

- January 9, 2002 - A well-armed, disgruntled former employee at the San Onofre nuclear power plant in San Clemente was arrested for making threats against the plant. (See October, 6, 2001, and January 30 and December 10, 2002, for related incidents.)

- January 11, 2002 - Siren testing at TMI encountered numerous problems: all sirens failed in York County and one siren failed in Lancaster County. AmerGen attributed to computer malfunctions. (August, 15, 2001, and October 5-9, 2001.)

- January 29, 2002 - Exelon announced it would cut 3,400 or 15% of its work force by the end of 2002. (See May 20, 2001, for Corbin A. McNeill's pay raise, June 13 and September 28, October 24 & December 21, 2001, for information on 900 job cuts. Also, reference February 26, 2002, for information on McNeill's "retirement package.")

- January 30, 2002 - President Bush's State of the Union Address including a warning that nuclear power plants may be targeted for a terrorist attack. (See October 6 & 17 and November 7, 2001, and January 9, 2002 for related events.)

- February 14, 2002 - Exelon prepared an "inadequate critique" of their "emergency preparedness exercise." (See July 1, 2002.)

- February 26, 2002 - Corbin McNeill Jr. announced his retirement, and he is expected to receive \$7 million when leaves the Company in April, 2002. He will also receive a bonus payment. McNeill made \$2.5 million in 2001.\*

"His severance equals triple the sum of his annual base salary plus the average of his bonus over the last two years.

"McNeill is the company's largest individual shareholder. His 1.53 million shares are worth \$79.1 million based on yesterday's closing price of \$51.70." (*Philadelphia Inquirer*, C-1, March 14, 2002.)

\* Corbin A. McNeill's base salary, after the merger increased, from \$659,857 to \$855,830, and his bonus was increased from \$1 million to \$1,081,572. In addition, McNeill's restricted stock increased from \$942,188 to \$2.8 million. [May 20, 2001.]

(See June 13 and September 28, October 24 & December 21, 2001, for information on 900 job cuts, and refer to January 29, 2002, for further job cuts. ")

- March 28, 2002 - The NRC admitted that Peach Bottom and the 102 nuclear power plants could not withstand an impact of airplane the size of those that crashed into the Pentagon and World Trade Center on September 11, 2001. (March 28, 2002, *Patriot News*.) (See October 2001 & October 17, 2001 and January, 9 and 30, 2002, for related incidents.)

- April 3, 2002 - "Two men and a male juvenile from Mexico face possible deportation after attempting to enter an unprotected area of the Peach Bottom Atomic Power Station. All three remained in INS custody Wednesday." (*York Daily Record*, April 4, 2002.) (See January, 2001, October 6, 2001 & October 17, January, 9 and 30, 2002, and March 21 and May 15, 2002, for related incidents.)

April 17, 2002 - Exelon Corp., the country's largest nuclear plant operator, said yesterday that it would end its bid to develop the next generation of nuclear reactors.

The Chicago-based parent of Peco Energy Co. said it would terminate its nearly two-year relationship with Eskom, South Africa's state-owned utility, in building a prototype gas-cooled reactor. Exelon is getting out of the business of designing nuclear plants and will concentrate instead on operating them.

The company spent \$20 million on the project, of which it owned 12.5 percent. Exelon said it already had paid for its share as a research-and-development expense. It has not decided what to do with the 12 employees it had working on the project, a spokeswoman said. (Benjamin Y. Lowe, *Philadelphia Inquirer*, April 17, 2002.) (See December 5 & 10, 2001, for background information.)

- April 22, 2002 - **Exelon's 1st-Quarter Net Income Fell 98%**  
... as mild winter weather and maintenance costs hurt results.

"The country's largest operator of nuclear power plants reported late Monday net income of \$8 million, or two cents a share, compared with net income of \$399 million, or \$1.23 a share, a year earlier.

"The latest results included a charge of \$230 million, or 71 cents a share, from the effect of adopting SFAS 142 for goodwill amortization, while year-earlier results included a tax benefit for the implementation of SFAS 143 for derivatives. Excluding these items, the company said it had operating earnings of 77 cents a share, compared with operating earnings of \$387 million, or \$1.19 a share." (*Mon Apr 22,10:53 PM ET*, CHICAGO -- Exelon Corp. )

(See June 13 and September 28, October 24 & December 21, 2001; and, January 29 & February 26, 2002. For information related economic developments.)

- May 11, 2002- “Exelon Corp. is the subject of a shareholder lawsuit alleging the electric and gas utility made false and misleading statements that artificially inflated its share price. The law firm of Charles J. Piven said it filed a lawsuit on behalf of buyers of Exelon shares between April 24, 2001, and September 27.” (*Philadelphia Inquirer*, D-3, May 11, 2002.)

- May 15, 2002 - “A foreign intelligence service recently warned that a nuclear power plant in the Northeast could be the target of a July 4 terrorist attack...Published reports suggested that the target could be Pennsylvania’s Three Mile Island, but a second US official with knowledge of the information said no specific facility had been named.” (Knight Ridder, May 15, 2002.) (See January, 2001, October 6, 2001 & October 17, January, 9 and 30, 2002, and March 21, for related incidents.)

- May 28, 2002 - “Exelon Corp. and three other utilities [Main Yankee Atomic Power Co., Omaha Public Power District & Sacramento Municipal Utility District] lost a \$2.2 billion legal challenge to the federal government’s nuclear-waste cleanup plan...In 1992, Congress ordered utility companies that use government uranium-enrichment services to pay one-third of the cleanup bill. The U.S. Supreme Court said yesterday that it would not hear an appeals from the companies that argue that the assessments are unconstitutional.” (“Associated Press”, May 29, 2002.)

- June 2, 2002 -An alert began at around 12:30 am, ending at 3:01 am, relating to the activation of the fire suppression system due to EDG failure which released carbon dioxide into a room where two employees were working. No injuries were reported and both Peach Bottom 2 & 3 remained at 100% power. (Exelon Nuclear, News Release, June 2, 2002, 4:10 am.) (See November 26, 2002 for follow-up, and July 11, 2003 for absolution.)

- June 12, 2002 - The Bioterrorism Bill signed into law on June 12, 2002 mandates KI stockpiles out to 20 miles.

- June 25, 2002 - “...station emergency preparedness personnel discovered that the emergency planning siren base station at the site, was unable to communicate with the off site sirens, due to external radio frequency noise in the area.” (IR-50-277/02-05; 50-278/02-05)

- July 1, 2002 - The NRC found that on February 12, 2002, Exelon “did not identify that key information needed by the emergency director (ED) to classify the simulated event as a General Emergency was not provided to the ED by members of the Emergency Response Organization (ERO). The finding was preliminary classified as White because the critique failed to identify a problem associated with the implementation of a risk significant planning standard.”

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Exelon disputed the findings on September 4, 2002.

The NRC reasserted that “the critique problems were more than minor but the Issuance of the White finding is not appropriate because the inadequate critique did not result in a failure to identify a risk significant planning standard (RSPS) problem.”

**The incident is classified a Non-Cited Violation.**

(Final Significance Determination for Green and White Findings and a Notice of Violation at Peach Bottom, IR-50-277/02-07; 50-278/02-07).

This was the *twenty-fifth Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., “**credit**” for 25 Non-Cited Violations = **\$1,255,000**.

- July 21, 2002- At Unit-2, “the fifth stage feed water heaters were removed from service for end-of-cycle coast down.” (IR-50-277/02-05; 50-278/02-05). (See August 4, 2002 for related event.)

- July 23, 2002- “Exelon did not evaluate in a prompt manner whether it was appropriate to disable the electrical trips of the EDGs from the cardox injection fire protections system after NRC inspectors identified that the trips were still active with the EDG cardox system isolated” (IR-50-277/03-02; 50-278/03-02) (Also refer to IR-50-277/02-04; 50-278/02-04).  
(See April 23, 2004 for NCV).

- August 4, 2002- At Unit-2, “the fourth stage feed water heaters were removed from service.” (IR-50-277/02-05; 50-278/02-05). (See July 21, 2002 for related event.)

- August 15, 2002 - Despite a favorable EIS of Exelon’s request for a license extension at Peach Bottom-2 & -3, the NRC listed three safety issues that need to be addressed prior to approval: replacement o electric fuse clips; removal of the anti-aging plan; and, replacement of faulty cables.

- August 30, 2002- At Unit-3, “power was reduced to approximately 90% prior to shut down the 3 ‘A’ recirculating water pump because of high differential pressures on the circulating water intake screens. The high differential pressures were caused by a sudden surge in the amount of fish (Gizzard Shad) that entered the intake canal and clogged the screens. Unit 3 power was returned to 100 percent following cleaning of the circulating water screens and restating of the 3‘A’ circulating water pump.” (IR-50-277/02-05; 50-278/02-05).

- August 31, 2002 - New security budget increased to \$2.2 million annually or \$550,300 less than John W. Rowe’s base salary.

- September 5, 2002 -- Three Mile Island Alert filed a formal Petition for Rulemaking with the Nuclear Regulatory Commission to include day-care centers and nursery schools in emergency evacuation planning. The proposed rule would affect all 103 operating nuclear plants in the United States.

- September 10, 2002 - The Office of Homeland Security announced that the “yellow” warning had been increased to a heightened state of alert or an “orange” upgrade at 1:00 pm. (Exelon Public Relations.)

- “...Unit 2 was manually scrammed, in preparation for the 2R14 refueling outage” (IR-50-277/02-05; 50-278/02-05).

- November, 2002 - “ Governor Schweiker “directed the National Guard to join State Police in a joint security mission at the state’s nuclear facilities.” In December, the Governor extended the joint mission of the National Guard and the State Police at the Commonwealth’s five nuclear generating stations until March 4, 2002. (DEP, *Update*, December 6, 2002.)

- September 21, 2002 - A Non Cited Violation was issued for incident “when a chain broke” on a “rigging hoist and the motor, weighing approximately 48,000 pounds, fell approximately ten inches into the pump/motor stand.”

This was the *twenty-sixth Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., “**credit**” for 26 Non-Cited Violations = **\$1,355,000**.

- November 26, 2002 - Initially classified as a White, **the incident was classified a Non-Cited Violation**. (See June 2, 2002, for precursor event.) (Final Significance Determination for Green and White Findings and a Notice of Violation at Peach Bottom, IR-50-277/02-07; 50-278/02-07).

This was the *twenty-seventh Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., “**credit**” for 27 Non-Cited Violations = **\$1,355,000**.

- December 10, 2002 - A security challenge occurred at an Exelon nuclear power plant outside of Chicago.

“BRAIDWOOD -- A crazed Chicagoan, swearing to be an extraterrestrial alien, crashed his car through the gates of the Braidwood nuclear facility late Monday before speeding away only to be arrested for reckless driving in Wilmington minutes later.

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No injuries resulted. Metta said the intruder is alleged to have penetrated the parking area by crashing through closed gates, flashing past a plant checkpoint and then doing "donuts" in the parking lot. ("The Daily Journal", Kankakee IL.) (See January 9 and December 20, 2002, for related incidents.)

- December 12, 2002 - TMI sirens malfunctioned in Cumberland and York counties. In Dauphin County, 28 sirens malfunctioned due to the "inadvertent" discharge of the "space bar" by a computer operator. (Refer to June 22, August 15 and October 5-9, 2001 and January 11, March 3 2002, for related problems.)

- December 20, 2002 - Another security challenge occurred at an Exelon nuclear power plant outside of Chicago:

"BRAIDWOOD -- She was the second driver to breeze past the guard station at Braidwood's nuclear facility in the span of a week.

"But its unclear if the trespasses arrest of Wilmington's Christina Staley, Tuesday, will result in changes to the nuclear generating station's security apparatus.

"Neal Miller, station director, noted that Ms. Staley, 31, had apparently become disoriented and was looking for some place to turn around when she drove past the security at 9 a.m."

("The Daily Journal", Kankakee IL.)"

(See January 9 and December 10, 2002, for related incidents.)

- December 13, 2002 - A security challenge occurred at a nuclear facility north of Peach Bottom, on the Susquehanna River

"At 1450 EST on 12/13/2002, Susquehanna LLC Main Control Room received a request for additional information from the Pennsylvania Emergency Management Agency (PEMA). PEMA received rumors that a HAZMAT team had been dispatched to Susquehanna in response to a spill associated with a potential sabotage event.

