown in the management of a nuclear facility.**"

- February, 1988 - The PUC ordered PE to reduce rates by a \$37 million a year until Peach Bottom is allowed to restart.

- February, 1988 - Four PECO employees were indicted for allegedly **distributing drugs** at Peach Bottom. PECO maintained that the workers were not working in areas affecting safety. (For more details see: November, 1987; January 8, 1988; May 2, 1988; November, 1989; and, May 10, 1999)

- February 9, 1988 - In a editorial, The Patriot News concluded: "PECO's management failed in that basic responsibility to the company's stockholders, to the federal regulations they are required to abide by and the public that was put at risk by this slipshod performance."

- March 17, 1988 - PE officials acknowledged that the plant will not be ready for restart until the "...fall frame time." This prediction would mean that the plant would be shut down for "at least 18 months, costing the company \$125 million, based on its current rate of expenditures for replacement power and a penalty imposed by the state Public Utility Commission" (The Patriot News, March 17, 1988, p.B-9).

- April 13, 1988 - J. Lee Everett "retired" as Chairman and Chief Executive Officer of Philadelphia Electric as a direct result of the harsh criticism from a January 12, 1988 report released by the Institute of Nuclear Power Operations (Refer to February 3, 1988).

- May, 1988 - Bessie Howard filed a complaint with the United States Department of Labor alleging that she was **fired "in retaliation for her identification of safety problems relating to security** at Peach Bottom." Beginning on January 24, 1988, Mrs. Howard reported that another security guard was sleeping on the job. She continued to report the matter until she was fired On March 16, 1988, by Burns Security, the security contractor for Peach Bottom. She was classified "status nine" and prohibited from working at other nuclear power plants or government facilities.

- A report issued by the NRC indicated "**that security personnel were forced to work excessively long hours, sometimes up to 12 hour shifts; were not given meal breaks, and were required to remain at posts for extended periods of time without being rotated to other posts**, a violation of NRC regulations" (York Daily Record, May 1988).

- May 2, 1988 - Four Peach Bottom employees were **charged with conspiracy to distribute methamphetamine** at the plant and elsewhere. Thirteen people, most of whom work at Peach Bottom, have been charged with drug-trafficking as a result of an FBI investigation. (For more details see: November, 1987; January 8, 1988; February, 1988; November, 1989; and May 10, 1999.)

- Spring 1988 - **A cot for sleeping on the job** was removed from an area located near the control room, and the NRC acknowledged knowing of its presence prior to its removal.

- June 6, 1988 - The NRC warned that the "**effort to make sure the Peach Bottom nuclear power plant is run safely is by no means a sure thing**" (Centre Daily News, June 1, 1988, A-6).

- June 16, 1988 - The General Counsel to the Governor of Pennsylvania submitted comments on the Revised Plan for Restart of Peach Bottom Atomic Power Station and the Actions of Philadelphia Electric Company Leading Up to and Succeeding the March 31, 1987 Shutdown Order of the Nuclear Regulatory Commission.

Counsel noted, "**The plan on the whole remains too general to permit proper evaluation.** Some of the most crucial areas, for example, the responsibility for individual operators and those managers who are retained for previous misconduct and the justifications for their retention, remain undisclosed. Certain basic problems, such as drug abuse and previous sanctions against **whistleblowers**, are either not addressed at all or are insufficiently addressed. Independent assessment organizations need even greater independence and must satisfactorily demonstrate reanalysis of problem reports (such as Significant Operating Events and vendor reports) that may have triggered inadequate responses over the last few years. Finally, and most importantly, the reforms generally proposed must be reduced to specific, clear, verifiable commitments and proper avenues outlined for verification."

- July 27, 1988 - Public Service Enterprise Group Incorporated and its subsidiary Public Service Electric and Gas Company filed an action in the United States District Court to **recover damages resulting for the NRC's shutdown of Peach Bottom**. On the same day in the same court, Atlantic City Electric Company and Delmarva Power and Light Company filed similar suits against Philadelphia Electric. The suits allege that PECO breached its contract under the Owners Agreement. Several tort claims were also filed, however no dollar amounts were specified. (Based on information from Philadelphia Electric Company's "Report to Shareholders Third Quarter 1988.") (See April 4, 1992 for settlement agreement.)

- August, 1988 - Peach Bottom's **security contractor was replaced due to incompetence.**

- August 11, 1988 - The NRC proposed fining PECO **\$1.25 million** for "management problems that resulted in a **forced shutdown** of the company's Peach Bottom nuclear plant." In addition, the NRC proposed fining **33 reactor operators** for **sleeping on the job, playing video games, engaging in spit ball battles, and other unprofessional activities.** Fines of \$500 to \$1,000 were recommended. PECO spokesperson Williams Jones disclosed that the company "has lost more than \$90 million since the NRC ordered Peach Bottom shutdown..." (Patriot News, August 12, 1988).

- August 17, 1988 - Joseph Rhodes, Jr., a member of the Pennsylvania Public Utility Commission, suggested that a **deal** between PECO and the NRC might have been made in order to get Peach Bottom back on line. In letters to NRC Chairman Lando Zech and PECO CEO Joseph Paquette, Jr., Rhodes stated, "One could draw the conclusion that by announcing these fines, the NRC has cleared the way for PECO to receive expedited approval of its Peach Bottom restart plan"(Patriot News, August 17, 1988).

- September 15, 1988 - NRC Chairman Lando Zech told senior management officials of PECO, "**I'm not going to accept what you say today and be anywhere near ready to authorize this plant.**" Zech noted, "Your operators certainly made mistakes, no question about that. Your corporate management problems are just as serious." Zech added, "The fact that we have a situation like this existing at any plant in the country is very serious. We're responsible to the American people. We can't have plants with this much inattentiveness to anything."

William Russell, regional administrator, told plant officials that **unacceptable levels of contamination exist** in three pump rooms that are part of Peach Bottom's water cleanup system. He said the radiation in those locations is "some of the worst I've seen" (The Evening News, September 15, 1988, B 3.)

- September 23, 1988 - The Board of Directors voted to take no action to prevent the progress of shareholder lawsuits against former chairman and CEO, James L. Everett, III, and former President and CEO, John H. Austin, Jr., "for claims alleging mismanagement which resulted in the shutdown..." of Peach Bottom (Philadelphia Electric Company, Report to the Shareholders, Fourth Quarter, 1988.)

- September 26, 1988 - Governor Casey, through the Pennsylvania Department of Environmental Resources (Pa DER), ordered PECO and INPO to release files on recent investigations of the plant. Governor Casey noted, "We

made it clear there were certain kinds of information we needed to evaluate our concerns, but after months of being unable to persuade PECO to provide us with that information on its own, we had to go ahead and issue these orders." (Philadelphia Inquirer, September 27, 1988.)

- September 27, 1988 - **A jury awarded \$130,000 to four pipe fitters who claimed they have health problems as a result of being exposed to asbestos** at several construction sites including Peach Bottom, Three Mile Island and Glatfelter paper mill.

- September 28, 1988 - Senator William Lincoln of Fayette announced that hearings should be required before a Peach Bottom restart.

- October 14, 1988 - PE appealed the Pa DER order to give the Casey administration access to internal documents relating to restarting Peach Bottom.

- October 19, 1988 - INPO "provided observations on its corporate evaluation conducted in October and on its plant evaluation conducted in September" (Philadelphia Electric Company, Report to the Shareholders, Fourth Quarter, 1988.)

INPO noted "that the operators needed additional simulator training to properly respond to some plant events, that management and shift supervision must take more effective action to correct significant operational and administrative problems, that administrative provisions must be upgraded to better help control room operators readily and accurately determine plant status, and that improvements are needed in communicating and assessing performance standards."