- December 17, 2002 - "...Unit 2 power was reduced to approximately 16 percent to facilitate leak repairs on the Caldon LEFM flow measurement system. After repairs, Unit 2 returned to 100 percent power in the afternoon of December 21" (IR 50-277/02-06; 50-278/02-06). (See April 30 - May 11, 2003, for a similar problem).

- December 21, 2002 - An LER was recorded after “Unit 2 automatically shutdown from 100% power when the main steam isolation valves closed due to a Group I Primary Containment Isolation System (PCIC) actuation” (IR 50-277-03-02; IR-50-278/03-02).

“For example, on Dec. 21, 2002, a Peach Bottom Atomic Power Station Unit 2 electro-hydraulic control system circuit card failure triggered a scram, according to the NRC’s report. That system controls the wide-range speed control of the turbine, Sheehan said.

“In other words,” Sheehan said, “it serves as a sort of high-tech throttle for the plant’s turbine, thereby controlling the plant’s power output.”

“On Dec. 22, 2004, the NRC report said, another part of that same system malfunctioned, causing a loss of reactor pressure and forcing a scram.” (“York Sunday News”, March 13, 2005)

- January 28, 2003 - An NCV was issued relating to Exelon's failure to correct and maintain “preventative maintenance activities and procedures on critical, safety related ventilation dampers since 1988...A contributing cause to the length of time that Exelon did not identify this issue was related to the Problem Identification and Resolution crosscutting area. Peach Bottom plant personnel did not identify the lack of preventative maintenance for safety-related dampers following the identification of excessive stroke times...in June 2000 or...failure to stroke on June 16, 2002” (IR 50-277-02-06; IR-50-278/02-06).

This was the *twenty-eighth Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., “**credit**” for 28 Non-Cited Violations = **\$1,405,000**.

- February 11, 2003 - A Severity Level IV violation was issued by the NRC. Exelon made changes to their emergency plans without prior NRC approval.

“The finding was determined to be more than minor as its significance was related to the impact it would have on the mobilization of the emergency response organization and preclude offsite agencies from being aware of adverse conditions on site” (NCV 50-277; IR-50-278/03-006-01);

This Violation was classified a Non-Cited Violation. This was the *twenty-ninth Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., “**credit**” for 29 Non-Cited Violations = **\$1,455,000**.

- February 17, 2003 - PEACH BOTTOM-2 WAS REDUCED TO 45% POWER AFTER A RECIRCULATION PUMP tripped. Exelon spokesman Dave Simon said the trip occurred Feb. 17 at 6:48 a.m. The root cause of the trip has not yet been determined, he added. Simon declined to say how long the unit is expected to be operating at the reduced power level. Peach Bottom-2 was at full power prior to incident (*Reuters.*) The plant ramped up to full power by February 20, 2003.

Reuters: Exelon's Pa. Peach Bottom 2 nuke drops to 41 pct

Tuesday February 18, 8:25 am ET

NEW YORK, Feb. 18 (Reuters) - Exelon Nuclear's 1,110 megawatt Peach Bottom 2 nuclear unit in Pennsylvania was at 41 percent power early Tuesday, down from full power on Friday, the U.S. Nuclear Regulatory Commission said in its power reactor status report.

It was not immediately known why the unit, located in Delta, Pennsylvania, had been reduced.

Meanwhile, the adjacent 1,110 MW Unit 3 continued to operate at full power on Monday.

The NRC did not issue a reactor status report on Monday due to the U.S. Presidents Day holiday.

Exelon Nuclear is a unit of Exelon Corp. of Chicago.

- April 12-15, 2003 - At Unit-2, "an automatic reactor shutdown occurred due to high reactor pressure after the 'D' outboard main steam isolation valve (MSIV) collapsed. The MSIV closes as a result of a failed instrument line valve. Unit 2 returned to 100% power on April 15, 2003".

On April 12, 2003, "Unit 2 unexpectedly shut down when a single main steam isolation valve failed to close, based on a broken air-supply line. Exelon concluded that the valve's air tubing was vulnerable to a fatigue failure.

"While the plant did inspect more than 200 pneumatic lines linked to air-operated valves on both Unit 2 and Unit 3, the review did not take into account similar equipment such as instrument lines, according to the report" ("York Sunday News", March 13, 2005.)

- April 19, 2003 - A Green Non-Cited Violation was issued “when approximately 25 minutes into a planned load endurance test run for the E2 EDG, a small fire occurred on the EDG manifold” (IR 50-277-200-3003; IR-50-278/200-3003). This was the *thirtieth Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., “**credit**” for 30 Non-Cited Violations = **\$1,505,000**.

- April 23, 2003 - A Non-Cited Violation was issued for problems associated with the EDG cardox system on July 23, 2002.

This was the *thirty-first Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., “**credit**” for 31 Non-Cited Violations = **\$1,555,000**.

- April 23, 2003 - A Non-Cited Violation was issued for problems associated with emergency lighting units from November 6, 2002 through March 30, 2003. Eight-hour support batteries for three areas were not provided, i.e. Unit 2 RHR room, Unit 3 RHR room and Unit 3 RB “south isolation valve room.” (IR 50-277-03-02; IR-50-278/03-02).

This was the *thirty-second Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., “**credit**” for 32 Non-Cited Violations = **\$1,610,000**.

- April 30 - May 11, 2003 - Unit-2 power “was reduced to approximately 30 percent to facilitate repairs to the Caldon leading edge flow meter (LEFM) system and for power suppression testing, to identify a leaking fuel assembly. During power ascension to approximately 85 percent, on May 6, following repairs to the Caldon LEFM system and after the leaking fuel assembly was identified and the adjacent control rod was inserted and de-energized, the #3 main turbine control valve started oscillating. Unit power was reduced to approximately 40 percent to facilitate repairs to the main turbine control valve. On May 11, 2003, Unit 2 returned to 100 percent power after the #3 main turbine control valve was repaired” (IR 50-277-200-3003; IR-50-278/200-3003). (See December 17, 2002, for a similar problem).

- May 8, 2003 --The NRC RENEWED THE OPERATING LICENSES FOR PEACH BOTTOM-2 AND -3 FOR AN additional 20 years, the agency said today. The licenses will now expire on August 8, 2033 for unit 2 and July 2, 2034 for unit 3. Exelon had submitted the license renewal application on July 2, 2001 (*Platts, Nuclear News.*)

- May 8, 2003 --EXELON LOWERED POWER AT PEACH BOTTOM-2 TO FIX A TURBINE CONTROL VALVE. The problem was discovered at around 3 p.m. yesterday as the unit was powering back up following completion of power suppression testing, company spokesman Dave Simon said. The unit had been operating at around 61% since April 30 while the power suppression testing was being conducted. It reached as high as 86% before being lowered to 42% to repair the control valve. Simon declined to say how long the repairs would take or when the unit would be returned to full power (*Platts, Nuclear News.*)

- May 13, 2003 - During a surveillance test, technician discovered a " wire for the station power supply" was broken. (IR 50-277-03-02; IR-50-278/03-02).

This was the *thirty-third Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., "**credit**" for 33 Non-Cited Violations = **\$1,665,000.**

### **SCRAM: APPENDIX "R" ISSUE AT PEACH BOTTOM 3**

- "On May 14, 2003, at approximately 0410, the shift supervisor determined that the Alternate Shutdown Panel on Unit 3 was not operable following discovery of a de-energized power supply. The panel provides the capability to maintain a safe shutdown path for a fire in the cable spreading room, main control room or main control room fan room. Therefore, operators would have been prevented from implementing required actions for a fire in those areas. The apparent cause of the loss of power was a broken wire, which was discovered during routine testing of the panel.

"Power was restored to the Alternate Shutdown Panel at approximately 1030 on May 14, 2003 and further investigation is in progress to determine the cause of the broken wire and full extent and effect of the de-energization of the panel." (U.S. Nuclear Regulatory Commission Operations Center, Event Reports For 05/14/2003 - 05/15/2003.)

### **"Pa. Nuclear Operator Found Drunk on Job"**

May 14, 2003 - An employee at two Pennsylvania nuclear power plants has been suspended for being intoxicated on the job, according to a Nuclear Regulatory Commission report.

The employee tested positive as being under the influence of alcohol during a random May 14 drug test at the Limerick Generating Station, according to the report. The test was given at 9:45 a.m., when the employee had already been at work for several hours, the report stated.

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The employee had been licensed to operate reactors at the Limerick plant in Montgomery County and the Peach Bottom plant in York County before being suspended by Exelon Nuclear, officials said.

The NRC considers nuclear workers with a blood-alcohol content of 0.04 or above to be intoxicated. The state of Pennsylvania considers drivers with a 0.10 reading to be intoxicated and unfit to drive.

The NRC is considering whether to issue the company a violation for the incident or revoke the operator's license. (See November 14, 2003, for a related development.)

- May 21, 2003 --EXELON'S FORMER CHIEF EXECUTIVE MADE THE TOP 10 LIST OF BEST-PAID U.S. energy executives for 2002, according to a compilation by the Platts Energy Business & Technology (EB&T) magazine. Corbin McNeill, Jr., the ex-chairman and co-CEO of Exelon Corp. had a compensation package of nearly \$29.8- million last year, making him the fourth highest paid CEO out of the 250 executives that were examined. McNeill's 2002 package included a severance payment and benefits from a pension benefit plan from PECO Energy. He retired from Exelon in April 2002. The highest-paid executive in 2002, at \$46.6-million, was Charles Watson, former CEO of Dynegy Inc., the EB&T listing shows. The survey, which will be published in the June issue of EB&T, considered the executives' salary, bonuses, restricted stock awards, underlying options, value of options exercised, long-term investment pool pay outs, and any other compensation. (See July 9, 2003, for staff cuts).

- May 22, 2003 - The NRC identified a Green violation relating to Appendix R, i.e., fire protection. The NRC deemed the issue as being of "very low safety significance" (IR 50-277-03-009; IR-50-278/03-009).

This was the *thirty-fourth Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., "**credit**" for 34 Non-Cited Violations = **\$1,720,000**.

- May 22, 2003 -- THE PENNSYLVANIA NATIONAL GUARD IS INCREASING ITS PRESENCE at the state's nuclear plants, Gov. Edward Rendell (D) announced yesterday. Since shortly after the Sept. 11, 2001 terrorist attacks until the end of last month, Pennsylvania had had a 24-hour Guard presence at the plants, but then had switched to random, unannounced security patrols, Rendell spokesman Michael Lukens said. But under Rendell's order, which went into effect yesterday, the two elements are being combined, Lukens said.

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He said the order would remain in effect "indefinitely," and the governor's office would continue to assess it. Rendell's announcement said he took the action in response to the recent elevation of the national threat level to orange, but Lukens said the state's assessment of the need for the Guard would not necessarily be tied to future changes in that threat level.

( *Platts Nuclear News Flashes*. ( See October 6 & 17, 2001, January 30, 2002, and November 2, 2002 for related incidents).

- May 28, 2003 -A License Event Report was generated after "licensed operators were notified that approximately 4 inches of water [170 gallons] was discovered at the bottom of the 'A' Standby Gas Treatment (SBGT) filter plenum during the performance of annual surveillance (IR 50-277/2003004; IR-50-278/2003004).

- June 13, 2003 - LOSS OF BOTH OFFSITE POWER SOURCES TO TECHNICAL SUPPORT CENTER: "During severe thunderstorms in the area power was lost to the onsite technical Support Center (TSC) for approximately 90 minutes. These storms caused both offsite power sources to the TSC to de-energize at 2021. Grid operators began restoration activities immediately and power was restored to the facility at approximately 2200. Investigation is in progress for the cause of the line tripping."

The licensee notified the NRC Resident Inspector.

- June 17, 2003 - ***Pensions: Utility Obligations Add Up***,  
*By Ken Silverstein Director, Energy Industry Analysis Utilities may get soaked again.*

Already, stock values and credit ratings have taken a hit because of the failure to mitigate risks to their unregulated operations. Now, their credit status may get cut even more, given the level of "unfunded" pension liabilities. If the money in the pension plan to pay retirement obligations falls short, then a "minimum pension liability" must be recorded on the financial statements. In lay terms, it means that if a company were to be liquidated today, then it would be compelled to pay up. The liability recorded could therefore impede the debt-to-capital ratio, which could harm credit quality and even trigger violations of covenants.

And while regulated utilities have a chance to recover such costs from their customers, many are now in the midst of rate moratoriums and cannot seek recovery, says Steven Fleishman, analyst with Merrill Lynch in New York City. Others would prefer to avoid a rate case, given that regulators may revisit their entire rate structure and reduce their allowable returns, he adds.