- October 21, 1988 - PECO announced a revision in their restart schedule. The projected date for restart was pushed back to the second quarter in 1989.

- October 27, 1988 - A recent safety evaluation conducted by the NRC was favorable for restart, according to PECO spokesman Neil McDermott. "What it [the report] is saying is that our plan addresses the problems which led to the shutdown, and that actions laid out in the plan are appropriate to correct those root causes." He added, "Now, of course, the NRC will continue to monitor the effectiveness of the implementation" (The Patriot News, October 22, 1988, B 9.)

- November 17, 1988 - **The NRC fined PECO \$50,000 because security guards were found sleeping on the job, inattentive duty and improperly posted.** The NRC also noted that "a key that could have unlocked doors to a security area was issued to a unauthorized employee, couldn't be found and officials didn't do anything about it once they discovered it was missing." William T. Russell, NRC regional administrator, noted, "The improvements made to date

were not effective in precluding the occurrence of the violations" (The Patriot News, November 17, 1988, B 2.)

- January 1989 - The state of Maryland published a report of **radioactive contamination of the Chesapeake Bay** due to emissions from Peach Bottom. (Note: The city of Baltimore gets 250,000 gallons of drinking water per day from the Susquehanna River.)

- January 12, 1989 - Admiral James D. Watkins, a member of Philadelphia Electric's Board of Directors, was **nominated for the post of Secretary of the Department of Energy**.

- February 8, 1989 - **The NRC announced that despite improvements at Peach Bottom, a restart vote will not take place until April, 1989.**

- February 18, 1989 - The NRC's Integrated Assessment Team's Inspection announced that PECO was close to restarting Peach Bottom.

- February 28, 1989 - The Commonwealth of Pennsylvania and Philadelphia Electric concluded an agreement that would give the Commonwealth access to confidential material and allow the state to monitor PECO's operation of Peach Bottom. The agreement was not an endorsement for restarting Peach Bottom.

- February 28, 1989 - The Lancaster New Era declared in an editorial on restart that, "While the company claims it sincerely has reformed, we have the overriding impression that reopening the plant, not safety, is the bottom line for the plant operator, Philadelphia Electric Co."

- April 21, 1989 - By a 3-0 vote, the NRC approved the restart of Peach Bottom. PECO spokesman Bill Jones calculated that the shutdown cost Philadelphia Electric \$300 million. (Patriot News, April 21, 1989, B-3.)

**"Whistleblower"** W. Allan Young, who was fired from Peach Bottom after raising concerns about workers being **exposed to high levels of radiation**, said in an open letter to the NRC, that the same people who fired him and prevented his rehiring at the plant, are still there. Young told WITF-TV, "They have idiots running that plant."

- April 28, 1989 - Peach Bottom began its ascent towards full power.

- August 5, 1989 - PECO reached an agreement with the Public Utility Commission "not to charge customers for \$24.3 million in costs incurred by the company when the Peach Bottom nuclear power plant was shut down under a federal order" (Patriot-News, August 4, 1989, B-6.) However, PECO is seeking to "recover" \$107 million from its customers through a rate increase.



- September, 1989- The NRC released a SALP report indicating weaknesses "...in the performance of and support for some engineering projects, corporate technical assessment activities and management support for health physics training programs and technical facilities" (Annual Report 1989, p.13.)

- October 5, 1989 - **The NRC lifted its shutdown order on Peach Bottom.** (The order was enacted on March 31, 1987.) This action allows Unit-3 to restart immediately. (Unit-2 has been operating since April, 1989, while the shutdown order was in effect.) The order also reduces the "strict" monitoring presence of the NRC at Peach Bottom. "The total cost of the shutdown was about \$250,000 million, including \$168 million for replacement power and a \$46 million fine imposed by the state and Public Utility Commission" (Patriot News, October 6, 1989, B-6.)