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Those with the largest underfunded pensions at year-end 2002, says Merrill Lynch, include Exelon (\$2.4 billion), FirstEnergy Corp. (\$977 million), Public Service Enterprise Group (\$837 million) and American Electric Power (\$788 million.) Companies with the largest underfunded pensions as a percentage of equity market value, include CMS Energy (60 percent), Sierra Pacific Resources (30 percent), AES Corp. (29 percent) and CenterPoint Energy (17 percent). FirstEnergy, for instance, has said that its pension liabilities had forced it to cut its 2003 earnings picture. Profits, it says, will grow by 4-5 percent-not the 7-8 percent that it had projected. DTE Energy, meanwhile, said that its pension expenses would be \$50-\$55 million higher in 2003 than in 2002. (See December 3, 2003, for related GAO Study).

- July 9, 2003 --EXELON HAS RESTRUCTURED ITS NUCLEAR OPERATIONS BY ELIMINATING regional operating groups in favor of a single organizational unit. The restructuring was made public today in an NRC Weekly Information Notice, but was announced internally to Exelon employees June 23. As part of the restructuring, Chris Crane was named chief operating officer of Exelon Nuclear, William Levis vice president of mid-Atlantic operations, and Chip Pardee senior vice president of nuclear services. Also, Robert Braun will replace the retiring Joel Dimmette as vice president of nuclear operations. The changes will become effective by Aug. 1, said Exelon spokeswoman Ann Mary Carley. She said that when Exelon Nuclear was formed in 2002, it set up the regional operating groups to accommodate the nuclear organizations of the former PECO Energy and Commonwealth Edison (ComEd), as well as AmerGen, a joint venture between Exelon and British Energy. Exelon was created by the merger of PECO and ComEd parent Unicom Corp. Over time, the two regional groups' policies and procedures have aligned and all 10 Exelon plants are now using the same policies and procedures, Carley said (Also refer to May 21, 2003 --EXELON'S FORMER CHIEF EXECUTIVE MADE THE TOP 10 LIST OF BEST-PAID U.S. energy executives for 2002, according to a compilation by the Platts Energy Business & Technology (EB&T) magazine. )

- July 11, 2003 - The NRC conducted a supplemental inspection to “assess the licensee's evaluation and corrective actions regarding the...June 2, 2002, carbon discharger event”. The NRC diluted its previous “White” finding and noted the event “will only be considered in assessing plant performance through the period concluding at the end of the second calendar quarter of 2003...” [In other words, 20 days from the NRC’s promulgation the event becomes a “non-event”.] (See November 26, 2002 additional data.) (IR Supplemental Report 50-277-03-11; 50-278/03-011).

This was the *thirty-fifth Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., “**credit**” for 35 Non-Cited Violations = **\$1,775,000**.

- July 16, 2003 - The NRC's Office of Investigation's (OI) concluded that Exelon was in violation of a License Amend met Restriction that requires notification when a reactor operator (RO) medical status changes. Such a change occurred to an RO on September 13, 2001, and the forenamed operator returned to work between April and December 2002 without notifying the NRC about the reactor operator Fitness for Duty in the control room.

The NRC's investigation began on January 3, 2003. "After careful consideration of the information developed during the investigation, the NRC has concluded that a violation of NRC requirements occurred" (PBAPS, NRC O&I No. 1-2003-002).

This was the *thirty-sixth Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., "**credit**" for 36 Non-Cited Violations = **\$1,830,000**.

- July 22-29, 2003 - Unit 2 experienced an automatic reactor shutdown "due to generator lockout from foreign material causing a short in the bus duct. Unit 2 returned to 100% power on July 29, 2003." (IR 50-277/2003004; IR-50-278/2003004).

On July 22, 2003, "Unit 2 shut down when a piece of broken fan belt entered the reactor's isophase bus duct cooling system. Exelon found that a design weakness existed and decided to install debris guards that would prevent beltmaterial from entering the fan suction."

"Despite Exelon's intention to install fan belt guards within 30 days, the corrective action took two months "with no rationale provided for the delay," according to the inspection report" ("York Sunday News", March 13, 2005).

- July 23, 2003 - PEACH BOTTOM-2 REMAINED DOWN TODAY AFTER TRIPPING AUTOMATICALLY yesterday due to an actuation of the main generator protective relay, Exelon spokeswoman Dana Fallano said. She said Exelon is investigating the root cause of the actuation (Source: Platts, *Nuclear News*).

- July 24, 2003 - The NRC identified a Green violation relating to the inoperability of 'A' train was inoperable between November 2000 through may 28, 2003 (IR 50-2772003003 IR-50-278/2003003).

This was the *thirty-seventh Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., "**credit**" for 37 Non-Cited Violations = **\$1,885,000**.

- July 29, 2003 - 11:55:05 AM EST **Peach Bottom plant back to full power; Shutdown of nuclear generating unit 2 last week cited as non emergency** By LANCASTER INTELLIGENCER JOURNAL

The Peach Bottom Atomic Power Station returned to full power today after an outage of one of its two power generation reactors last week.

Peach Bottom's Unit 2 reactor returned to service at about 10:15 a.m. Saturday. As of yesterday, the unit was operating at approximately 90 percent of capacity, said Dana Fallano, spokeswoman for Exelon Nuclear, which owns the plant.

Unit 2 shut down one week ago after generator problems forced an automatic shutdown.

Neil Sheehan, spokesman for the Nuclear Regulatory Commission, said all safety systems functioned properly during the shutdown and any radioactive steam that could have been released was contained and isolated in the reactor vessel. "It seems like a pretty straightforward event," he said.

Exelon reported the shutdown to the NRC at 5:30 p.m. July 22. The commission classified the shutdown as a "non emergency event."

According to Exelon's event report, Unit 2's generator malfunctioned at 1:45 p.m. that afternoon while operating at full power. With no way to output electricity, the plant's main turbine tripped off, which then triggered an automatic reactor shutdown.

Exelon employees had no firm answers last week on what caused the generator to malfunction, Sheehan said.

Yesterday, Fallano said the generator's protective electronic relay system activated after sensing some type of movement. She said the company is still investigating what type of movement that was.

**NRC reaction:** Sheehan said it's unlikely the NRC will send a team of inspectors to investigate because the problem occurred in the generator, not the reactor vessel, and the shutdown appears to have gone smoothly.

The utility may be concerned, Sheehan said, about losing a reactor during heavy summer demand for electricity. Fallano declined to discuss how much revenue was lost, calling it private, competitive information. When both Peach Bottom reactors are running, the power station supplies enough electricity for 2 million homes.

*...Continued on the following page...*

The event marked the second shutdown at Peach Bottom's Unit 2 in seven months. On average, the nation's 103 commercial reactors automatically shut down only once every other year, according to the NRC.

On Dec. 21, computer failure closed valves that direct steam from Peach Bottom's Unit 2 to the main turbine that generates electricity. The reactor automatically shut down to avoid a steam buildup.

The NRC sent a team of inspectors to the plant and cited Exelon for two safety violations involving human errors and equipment problems that occurred during that shutdown.

*Staff writer Charlie Young contributed to this report.*

- July 30, 2003 - EXELON REPORTED SECOND QUARTER 2003 EARNINGS OF \$402-MILLION, an 8.9% increase over the \$369-million earned in the same quarter one year ago. The company said an increase in sales, lower interest expense, and lower depreciation and amortization offset weather-related decreases in electricity deliveries and lower energy margins at Energy Delivery. Exelon reported its nuclear fleet, excluding the plants in the AmerGen joint venture (Clinton, Oyster Creek and Three Mile Island-1) generated 29,619 gigawatt-hours in the second quarter, compared to 28,776 GWH in the second quarter of 2002. Capacity factor of the Exelon fleet, including the AmerGen plants, improved to 94% during the second quarter this year from 92.1% in the second quarter last year, Exelon reported. AmerGen is a joint venture between Exelon and British Energy (Source: Platts, *Nuclear News*).

- August 8, 2003 - The NRC identified a Green violation “concerning the failure to properly correct an equipment deficiency that subsequently resulted in a challenge to the plant and operators. Specifically, a solenoid associated with a reactor feed pump turbine (RFPT) overspeed trip device exhibited degradation during RFPT overspeed testing on two occasions [September 27 and November 27, 2001], however, your staff failed to determine the root cause for this problem until a third problem occurred that resulted in a RFPT trip and plant transient” (IR 50-2772003012 IR-50-278/2003012).

This was the *thirty-eighth Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., “**credit**” for 38 Non-Cited Violations = **\$1,940,000**.

- August 14, 2003 - “...the fifth stage feed water heaters were removed from service for end of cycle coast down.” (IR 50-277-200-3004; IR-50-278/200-3004).

## ***Exelon Corp debt ratings unchanged by Sithe deal-S&P***

(NEW YORK, Aug. 18 - Standard & Poor's Ratings Services said today that its ratings on Exelon Corp. (nyse: [EXC](#) - news - people) (A-/Stable/A-2) and its subsidiaries will not be affected by the company's announcement that it will sell 50% of its equity interest in Sithe Energies Inc. Further, subsequent full sale of Sithe, which remains a distinct possibility given the put and call options attached to Sithe ownership, would not affect Exelon's ratings...Exelon's announced equity interest sale demonstrates the company's intention to sell off the disappointing merchant assets it acquired several years ago, a positive for credit quality. However, the fact that Exelon recorded a \$200 million write-down related to its original 49.9% investment in Sithe demonstrates the inherent risk associated with the remaining high-risk portion of this business. Copyright 2003, Reuters News Service.

(See August 29, 2003 for a related development).

- August 24, 2003 - "The fourth stage feed water heaters were removed from service [for end of cycle coast down]". (IR 50-277-200-3004; IR-50-278/200-3004)

## **POLL: Security officers expect another blackout in 12 months**

- August 25, 2003 - CSO Magazine polled 382 chief security officers (CSO) and senior security executives showed 59% blamed the electric industry and not the government for the blackout of 2003.

CSOs showed their lack of confidence in the power industry and grid with 59% predicting another major blackout within 12 months. Over three-quarters said they doubt the electric industry will be modernized in five years. That percentage want a probe by an independent investigator without ties to the industry. Almost half (47%) ask that the probe's results be classified to keep terrorists from learning about US vulnerabilities.

Those surveyed included 156 whose firms felt some direct impact of the outage. Many want the federal government to expand oversight of the electric industry. "Regulations are often regarded as the necessary evil in securing the nation's infrastructure," said Lew McCreary, editor of the Framingham, Mass, publication, but he was surprised that CSOs -- traditionally anti-regulation -- are calling for increased government control in this industry, "having now been faced with a glaring example of so-called market forces at work," the editor cleverly observed.

*...Continued on the following page...*

The magazine did the survey online Aug 19-21, having sent an email invitation to the web-based survey to 12,200 subscribers. The 382 are the ones that met qualifications and fully completed the survey. The sample was chosen randomly and each subscriber had an equal probability of being selected. Figure a 5% margin of error, the magazine said.

Results are at [www.csoonline.com/releases/\\_08220385\\_release.html](http://www.csoonline.com/releases/_08220385_release.html).  
(Story originally published in *Restructuring Today* 8/25/03)

### ***Raytheon Also Sues BNP Paribas Over Exelon Projects***

August 29, 2003 - LEXINGTON, Mass. -(Dow Jones)- Raytheon Co. (NYSE:[RTN](#) - [News](#)) sued an indirect subsidiary of Exelon Corp. (NYSE:[EXC](#) - [News](#)) , as well as BNP Paribas SA , about Exelon's decision to turn over the subsidiary to its bank lenders.

Raytheon said it is "seeking to protect Raytheon's rights" in connection with the Exelon Mystic and Exelon Fore River power plant projects in Massachusetts. In a press release, the aerospace and defense company said the suit was filed in Massachusetts' Suffolk County Superior Court.

On July 29, Exelon said it planned to turn Exelon Boston Generating LLC, its indirect subsidiary, over to its bank lenders. It decided to do so after continued evaluation of Boston Generating's power-plant projects and discussions with lenders.

Raytheon turned over the Mystic and Fore River projects to owner Exelon - one in April, one in July. The projects weighed down Raytheon's balance sheet for several years.

Raytheon was forced back into the construction business to complete the projects in Weymouth and Everett, Mass., after Washington Group International Inc. (NasdaqNM:[WGII](#) - [News](#)) filed for bankruptcy.

Representatives from Exelon and BNP Paribas were not immediately available to respond to the lawsuit.

Raytheon named the Mystic and Fore River units as defendants as well.

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Raytheon said that since Exelon's announcement, Raytheon has continued to perform final close-out work on the projects. Raytheon said it seeks to "obtain adequate assurances of payment" and protect its rights under its support agreements.

Raytheon, through a subsidiary, was the original contractor of the plants. It sold that subsidiary to Washington Group in 2000, but got project responsibility back in a settlement from Washington Group after Washington filed for bankruptcy in 2002.

Exelon seeks to transfer ownership of Boston Generating without the subsidiary filing for bankruptcy. Exelon has about \$700 million invested in Boston Generating. Exelon has said it plans to spend nothing further on Boston Generating outside of limited administrative and operational services.

Therefore, Raytheon is seeking a declaratory judgment and injunction from the court that will assure it is paid by either Exelon, its subsidiaries and subunits, or its lenders.

Exelon has refused to refund about \$36 million in prepaid liquidated damages that Raytheon advanced, the court papers said. Raytheon also said that the defendants have no right to draw upon about \$73 million in letters of credit that the defense contractor posted for them. Raytheon said it posted the credit to ensure the performance of its contractual obligations.

Throughout the court filing, Raytheon says that it spent, during the lifetimes of its guarantee agreements, more than \$1 billion for the benefit of Exelon, its subsidiaries and subunits, and the lenders.

BNP Paribas' alleged role in the matter dates back to January 2001, when a former owner of the plants, Sithe Generating, secured financing from the French bank to pay for the construction of the Mystic and Fore River facilities. After Washington Group abandoned work on the facilities, BNP and other lenders insisted on credit facility changes. One of those changes was that BNP, court papers indicated, would provide Raytheon with prompt written notice of any continuing events of defaults under the credit agreement.

Raytheon said that, from November 2002 -- when Exelon bought Sithe -- to the day Exelon announced it was handing the units over to its lenders, it never received any notices from BNP Paribas.

Because of the lack of notice, Raytheon claims it has continued to spend money in good faith and has been damaged by BNP's alleged omissions.

-Thomas Derpinghaus; Dow Jones Newswires; 201-938-5400.  
(See August 29, 2003 for a related development).

***The commission investigated a loss of power at  
Peach Bottom's power station in May***

By SEAN ADKINS Daily Record

- September 4, 2003 - For about nine days in May, an undetected broken wire caused a loss of power to a redundant control station for Peach Bottom Atomic Power Station Unit 3.

A failure to observe work order test instructions after maintenance on the panel prevented plant technicians from immediately discovering the broken wire, according to a U.S. Nuclear Regulatory Commission report.

Damage to the power supply wire occurred during maintenance to the high-pressure coolant injection alternative control station — a system used to shut down the plant if the operators are forced to leave the main control room because of a fire, said NRC spokeswoman Diane Screnci.

While the violation is under commission review, the incident did not pose a safety threat since the plant repaired the wire and restored power to the back-up station on May 14, Screnci said.

“There are other ways you could shut down the plant even if you don't have the station active,” she said.

Depending on the commission's findings, the infraction could mean additional plant inspections.

In June, Peach Bottom Atomic Power Station was the subject of a supplemental NRC inspection for a violation committed the year before.

Last year, a light bulb dropped from the ceiling onto a circuit board and caused the plant's fire-suppression system to discharge carbon dioxide [Refer to July 11, 2003] into the E-3 emergency diesel generator room in the Diesel Generator Building.

The supplemental inspection found that the plant had taken the proper corrective actions and the power station could return to a routine inspection schedule.

While the plant showed that its fire-suppression system was in working order, a malfunction in one of its diesel generators garnered a non-cited commission violation of very low safety significance.

*Continued on the following page...*

In June, NRC inspectors found that Exelon technicians had not adequately tightened the engine top cover flange joint bolts of an emergency diesel generator during a maintenance procedure.

As a result, lube oil leaked from the joint and caused a small fire on the exhaust manifold during a test.

During that same time period, Three Mile Island Unit 1 violated an NRC reporting requirement.

In June, NRC inspectors found that, on three instances, TMI officials found potentially disqualifying medical conditions among its licensed operators but had not reported them to the NRC within the required 30 days.

TMI requested its doctor to confirm with the patient's physicians, which extended past the 30-day NRC reporting period.

### **Two units at nuke plant shut down; grid disturbance cited**

- September 15, 2003 - An electrical disturbance on the power grid cut off incoming electricity at the Peach Bottom nuclear power plant and caused both reactors to shut down automatically early Monday, Exelon Nuclear officials said.

Plant officials declared an "unusual event" just after 2:30 a.m.

The plant's four emergency backup diesel generators provided emergency power for about an hour, said Exelon spokesman David Simon. One of the generators malfunctioned, and then another backup source of power was used to power vital equipment, such as lights and emergency feed water pumps, until power was restored later in the morning, Simon said.

... PJM Interconnection, the company that operates the power grid in the Mid-Atlantic, said it was investigating the grid disturbance. PJM spokesman Ray Dodter said the company couldn't yet say what caused the disruption.

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**Unit-2 was operating at 100% power, and returned to full power on September 25, 2003.**

**Unit-3 was operating at 91% power, and remained shut for the 3R14 refueling outage.**

- September 15, 2003 --THE U.S. COAST GUARD PROPOSED ESTABLISHING A PERMANENT SECURITY ZONE on the waters adjacent to Peach Bottom. According to a notice of proposed rulemaking published in yesterday's Federal Register, the zone "would protect the safety and security of the plant from subversive activity, sabotage, or terrorist attacks initiated from surrounding waters. This action would close water areas around the plant." A temporary final rule issued June 4 established the security zone on the Susquehanna River by restricting any person or vessel from entering or navigating the security zone without Coast Guard permission. The Coast Guard said in the notice that it wants to make the security zone permanent. Comments on the proposed rule are due by Nov. 14. (Source: Platts, *Nuclear News*).

- October 24, 2003 - Exelon Corp. Posts Quarterly Net Loss of \$102 Million  
- Oct. 24--Commonwealth Edison parent Exelon Corp. reported solid operating profit in the third quarter, but special items -- including a mammoth \$573 million charge to write off a disastrous investment in East Coast electricity-generating projects -- pushed the holding company's bottom-line results into the red. In the latest quarter, Exelon reported a net loss of \$102 million, or 31 cents a share. (*Knight Ridder Tribune Business News*.)

- October 27, 2003 -NRC AGREED TO RELAX TWO REQUIREMENTS IN AN APRIL ORDER ON SECURITY FORCE personnel working hours. NRC Office of Nuclear Reactor Regulation Director James Dyer Oct. 23 issued notices to all reactor licensees that the agency would allow shift turnover time to be excluded from total group work hours that must be tracked. The NRC staff had wanted accounting of all hours worked for tracking overtime, which it says could lead to worker fatigue, but now agrees with the industry that tracking the extra time does impose some additional burden. Industry officials argued the shift change time is usually not more than 15 minutes. The second relaxation allows licensees to increase the work hours during force-on-force exercises from a 48- to 60-hour per week average. Dyer said the staff understands that the simulated exercises put additional demands on the security guards but the mock attacks extend only for a short period of time (Platts, *Nuclear News*).

- October 29, 2003 --OPERATING POWER REACTOR LICENSEES MUST BE IN FULL COMPLIANCE TODAY with NRC's April 29 order imposing measures to control the work hours for security force personnel. The industry had asked for relief in two areas of the order, and the NRC staff recently approved those requests. The industry will not have to track the time it takes for guards to change shifts in the overall group work hours and will be allowed a 60-hour limit--up from the usual 48 hours per week--in scheduling guards during the week of a force-on- force exercise. Two other April orders, one on security officer training and the other on changes to the design basis threat, require full implementation by Oct. 29, 2004. A Nuclear Energy Institute official said at a conference in Arlington, Va. today that the industry plans to ask the NRC to rescind the three orders after licensees adopt the requirements in their security plans (Platts, *Nuclear News*).

- November 3, 2003 - S&P placed Exelon on credit watch after the Company announced it wanted to buy Illinois Power from Dynegy. or \$2.2 billion, if Illinois legislators grant it single-digit rate increases.

The deal was **canceled** after Exelon determined it could not count on rate increases.

- November 4, 2003 - NRC inspectors identified three, "Green" non-cited violations and Severity Level IV violation "associated with a lack of records to support changes made to the emergency plan" (IR 50-277-200-3004; IR-50-278/200-3004).

The Severity Level IV Violation, also Non-Cited, involved changes to Exelon's Standard Emergency Plan, including Limerick, Peach Bottom and Three Mile island. Exelon changed "emergency plan commitments without documentation" which subsequently impacted "the NRC's ability to perform its regulatory function..."

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The three other “Non-Cited” violations include different aspect of plant operations and training:

Licensed Operator Requalification “Green. A non-cited violation...was identified regarding the licensee’s method used to reactivate senior operator licensees to support refueling. The operators were reactivated without the required direct supervision being present during the shift under-instruction item. The Limited Senior Reactor Operator (LSRO) Requalification Program for Fuel Handlers is a dual site operator license program that applies to both Limerick and Peach Bottom sites.”

Finding 1 -Unit 2 Reactor Core Isolation Coolant System During Unit 2 Scram “...Exelon did not adequately correct a significant condition adverse to quality identified during a December 21, 02 scram, associated with the inoperability of the Unit 2 reactor core isolation cooling (RCIC) pump in the automatic flow control mode”

Finding 2 -Unit 2 Main Steam Line High Temperature Switch “..during the period of July 2001 through July 2003, Exelon did not adequately correct a condition adverse to quality, specifically a high Unit 2 steam tunnel temperature condition that was not representative of a steam leak”.

This was the *thirty-ninth, fortieth, forty-first and forty-second Non-Cited Violation* since June 1998. Exelon's **total cost avoidance**, i.e., “**credit**” for 42 Non-Cited Violations = **\$2,160,000**.

- November 7, 2003 - “NRC: NRC Appoints New Senior Resident Inspector at the Peach Bottom...Craig Smith is the new senior resident inspector at the Peach Bottom Atomic Power Station in Delta, Pa. The two-unit site is operated by Exelon. Most recently, Mr. Smith was a resident inspector at the Three Mile Island nuclear plant in Middletown, Pa.” (“NRC Press Release”).

However, Eric Epstein, Chairman of TMI-Alert, noted: “Craig Smith was at TMI for five years and hid on the Island except for annual appearances.” Mr. Epstein pointed to Mr. Smith’s last appearance before the public at the NRC’s Annual ROP Assessment meeting on Wednesday, April, 9, 2003.

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Mr. Smith stated that the number of employees at TMI was 529. When the NRC was apprised that they were off by 114 employees, they reassured the community it didn't matter how many people worked at TMI based on the color code, PI sequence and late hour. Local residents persisted, and told the NRC that Performance Indicators for Non- Performance does make sense, and we're still old fashioned enough to prefer Zero Tolerance to color-coded lollipops.

- November 8, 2003 - U.S. Warns of Al Qaeda Cargo Plane Plot -  
WASHINGTON (AP) -- The latest warning from the Homeland Security Department that al-Qaida may be plotting an attack is renewing calls for stricter security on cargo planes.

The department advised law-enforcement officials Friday night of threats that terrorists may fly cargo planes from another country into such crucial U.S. targets as nuclear plants, bridges or dams, Homeland Security spokesman Brian Roehrkasse (By THE ASSOCIATED PRESS/Published: Filed at 4:29 p.m. ET).

- November 13, 2003 - "Exelon Nuclear's Peach Bottom-2 was forced to shut down 196.3 hours due to off-site voltage fluctuations in the electrical grid" (*Nucleonics Week*, p. 17.)

yees screened positive for the illegal drug ~ the largest single six-month j  
**On drugs, and on the job, Between July 1999 and December 2002, 143 workers at local power plants tested positive for drugs or alcohol.**

By SEAN ADKINS , Daily Record staff (November 14, 2003)

Late in the afternoon of Sept. 24, 1999, a Three Mile Island security officer checked a tip about a short-term contractor smoking marijuana on the job. Officer Darlene Ranck escorted George Lonnie McDaniel, 27, to TMI's security office to be questioned for violating the plant's Fitness-for-Duty Program. Ranck and Officer Greg DeHoff asked McDaniel to empty his pockets.

The Jessup, Ga., resident pulled a small plastic bag of marijuana from his pocket, and plant security officers called the Pennsylvania State Police, according to an affidavit filed with District Justice David H. Judy in Dauphin County.

McDaniel's job at TMI did not grant him access to vital areas of the plant. Currently, Dauphin County has a fugitive warrant out for McDaniel's arrest. He could not be reached for comment for this article.

Between July 1999 and December 2002, 143 workers and short-term contractors at Three Mile Island and Peach Bottom Atomic Power Station tested positive for drugs or alcohol, according to biannual Fitness-for-Duty reports.

The York Daily Record obtained the reports from the U.S. Nuclear Regulatory Commission through a Freedom of Information Act request.

Drugs listed in the reports include marijuana, cocaine, opiates, amphetamines and alcohol. All the workers tested were people who had or were applying for unescorted access to vital areas of the plants. Many were short-term workers, such as McDaniel. They travel the nation, from power plant to power plant, to work when reactors are shut down for refueling.

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State Rep. Bruce Smith, R-Dillsburg, said he was disturbed by the number of positive drug tests reported by TMI officials. “There is no excuse or any way to defend substance abuse at a nuclear power plant,” he said.

Smith said he plans to contact the NRC and acquire the plant's Fitness-for-Duty reports for his own records. A Daily Record investigation found:

**XB7;** More people might have tested positive, but the NRC does not have a zero-tolerance policy when it comes to chemical testing. The commission uses cutoff limits to screen for narcotics and alcohol. For example, the NRC's limit for alcohol is a blood-alcohol content of 0.04 percent. That is equivalent to three 12-ounce beers in an hour for a 200-pound man.

**XB7;** Short-term contractors made up the majority of the workers who tested positive at both Peach Bottom and TMI unit 1 in Londonderry Township, Dauphin County. Short-term contractors generally handle maintenance and repairs that cannot be completed when the plant is on-line.

**XB7;** Workers inability to cope with stress following the terrorist attacks may have contributed to the largest single six-month jump in marijuana use among plant workers since July 1999. For both plants, 73 people tested positive for marijuana ~ the most of any intoxicant.

### **Keeping fit for duty**

In 1989, the NRC created a policy that each plant should follow an individual fitness-for-duty program. Collecting such data helps ensure that workers complete their jobs free of any physical or mental impairment such as drugs, said Neil Sheehan, commission spokesman. Twice a year, each plant files a report with the commission that details how many workers tested positive for legal or illegal substances.

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The commission examines the data for trends in drug use among plant workers, Sheehan said. “It acts as a performance indicator of a plant,” he said.

If a plant reports two or more fitness-for-duty program failures, the NRC will increase its level of oversight.

An example of a program failure could be a worker and plant physician working together to falsify screening results. Program failures could translate into increased inspections and possible fines, Sheehan said.

In 2001, the NRC hosted a specific investigation into whether a former commission- licensed chief shift operator at the Nine Mile Point Nuclear Station in New York had deliberately provided false, inaccurate, or incomplete information on health history forms. The investigation uncovered that the operator deliberately failed to provide complete information on the forms in order to mislead an officer.

The fitness-for-duty violation case did not result in a fine, but the NRC could have issued a base civil penalty of \$55,000.

Neither Peach Bottom nor TMI Unit 1 has been cited for a fitness-for-duty violation.

### **Test limits**

Rather than have a zero-tolerance drug policy, the NRC relies on cutoff levels to test if a person has abused drugs or alcohol. For example, the NRC’s limit on marijuana is 100 ng/ml ~ about the equivalent of smoking one joint in a week. At those levels, it is possible that a worker could endanger himself, fellow employees and the community, said Jim Beek, a public information officer for the Substance Abuse and Mental Health Services Administration.

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A division of the U.S. Department of Health and Human Services, SAMHSA sets guidelines for workplace drug testing for the NRC. The level of impairment depends heavily on a person's sensitivity to a specific drug, Beek said. Since most 'street drug' like marijuana and cocaine are not regulated by the U.S. Food and Drug Administration, it can be difficult for experts to determine the strength of the drug, Beek said. "When someone takes a hit off of a joint, you don't know how or when it might affect them," he said. "They could end up losing an arm or blowing up Delta, Pa."

From her living room, Marianne Adamski of Goldsboro has a view of TMI's water cooling towers billowing steam. She said the lack of a zero-tolerance drug policy for plant workers is , "cary."

"They should regulate it much better than that," Adamski said. "They should be more responsible than that."

The NRC's use of cutoff levels rather than zero tolerance is based on decades of research, Sheehan said. Studies indicate that drugs in quantities below the cutoff levels are not likely to affect job performance. For example, a plant employee who must report to work at 4 p.m. Monday and has cocktails Sunday night should not be affected by the alcohol once he reports to the plant, Sheehan said. "You might have a small amount of alcohol in your body, but based on evidence, it will not impair your ability to do the job effectively," Sheehan said.

One expert claims a zero-tolerance drug policy does not account for human digestion and passive exposure involving marijuana. The human body produces alcohol as a process of digestion, said Robert Stephenson, head of the SAMHSA Division of Workplace Programs. That amount of alcohol is below the level of impairment but above zero, Stephenson said.

Marijuana can stick to clothes and hair, he said.

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If a person walks through a room where people are smoking marijuana, it may mean that they were exposed to second-hand smoke rather than ingesting the drug. “Zero tolerance means that we won’t tolerate one free bite of the apple,” Stephenson said.

Another hurdle that laboratories must traverse in the quest for a true zero-tolerance drug test is technology.

Many drug cutoff levels exist essentially to test how far down the screening equipment can reach, said Dr. Carla Huitt. “Much of the equipment can't accurately measure down to zero,” said Huitt, medical director of the Industrial Resource Center at Memorial Hospital. “Below the cutoff level, they are just making an assumption that the person is not impaired.”

Regardless of the equipment, doctors cannot determine how an illegal drug will affect one person compared to the next.

Marijuana, the most common drug found in plant workers, can remain in the body for up to a month, Huitt said.

### **Fitness offenders**

On a regional level, most nuclear plant workers who tested positive for drugs were short-term contractors who work the sites during refueling. Between July 1999 and December 2002, 91 short-term contractors at Peach Bottom tested positive for drugs. At TMI, 45 temporary employees tested positive. The remaining seven workers who tested positive for drugs at both power plants were licensed employees.

A licensed worker is someone who has been certified by the NRC in their job and works at the plant full time.

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One reason for the unbalanced figures could be that Peach Bottom has two operating reactors that require double the manpower, compared to the needs of TMI's lone unit, Sheehan said.

Typically, plants temporarily hire hundreds of short-term contractors for repairs and maintenance when reactors are shut down for refueling. For example, short-term contractors have been involved with the installation of a reactor vessel head at TMI since Oct. 18. The plant's unit 1 reactor is currently shut down.

"There really is no need to keep a staff that size on permanently," said David A. Lochbaum, of the Union of Concerned Scientists in Washington, D.C., a nonprofit environmental group.

Power companies have the month-long outages every two years to conduct inspections, change out spent fuel rods, upgrade equipment and perform preventive maintenance that is difficult to complete while a plant is operational.

Since 1990, when the average refueling outage lasted 60 to 75 days, the industry has pushed to reduce the number of days the power plants are down, Lochbaum said. The more time a reactor is offline, the longer a plant goes without supplying power to the electrical grid ~ its main business. "They make their money when the plant is running," Lochbaum said. "Plant operators began to hire additional workers to get the required repairs completed in half the time."

But more workers means more drug screenings and a greater potential for positive chemical tests, Lochbaum said.

Most of the workers who fail the plants' drug tests are new hires who are screened for the first time and have not yet been assigned to the protected area, he said.

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For those workers who actively take drugs and make it to the protected area of the plant, specific safeguards exist to expose that person's habits to security.

Exelon Nuclear operates a computer program that randomly drug tests 50 percent of a plant's staff on an annual basis, said Hugh McNally, regional security manager for Exelon Generation. The process deters people from taking drugs under the assumption that a random test could take place at any time, he said. For example, the computer could randomly select a worker who was tested for drugs on Monday to be screened again on Thursday of the same week. "I could be tested three times in a year," McNally said. "Personally, I've been tested twice in one week"

As part of the plant's training process, new workers are instructed to recognize the symptoms of narcotics use and must report any changes in behavior they notice in other employees. Failure to do so could result in a worker losing his job, McNally said. "If I smell alcohol on someone's breath,% he said, "I need to report it to my supervisor."

At the drug test, a worker must list all the prescription medications he may be taking. The employee must fill a container with urine, McNally said. The worker is allowed to complete the four-minute test in a bathroom in private, but the employee is not permitted to run any water or flush the toilet. "We try to have a lot of controls in place so a person can't beat the system," he said. An onsite laboratory tests the samples. If a worker's urine screens positive for drugs, the plant sends the sample to an outside laboratory for complete verification.

Exelon temporarily denies the employee access to the protected area of the plant. Once the outside laboratory has confirmed the test, the plant's medical review officer makes a final determination.

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The commission requires a nuclear plant to restrict a worker's access to protected areas for at least 14 days. "For most people," Lochbaum said, "that means they lost their job. The plant may request a worker complete drug and alcohol counseling before the employee can return to the plant.

Plant officials make the final determination whether to reinstate the employee's access to the protected area or to fire the employee, McNally said. Access is automatically denied for three years if a person screens positive a second time, he said.

A failed drug test could hamper a person's chances for a new job, Lochbaum said. Power companies enter information relating to the failed test into a national database that is monitored by all power plants.

"It's a red flag that you lost unescorted access privileges to the plant," Lochbaum said. "If you violated their drug policy, you've kissed your job goodbye."

### **Spike in marijuana use**

Between July and December 2001, 10 TMI workers tested positive for marijuana while 20 Peach Bottom employees since July 1999.

By contrast, no workers at Peach Bottom tested positive for marijuana during the previous six-month period. At TMI Unit 1, three people tested positive for the drug during that period.

Aside from fall refueling outages that require more workers, the jump in drug abuse may be attributed to stress. The Sept. 11, 2001, terrorist attacks happened during the six months when the spike occurred.

*Continued on the following page...*

Generally, an unstable political and economic climate can elevate stress to the point where a person could turn to drugs as a coping mechanism, said Helen Gyimesi, a drug and alcohol prevention specialist for Memorial Hospital. “These are mood-altering drugs,” she said. “Working in a place like that after 9/11 could be scary”. (See May 14, 2003, for a related incident).

**The NRC will increase its inspections after four unplanned shutdowns of the nuclear plant’s unit 2 reactor.**

By SEAN ADKINS, *Daily Record staff, Saturday, November 15, 2003*

For the next year, the U.S. Nuclear Regulatory Commission will increase the frequency of its inspections at Peach Bottom Atomic Power Station’s unit 2.

Since October 2002, unit 2 has experienced four unplanned reactor shutdowns, said Neil Sheehan, commission spokesman. An NRC rule permits a utility to have three unscheduled reactor shutdowns within 7,000 critical hours of operation or about one year, he said.

If a reactor has more than three unplanned shutdowns, the NRC bumps its level of oversight of the reactor.

Dave Simon, spokesman for Exelon Nuclear, said the issue of the shutdowns will be addressed at a public meeting slated for next week. Exelon Nuclear declared an unusual event Sept. 15 when electrical breakers on the PJM Interconnection power grid failed to isolate a lightning strike in Chester County. The strike generated a power surge on two electrical lines that feed into the plant, forcing the unit 2 and unit 3 reactors into automatic shutdown.

Exelon co-owns and operates Peach Bottom Atomic Power Station and Three Mile Island unit 1 in Dauphin County.

*Continued on the following page...*

On July 22, a fault in the main generator system caused an automatic shutdown of Peach Bottom's unit 2. The unit's computerized reactor protection system received an over-current signal from the generator, which caused a trip of the main turbine and shut down the unit.

On April 12, the power station's unit 2 reactor shut down after an air line failure. The malfunction resulted in the closure of a main steam line isolation valve, which tripped the automatic shutdown.

An equipment failure that caused multiple bypass valves to open Dec. 21 of last year also led to an unplanned shutdown of Peach Bottom Atomic Power Station's unit 2 reactor.

In response to those four unscheduled reactor shutdowns, the NRC has labeled unit 2 with a white performance indicator. A green indicator is awarded to reactors that require the basic level of inspection. The next level up, a yellow performance indicator, is assigned to a reactor that requires extra monitoring.

As part of the additional inspections, NRC officials will examine the unit 2 reactor for equipment reliability and operator performance, Sheehan said.

"These shutdowns pose no danger to the public," he said.

# Mixed findings at plant

**Team investigated Sept. shutdown of 2 reactors**

**By KRISTIN FINAN *Dispatch/Sunday News***

A special team that analyzed the causes of, and responses to, an automatic shutdown of both reactors in September at the Peach Bottom Atomic Power Station reported mixed findings about the facility's handling of the event.

The U.S. Nuclear Regulatory Commission and representatives from Exelon, the company that operates the plant, presented their early report last night to the public at the Peach Bottom Inn in Delta.

Lightning struck the plant on Sept. 15 and disturbed the local electrical grid. Because Peach Bottom receives energy from the grid as well as provides it, it shut down automatically around 1:30 a.m. when those power sources were reduced.

The six-person team of specialists from the NRC regional office will release a full report by Dec. 18. As it outlined its findings last night, the team said it found both positives and negatives in the way the situation was handled.

**Malfunction:** The Peach Bottom facility, which has been generating electricity since 1974, is on the west bank of the Susquehanna River in southeastern York County and serves about 2.5 million homes. It is one of 17 generation units operated by Exelon Nuclear.

A major problem with the September shut-down was a malfunction with a system backup, said NRC spokesman Neil Sheehan. Typically, if there is a problem with a reactor, emergency diesel generators provide more power.

But the reactors shut off after an hour, and one of the diesel generators shut down.

Team members said that while the generator's failure appears to be an equipment problem, they were not yet sure who should have been accountable.

Team members also found degraded conditions within the plant that should have been updated and said concerns voiced by staff members were never investigated.

*Continued on the following page...*

They noted lapses in the monitoring of equipment, procedural problems concerning what action should be taken after a shutdown and conflicts over which departments should take action about specific issues.

"We have not been as diligent at identifying problems and getting them out on the table as we need to," said Rusty West, Peach Bottom site vice president. "We need to better understand all the equipment anomalies that we have and pursue them with great vigor."

But the team noted that the Peach Bottom staff acted quickly and correctly determined how to respond to the incident, the team reported.

And managers have been diligent about conducting internal investigations and taking proactive actions --- such as cleaning equipment and defining emergency procedures, it said.

But some audience members said the NRC should be doing more to prevent future shutdowns.

Sept. 15 was the plant's fourth automatic reactor shutdown in the past year. On July 22, Peach Bottom's unit 2 reactor lost power after generator problems. The same unit shut down previously on April 12 and Dec. 21.

In response, the NRC recently labeled unit 2 a white performance indicator, meaning it will be monitored more closely, Sheehan said.

But Eric Epstein, chairman of Three Mile Island Alert, a group that monitors local nuclear plants, said the four shutdowns in a year are cause for concern.

"You should be concerned with the trend," Epstein said. "Any time there's a forced shutdown, it means the plant's safety systems are being challenged."

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THE NRC's Inspection team **found six "Green: violations** as a result of the incidents. All six were deemed Non-Cited violations

This was the *forty-third, forty-fourth, forty-fifth, forty-sixth, forty-seventh and forty-eighth* **Non-Cited Violation** since June 1998. Exelon's **total cost avoidance**, i.e., "**credit**" for 48 Non-Cited Violations = **\$2,490,000.**

- November 25, 2003 - NON EMERGENCY 10 CFR Section: 26.73 -  
FITNESS FOR DUTY Person (Organization): ANTHONY DIMITRIADIS (R1) Unit  
SCRAM Code RX CRIT Initial PWR Initial RX Mode Current PWR Current RX Mode  
2 N Y 100 Power Operation 100 Power Operation 3 N Y 100 Power Operation 100  
Power Operation **Event Text** FITNESS FOR DUTY NOTIFICATION DURING  
RANDOM DRUG TESTING

A contract employee tested positive during a random test. The employee's access to the protected area has been terminated. Contact the HOO for additional details. The licensee has informed the NRC Resident Inspector.

- December 17, 2003 --PEACH BOTTOM-2 WAS AT 58% POWER AND RAMPING UP THIS MORNING FOLLOWING a reduction yesterday to 44% power in order to perform a planned control rod pattern adjustment, Exelon spokesman Ralph DeSantis said (NUCLEAR NEWS FLASHES )

**Peach Bottom has rough week** BY REBECCA J. RITZEL  
Intelligencer Journal Staff

- December 22, 2003 - Peach Bottom Atomic Power Station got a double dose of bad news last week. On Wednesday a routine test went awry, and on Thursday a report arrived in the mail warning that plant operator Exelon Nuclear likely will be cited for five safety violations for reactor shutdowns in September. On Tuesday, plant operators ran a test on the Unit 3 reactor's high-pressure coolant injection system. A turbine exhaust valve stuck open longer than expected, prompting workers to cancel the test midway through, according to a Nuclear Regulatory Commission report. Exelon Nuclear reported to the NRC that the plant was in "accident mitigation" status. The NRC classified the valve problem as a "non-emergency event."

Also last week, the NRC released a report concerning the September reactor shutdowns at Peach Bottom. Both active reactors went off-line Sept. 22 after a lightning strike in Chester County caused widespread power outages. An NRC inspection team visited the York County plant after the incident. In a 38-page letter to Exelon CEO Jack Skolds, an NRC deputy director of reactor safety detailed results of the inspection. The inspectors determined Exelon workers responded "adequately" to the emergency. "Nevertheless," the report says, "the operators were challenged by equipment and procedural problems."

Exelon likely will be cited for five safety violations as a result those problems. Of chief concern to the NRC is Exelon's failure to properly maintain its emergency generators according to their instruction manuals. One of the four generators failed during the power outage. On the NRC's color-coded scale, safety violations are classified, in descending order of risk, as "red," "yellow," "white" and "green." Exelon likely will receive a white violation at Unit 2 and a green violation at Unit 3 for the generator problems. Exelon has until Sunday to provide additional evidence before the NRC considers penalizing the utility. The NRC already has decided to cite Exelon for three green violations for other equipment malfunctions that occurred Sept. 22. The report also includes results from Exelon's own investigation into the lightning strike. PECO, an Exelon subsidiary, owns the power lines where the lightning strike occurred. A joint PECO/Exelon investigation found failures in circuit maintenance and a variety of problems in work practices.

When the lightning strike occurred, a circuit breaker failed to isolate the damaged power line, cutting off power to more than 100,000 PECO customers and shutting down three Exelon and PECO plants - Peach Bottom, Conowingo (Md.) Hydroelectric Station and Muddy Run Pumped Storage Facility in Holtwood.

Exelon determined Peach Bottom could have been isolated from the strike if power substations in Nottingham and Newlinville had been properly upgraded and maintained. Company officials said those upgrades will be included in widespread electrical infrastructure improvements.

## **Report: Funds set aside for nuke cleanup inadequate**

By AD CRABLE, Lancaster New Era

Dec 3, 2003, 13:53 EST, Congressional investigators say utilities are not adequately setting aside the hundreds of millions of dollars needed to clean up nuclear reactors at Three Mile Island and Peach Bottom when the plant sites close.

The report by the U.S. General Accounting Office claims that funds that, by law, must be set aside for restoring plant sites to their original condition may be as much as 25 percent lower than needed for TMI's Unit 2 reactor. Decommissioning for Peach Bottom's closed Unit 1 reactor appears to be 51 to 100 percent underfunded, according to the report.

The cost of closing down and removing TMI Unit 2 was estimated at \$433 million in 1997. The cost of decommissioning Peach Bottom Unit 1 was recently estimated at \$129 million by plant owner Exelon Nuclear. The report did not say how much actually had been set aside to date in the decommissioning funds for the two reactors.

However, the owners of the two plants, where other reactors remain in use, said today that the decommissioning funding report by the investigative arm of Congress is flawed and that the money will be there when the plant sites end their useful life several decades from now.

Updating a 1999 report that first warned that decommissioning funding at many U.S. nuclear plants was not adequate, the GAO said on Monday that the \$27 billion saved by the nuclear industry through 2000 was actually ahead of schedule.

But breaking down the savings by individual plant owners, the study said that owners of 42 of the 125 nuclear plants that have operated in the United States had accumulated fewer funds than needed to be on track to pay for eventual decommissioning, after the plants close.

*Continued on the following page...*

"Under our most likely assumptions, these owners will have to increase the rates at which they accumulate funds to meet their future decommissioning obligations," the 55-page report said. Furthermore, the report criticized the federal Nuclear Regulatory Commission -- the nuclear industry's governmental watchdog -- for not taking action to force utilities to step up funding to address inadequacies.

In 1988, the NRC began requiring owners to certify that sufficient money would be available when needed to decommission their nuclear plants. Beginning in 1998, utilities were required every two years to show how much money had been set aside and where the money was coming from. Most funds come from ratepayers and investments in trust funds.

The GAO study singled out Exelon Nuclear, the owner of Peach Bottom and the active reactor at TMI, as being behind the curve on set-aside funding. GAO said the trust funds for 11 of the 20 nuclear power plants owned by the company were inadequate.

However, the GAO found that Exelon Nuclear was actually well above other utilities in saving for the future closure of TMI's active Unit 1 reactor and Peach Bottom's two active reactors. And Exelon spokesman Craig Nesbit said the more-than-adequate funding will take care of any deficiency for the other Peach Bottom reactor that closed in 1974. Nesbit criticized the GAO report, saying it looked only at individual units instead of entire plant sites, and did not consider specific decommissioning strategies, such as Exelon's.

He also said the GAO study was "skewed" because it did not take into account that most nuclear plants, such as Peach Bottom and TMI, will be relicensed for another 20 years, which gives utilities more time to save decommissioning funds. "All of Exelon's plants are adequately funded for decommissioning now, and will be in the future," Nesbit said.

*Continued on the following page...*

Though Exelon owns the site, the responsibility for decommissioning the TMI Unit 2 reactor, closed since a 1979 accident, lies with FirstEnergy Corp., which bought out former TMI owner GPU.

The GAO study indicated the funding shortage is between 1 percent and 25 percent for TMI's Unit 2. FirstEnergy spokesman Scott Shields denied today that there were inadequate funds for restoring the Unit 2 site to its original condition. "We will continue to collect funds for the decommissioning for Unit 2 and we will be fully funded by the time the plant is retired," he said. Shields noted the site can't be cleaned up until Unit 1 is closed. TMI's license expires in 2014 but an extension is expected.

Eric Epstein, an expert witness on decommissioning before the Pennsylvania Public Utility Commission and chairman of TMI-Alert, a safe-energy citizens group, is not so confident.

He said the GAO study on decommissioning shortcomings is just the tip of the iceberg. Citing the escalating costs of disposing of low-level and high-level nuclear waste, Epstein said "clearly the utilities underestimate and lowball decommissioning costs." Epstein fears utilities will not be making the profits in the future when plants are closed down and will not be able to pay for what it will actually cost to restore nuclear plant sites. People not yet born may have to pay for that shortcoming through higher electric bills, he said.

Inadequate funding for future closures was a constant concern expressed by former Lancaster mayor Art Morris when he chaired a citizens advisory panel on the cleanup of TMI in the 1980s.

"It's just the same old story. It's absolutely remarkable that after all these years of public comment and criticism that the Nuclear Regulatory Commission just sits and does nothing about (inadequate funding)," Morris said today. "The taxpayers will have to pay for it. There needs to be an NRC that stays on top of this and monitors it."

- December 22, 2003 - NATIONAL GUARD TROOPS BEGAN PROTECTING PENNSYLVANIA'S NUCLEAR POWER PLANTS at 7 a.m. local time today, according to Gov. Edward Rendell (D). Troops will remain at the plants as long as the threat level remains at "orange," indicating a high risk of a terrorist incident, Rendell said. Deployment of the state National Guard to the nuclear plants was among the steps the state government took to protect Pennsylvania infrastructure in response to the raising of the Homeland Security Threat Level yesterday. The nuclear plants in Pennsylvania are Beaver Valley, Limerick, Peach Bottom, Susquehanna and Three Mile Island. NRC spokesman Dave McIntyre said he was not aware of other states deploying National Guard troops to nuclear plants in response to the increased threat level (NUCLEAR NEWS FLASHES.)

- NEW YORK, Jan 13 (Reuters) - Exelon Corp., the No. 1 U.S. nuclear plant operator, on Tuesday said it named nuclear industry veteran Christopher Crane as chief nuclear officer and president of its key nuclear division. Crane replaces **John Skolds**, who was named president of Exelon's energy delivery unit -- a position left vacant by the resignation of Michael Bemis. Jan 13, 2004 Reuters Power News

Sat, Jan. 17, 2004 **Authorities: Pilot who buzzed area was drunk**

By NICOLE WEISENSEEEGAN

The pilot who terrorized the airways with his erratic flying for four hours Thursday night - circling the Limerick nuclear plant and buzzing Philadelphia International Airport - was drunk, authorities said yesterday. When he emerged from his single-engine plane, he was staggering, his eyes were bloodshot, and his pants were unbuttoned and unzipped, authorities said.

Tests showed that the pilot, John Salamone, owner of a Pottstown concrete company, had a blood-alcohol level of 0.13, over the legal limit of .08. Until tests are complete, however, he has not been charged with DUI, according to Montgomery County District Attorney Bruce L. Castor Jr. Salamone, 44, owner of J. Vincent Concrete Contractors, was released into the custody of his brother-in-law. The single-engine plane he was flying is registered to his firm, records show.

Jim Peters, a Federal Aviation Administration spokesman, said his agency had opened an investigation into Salamone but have not yanked his license. "At the end we will make a recommendation about what to do," he said. That could mean anything from no action to a civil penalty, or suspension or revocation of his license. Salamone did not return phone calls requesting comment.

Salamone took off from Pottstown-Limerick Airport between 6:15 and 6:30 p.m., Peters said. He first flew over Center City, then headed toward Philadelphia International Airport, prompting controllers to order six aircraft that were on final descent to clear out of the way, Peters said.

Salamone then headed to South Jersey and attempted to land at an airport outside Glassboro before returning to Philadelphia airspace.

He declined to land in Philadelphia, and then headed to Limerick, where he landed briefly there, before taking off toward the nuclear plant. He finally landed again at Limerick airport and was arrested, authorities said.

York Daily Record: **NRC watching Peach Bottom -**

**The power station was issued violations after a September reactor shutdown.**

By SEAN ADKINS Daily Record staff Tuesday, February 10, 2004

The U.S. Nuclear Regulatory Commission will be more vigilant of Peach Bottom Atomic Power Station's Unit 2 reactor as result of a second-tier safety violation.

The commission has penalized the Unit 2 reactor with a "white" finding related to the failure of an emergency diesel generator during an unscheduled Sept. 15 reactor shutdown.

A white violation refers to an event at the plant that is considered as of low to moderate safety significance.

Since the generator failure affected both of the plant's units, NRC officials tacked on a green violation in regard to the power station's Unit 3 reactor.

A green violation is an event characterized as being of very low safety significance, said Neil Sheehan, spokesman for the NRC.

The commission decided on a green violation because fewer safety-related electrical loads powered by the emergency generator exist for Unit 3.

"This will help us better know where we need to focus an increased level of attention going forward," Sheehan said.

A bolt of lightning struck a Chester County power pole Sept. 15, generating an electrical surge along power lines that feed into Peach Bottom Atomic Power Station.

The strike led to the automatic shutdown of the plant, which triggered the formation of a special, augmented NRC inspection team.

As part of its findings, the team found that faulty protection circuitry and a loose wire failed to contain the surge that disabled the plant.

Exelon has replaced all damaged fuses and tightened necessary wires to help ensure a similar event will not shut down the power station.

Within moments of the September shutdown, the plant's four diesel generators kicked on to power the station's vital equipment and offices.

About an hour later, one of the reserve generators seized. Exelon declared a “discretionary” unusual event — the lowest of the NRC’s emergency categories.

“This is not a common thing,” Sheehan said. “These generators should operate smoothly.”

The commission’s inspection team found that deficient procedures were followed during the 1992 installation of generator adapter gaskets. Combustion gas leaked into the jacket water cooling system — a problem that led to the automatic tripping of the generator Sept. 15.

In March and April 2003, Exelon took corrective actions to repair the observed low jacket water pressure conditions. The NRC said the...problem was not resolved.

Last June, commission inspectors documented that lube oil had leaked from loose flange joint bolts on an emergency diesel generator at the plant. That leak caused a small fire in the exhaust manifold during a test.

The NRC responded to the fire by issuing a green violation.

Exelon has less than a month to reply to the commission’s white finding. The company will not appeal the determination, said Craig Nesbit, a company spokesman.

Exelon agrees with the NRC’s findings, he said.

Date: 02/22/2004

**Event Text**

**MANUAL SCRAM AT PEACH BOTTOM 2 DUE TO  
DECREASING CONDENSER VACUUM**

"Peach Bottom Unit 2 reactor was manually scrammed due to degrading main condenser vacuum. The reactor was manually scrammed prior to reaching the automatic scram setpoint. All plant systems responded as expected with no significant issues noted. A Group II and Group III Primary Containment Isolation was received due to reactor water level passing through 1 inch. All isolation systems responded as required and repositioned to their expected positions." The licensee also indicated that all control rods properly inserted into the core. The method of decay heat removal was using the main condenser. The licensee initiated a post scram review to identify and correct the source of degrading vacuum. The licensee also indicated the manual scram was initiated at 25 inches and lowering of condenser vacuum.

The licensee notified the NRC Resident Inspector.

YDR: Reactor shutdown no threat - *Mechanical problems caused Peach Bottom's Unit 2 reactor to be shut down Sunday.*

By SEAN ADKINS Daily Record staff Wednesday, February 25, 2004

Operators manually shut down Peach Bottom Atomic Power Station's Unit 2 reactor Sunday after a series of mechanical problems.

Last week, control room workers monitored an air leak in the reactor's condenser — equipment used to turn steam into water.

The condenser pumps that water back to the reactor.

On Tuesday, plant officials determined the leak came from an expansion joint caused by routine wear and tear of the system, said Dana Melia, spokeswoman for Exelon Generation. Exelon co-owns and operates the power station.

“That type of wear and tear is typical of any steam plant,” Melia said.

That leak caused a loss of vacuum — a piece of equipment found inside the condenser, she said.

The shutdown caused no threat to public health or the plant's ability to distribute electricity, Melia said.

Peach Bottom Atomic Power Station's Unit 3 was not affected by its neighbor's shutdown and continues to function at full power.

The second unit's reactor is designed to go into automatic shutdown if the vacuum level drops to a specific set point, Melia said.

On Sunday, operators elected to manually take the reactor offline and bring the unit to a cold shutdown.

“(A shutdown) is safer when it's manual rather than automatic,” Melia said. “You have more control over it.”

All equipment used to carry out the shutdown functioned as it should, Melia said.

“They did what they were supposed to do,” said Diane Screnci, spokeswoman for the U.S. Nuclear Regulatory Commission. “The plant's systems responded as expected.”

Soon after the 3:11 p.m. shutdown, the plant notified its resident NRC inspector of the unit's problems.

The commission is having its inspector look into the cause of the shutdown, Screnzi said.

As for Exelon, officials are investigating the cause of the leakage and what steps are necessary to bring the plant's second reactor back online, Melia said.

"We are trying to determine why it happened," she said.

Plant officials will use the shutdown as an opportunity to conduct routine maintenance of the site such as the checking of valves.

While Melia did not say when the reactor would return to service, Screnzi said the time frame is more "a matter of days rather than months."

### **YDR: NRC still watching Peach Bottom -**

*Four unplanned shutdowns in about a year netted the reactor a 'white' violation, which gets it extra oversight.*

By SEAN ADKINS Daily Record staff Saturday, April 10, 2004

At bottom: · IF YOU GO A low to moderate safety violation discovered last year means additional regulatory oversight for Peach Bottom Atomic Power Station's Unit 2.

The unit will face a Nuclear Regulatory Commission supplemental inspection later this year as a result of deficient performance based on its number of unplanned shutdowns.

The commission will follow a normal inspection schedule for the power station's third unit through Sept. 30, 2005. Based on the assessment of an NRC inspection team, the commission cited Unit 2 with a "white" violation for the failure of the emergency diesel generator.

Following a Sept. 15 unplanned shutdown of Units 2 and 3, a reserve generator seized.

The generator, one of four, helps power the plant's vital equipment and offices.

A commission inspection team later found that deficient procedures were followed during the 1992 installation of generator adapter gaskets. Gas leaked into the equipment's jacket water cooling system — a problem that led to the automatic tripping of the generator Sept. 15. The NRC team determined that corrective actions Exelon took to repair the observed low jacket water pressure conditions in March and April 2003 were inadequate. The problem was not resolved.

Since that time, the plant has created corrective actions to ensure the operation of the generators, said Pete Resler, spokesman for Exelon Nuclear, which co-owns and operates the power station.

For example, the plant has revised maintenance, testing and inspection procedures for the diesel generators.

Training materials regarding the generators have been updated, Resler said.

Aside from the low to moderate safety breach, five "green" violations at Unit 2 in 2003 caught the attention of the commission.

A green violation is characterized as being of very low safety significance.

Some of the green infractions include problems with the second unit's safe shutdown emergency lights and the emergency diesel generator fire protection system. "These findings highlight a need for Exelon to improve this area," according to a March 3 letter sent by the NRC to the utility.

Commission officials will make another trip to Peach Bottom Atomic Power Station's Unit 2 in September to review the causes behind the reactor's four unplanned shutdowns per 7,000 critical hours, or roughly one year of operation.

The shutdowns occurred between the fourth quarter of 2002 and the fourth quarter of 2003, said Diane Scenci, spokeswoman with the NRC.

The fourth shutdown that occurred during the third quarter of 2003 netted the second reactor a white performance indicator, she said.

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Increased oversight was maintained by the NRC at Peach Bottom-2, "which will face a Nuclear Regulatory Commission supplemental inspection later this year as a result of **deficient performance** based on its number of unplanned shutdowns. The commission will follow a normal inspection schedule for the power station's third unit through Sept. 30, 2005 (*York Daily Record*.)

## ***Unplanned shutdowns and equipment failure were to blame.***

By SEAN ADKINS Daily Record staff Thursday, April 15, 2004

With little more than a projection screen between them, officials with both the Nuclear Regulatory Commission and Exelon Generation met Wednesday night at the Peach Bottom Inn to walk through the agency's annual safety performance assessment of Peach Bottom Atomic Power Station.

Based on a 2003 low-to-moderate safety violation, commission officials will host a supplemental inspection of Unit 2 to ensure the reliability of the plant's diesel generators.

In September, NRC staff will investigate through an additional inspection the reason behind Unit 2's four unplanned shutdowns per 7,000 critical hours, or roughly one year of operation. The unscheduled shutdowns occurred between the fourth quarter of 2002 and the fourth quarter of 2003.

The fourth shutdown that occurred during the third quarter of 2003 netted the second reactor a white performance indicator — a violation of low to safety significance.

Between Jan. 1 and Dec. 31, 2003, both Peach Bottom Atomic Power Station's Unit 2 and 3 reactors racked up 17 green violations — an infraction of very low safety significance, said Brian Holian, deputy director of reactor projects for the NRC's Region 1.

Some of the green infractions include problems with the second unit's safe shutdown emergency lights and the emergency diesel generator fire protection system. "Seventeen green violations," Holian said, "it's a hefty amount. But you have to remember it's a twin reactor plant and that's for both units."

Bill Levis, vice president of mid-Atlantic operations for Exelon, said the company views the violations as an indicator that the plant did not meet expectations. "We can clearly do better than that," he said.

The commission will follow a normal inspection schedule for the power station's third unit through Sept. 30, 2005.

On Sept. 15, one of the plant's four emergency diesel generators seized. The equipment's failure occurred in the hours following an unplanned shutdown of both reactors.

A commission inspection team later found that deficient procedures were followed during the 1992 installation of generator adapter gaskets.

Gas leaked into the equipment's jacket water cooling system — a problem that led to the automatic tripping of the generator.

Typically, the plant runs all four diesel generators for at least two hours every two weeks to check for reliability, said Craig W. Smith, senior resident NRC inspector at Peach Bottom Atomic Power Station. The NRC team determined that corrective actions Exelon took to repair the observed low jacket water pressure conditions in March and April 2003 were inadequate. The problem was not resolved.

"We didn't do enough fast enough," Levis said. "We recognize our obligation to public health and safety. We take that very seriously." Since the generator failure, the plant has instituted a monitoring system that tracks the amount of gas that could leak into the generator's cooling system, said Paul Davison, director of engineering for the power station.

Following the failure, the plant checked all the generator adapter gaskets and installed new equipment as needed, he said.

Other tests that were in place prior to the generator shutdown scan for temperature, engine reliability and vibration control.

"We will follow all this up with inspections," Holian said. "The proof will be in the pudding."

July 2, 2004:

### **GOVERNOR RENDELL ANNOUNCES ENHANCED SECURITY MEASURES AT NUCLEAR POWER PLANTS**

#### ***National Guard, State Police to Provide a 24-hour Presence and Random, Unannounced Patrols During Independence Day Holiday***

**HARRISBURG:** Governor Edward G. Rendell today said the Pennsylvania National Guard and the Pennsylvania State Police will provide both a 24-hour presence and random, unannounced security patrols at the Commonwealth's five nuclear power plants. The enhanced security measures will be provided in a coordinated fashion with the plant operators and their security teams, and will remain in force at least through the conclusion of the Independence Day holiday.

"My Homeland Security Team continues to coordinate on a regular basis with the U.S. Department of Homeland Security, the Federal Bureau of Investigation, the U.S. Department of Defense, and the Nuclear Regulatory Commission in order to discuss and share relevant intelligence information and threat analysis," Governor Rendell said.

“Although there currently exists no credible threat against any Pennsylvania nuclear power facility, in an abundance of caution I have asked the National Guard and State Police to immediately commence enhanced security measures at our nuclear power stations. At a minimum, we will maintain this deployment status through the holiday weekend.”

The state’s nuclear power plants are Beaver Valley in Shippingport Borough, Beaver County; Susquehanna in Salem Township, Luzerne County; Limerick in Limerick Township, Montgomery County; Peach Bottom in Delta Borough, York County; and Three Mile Island in Londonderry Township, Dauphin County.

### **Groups want action on nuke fuel storage**

Watchdogs prod federal regulators to shore up spent-fuel pools against possible terrorism. Peach Bottom is among plants affected.

Date: 08/11/04

Day: Wednesday Page: B-1 Byline: Ad Crable

LANCASTER NEW ERA - Used, deadly uranium fuel stored at the Peach Bottom and 31 other similarly designed nuclear reactors around the United States is especially vulnerable to terrorist attack, watchdog groups charge. "Nuclear reactors are pre-deployed weapons of mass destruction," said Deb Katz, executive director of Citizens Awareness Network, one of three-dozen public interest groups signing the petition, including Greenpeace, Union of Concerned Scientists and the locally based Three Mile Island Alert.

The groups filed a petition for action with the U.S. Nuclear Regulatory Commission, calling on the agency to immediately address structural vulnerabilities to terrorism at the plants. "It is the NRC's job to protect our health and safety and assure public confidence in the regulatory process. Presently, NRC's efforts are inadequate," said Eric Epstein of TMI Alert and a candidate for the state Senate.

While alleging that all 103 commercial nuclear plants in the country are vulnerable to accidents or "acts of malice or insanity," the 33-page petition particularly points the finger at spent-fuel pools at Mark I and II boiling water reactors, such as that found at Peach Bottom.

At those nuclear plants, used uranium fuel rods are placed in pools of water high above the ground, covered by only a lightweight roof and walls, the groups say.

The arrangement, they say, makes the pool vulnerable to terrorist attacks from planes or on the ground. "If a pool is breached, there is no surrounding structure or backfill to inhibit the drainage of water. Its cooling system is vulnerable to attack at several points. The exterior configuration of the reactor building facilitates accurate aiming - for example, of an explosive-laden aircraft - by a knowledgeable attacker," the petition states.

The group says breaching of spent-fuel pools "could cause great public harm" with widespread radiation fallout.

The groups outline a number of steps they feel the NRC should take, including beefing up on-site security; re-equipping spent-fuel pools with low-density racks so that spent fuel would not ignite if water were lost from the pool; establishing ways to recover from loss of water; and improving emergency response plans for surrounding communities.

The petition comes shortly after concerns about spent-fuel vulnerability were voiced by some members of Congress.

Craig Nesbit, spokesman for Peach Bottom operator Exelon Energy, said this morning that "there is nothing substandard about any of Exelon's plant designs."

The NRC has no comment on the petition while the agency is processing it to see if it meets the NRC standards for action, spokeswoman Diane Screnci said.

A spokeswoman for the Nuclear Energy Institute, a nuclear industry group, said she had not yet seen the petition.

In another development affecting Peach Bottom, the federal Department of Energy announced it would pay Exelon at least \$300 million for costs associated with storage of spent fuel at its nuclear plants.

The DOE had promised in the early 1980s to accept used fuel from U.S. reactors for disposal, beginning in 1998. Amid extensive controversy, however, a national repository has not yet been built. Exelon and 64 other companies sued DOE for not taking the fuel.

By SEAN ADKINS Daily Record/Sunday News,

September 1, 2004

The Nuclear Regulatory Commission has requested that officials at Peach Bottom Atomic Power Station Unit 2 submit in writing plans to address inadequate corrective actions for known equipment problems.

The cross-cutting issue includes two "green" violations of very low safety significance listed within the commission's mid-cycle performance review and inspection plan of the power station.

That review stretched from July 1, 2003, to June 30. The NRC released the review Monday.

Next month, a team from the NRC will travel to the plant to run an additional inspection on Unit 2 to determine how Exelon has responded to "white" performance indicators found in the third quarter of 2003 and the first quarter of 2004.

Exelon co-owns and operates Peach Bottom Atomic Power Station.

The power station's Unit 3 performance requires no additional NRC oversight. That unit will follow a normal inspection schedule through March 31, 2006.

The supplemental inspection will investigate the reason behind Unit 2's four unplanned shutdowns per 7,000 critical hours, or roughly a year of operation.

The unscheduled shutdowns occurred between the fourth quarter of 2002 and the fourth quarter of 2003. One of the unplanned shutdowns included the failure of one of the plant's four emergency diesel generators. Following the shutdown, a commission inspection team found that deficient procedures were run during the 1992 installation of generator adapter gaskets. Gas leaked into the equipment's jacket water cooling system — a problem that led to the automatic tripping of the generator.

The NRC determined that the problem warranted a "white" finding, or a violation of low to moderate safety significance.

Earlier this year, the plant formed a root-cause analysis team from the power station's maintenance and engineering divisions to deal with the failed diesel generator, said Dana Melia, an Exelon spokeswoman.

The plant put its self-critical analysis into action in June and further modified its plan last month, she said. The actions focused on the maintenance of the generator and other reliability conditions, Melia said. The NRC will look at all the plant's actions during its September inspection.

Power station officials are now forming a second root-cause team to deal with the plant's ongoing problems with cross-cutting issues, Melia said.

Cross-cutting issues are events that affects many different areas of plant performance, said Neil Sheehan of the NRC. "The substantive cross-cutting issue was based on several inspection findings in which corrective action for a known equipment problem was either insufficient or delayed for implementation," according to the mid-cycle review.

The most recent findings deal with problems related to Unit 2's high-pressure coolant injection oil system and high-pressure service water valves, Sheehan said. Both problems resulted in green violations.

The high-pressure coolant injection oil system is a reserve safety operation put into play to shut down the plant quickly, Sheehan said.

The oil is used to lubricate the system that injects coolant into the reactor vessel to keep the fuel cool at times of emergency, he said.

In June, plant officials found that oil flow to a part of the system had been interrupted. As a result, damage to the turbine bearing and rotor rendered the machine inoperable. The plant had to replace the bearing and rotor. The system was unavailable.

The second green violation dealt with corrective actions of high-pressure service water valves that pull water from the Susquehanna River that is used to cool down various plant components, Sheehan said.

How the plant will respond to the violations will be part of the letter sent to the NRC in October, Melia said.

September 12, 2004:

**State plan to handle nuke crisis challenged**  
**Preschools, hospitals and nursing homes are unprepared,**  
**2 residents say**

**BY GARRY LENTON                      Of The Patriot-News**

State and federal authorities are investigating allegations that Pennsylvania is unprepared to evacuate preschool children and nursing home and hospital patients during a nuclear accident.

The federal government requires that the state have a plan for moving people who cannot care for themselves and live within 10 miles of a nuclear plant. Two Harrisburg area residents allege that the state has been out of compliance with federal safety requirements for nearly two decades.

Gov. Ed Rendell's office and the Federal Emergency Management Agency took on the review of the state's plan after receiving a letter last week from Larry Christian and Eric Epstein, chairman of the watchdog group Three Mile Island Alert, detailing these issues. The Nuclear Regulatory Commission also received the letter.

If the accusations are deemed true, it would call into question the validity of the operating licenses for the five nuclear power stations in Pennsylvania. Federal law requires the NRC to determine that the public will be protected in a radiological emergency before it grants a license to open a nuclear plant.

Event Date: 12/22/2004

**Event Text**

**REACTOR SCRAM AND ECCS INJECTION FOLLOWING OPENING  
OF TURBINE BYPASS VALVES**

"At approximately 04:55 on December 22, 2004, Unit 2 experienced a malfunction of Electro-Hydraulic Control (EHC) system resulting in opening of main turbine bypass valves and resultant loss of reactor pressure. The reactor automatically shutdown on RPS with the completion of a Group I isolation signal (Reactor pressure 850 psig and Reactor mode switch in RUN) resulting in a closure of the Main Steam Isolation Valves (MSIVs). Reactor level lowered to (ECCS) initiation set-point of -48 inches and High Pressure Coolant Injection (HPCI) system and Reactor Core Isolation Coolant (RCIC) system automatically initiated and restored level. When reactor level lowered below the 1 inch set-point, Group II and III Primary Containment Isolation System (PCIS) signals initiated. All Unit parameters are stable and RPS/PCIS/ECCS systems performed as designed. MSIVs remain closed. Reactor level and pressure are stable with HPCI and RCIC systems in control. Group I, II, and III isolations have been reset. The EHC malfunction is presently under investigation by Station Management." All systems functioned as required. The reactor water level is now at 23 inches and stable and the licensee is conducting a slow depressurization to Mode 4 to investigate the EHC system malfunction. The level transients experience during the scram would be expected with the closure of the MSIVs. The licensee has notified the NRC Resident Inspector.

***Peach Bottom-2, already under increased NRC supervision,  
scrams again***

**REACTOR SCRAM AND ECCS INJECTION FOLLOWING OPENING OF TURBINE  
BYPASS VALVES**

"At approximately 04:55 on December 22, 2004, Unit 2 experienced a malfunction of Electro-Hydraulic Control (EHC) system resulting in opening of main turbine bypass valves and resultant loss of reactor pressure...All Unit parameters are stable and RPS/PCIS/ECCS systems performed as designed...The EHC malfunction is presently under investigation by Station Management... The reactor water level is now at 23 inches and stable and the licensee is conducting a slow depressurization to Mode 4 to investigate the EHC system malfunction...The licensee has notified the NRC Resident Inspector." (NRC, Region I, Power Reactor Event Number: 41277.)

*Continued on the following page...*

By TOM JOYCE Daily Record/Sunday News

Saturday, December 25, 2004

Peach Bottom Atomic Power Station's Unit 2 reactor had an emergency shutdown early Wednesday morning.

It was down for about 48 hours, and started up again on Friday morning, according to Craig Nesbit, a spokesman for Exelon, the company that owns the plant.

No radiation leaked during the shutdown, Nesbit said. In fact, the shutdown didn't occur in a portion of the plant that contains radiological parts. According to Nesbit, the problem occurred when a circuit card malfunctioned in the electronic hydraulic control system.

The plant shut down, as it's designed to do in such circumstances. Nesbit characterized it as an engineering issue rather than a safety issue.

The time-consuming part was figuring out precisely where the malfunction occurred. "It's a relatively simple operation, but it takes a few days," Nesbit said.

The plant has experienced several emergency shutdowns in the past two years, Nesbit said. Plant officials are now conducting a "root cause investigation" to see if the problems are all the result of an underlying problem, or simply isolated occurrences. "A root cause investigation is a very detailed and intense look at the root cause of the problem," Nesbit said.

The Nuclear Regulatory Commission could not be reached for comment. On Friday, the Lancaster Intelligencer-Journal reported that an NRC spokesman said the commission is concerned about the frequency of Peach Bottom's shutdowns.

In August, the NRC sent Exelon's CEO a letter warning the company to improve its routine maintenance work for the remainder of 2004 or face increased federal oversight. And in September, the NRC sent a special inspection team to see what Exelon was doing to prevent emergency shutdowns at Unit 2.