Three Mile Island Alert

The Newsletter of Three Mile Island Alert February 1997

Pros and Cons Aired at Waste Site Meeting

from a December 7, 1996, Derrick (Oil City, PA) article

Sandwiched by presentations from two local protest groups, a representative from ChemNuclear Systems spoke in Franklin recently about the contractor's effort to find a site in Pennsylvania for a low-level nuclear waste storage facility.

Walt Newcomb spoke briefly to the board of the Northwest Regional Planning and Development Commission, comprised of a large group of elected officials from the eight counties the commission represents.

As he spoke, protesters in the audience at the Franklin Club stared stonily and waived signs proclaiming the counties in the area were 'Posted. No radioactive dumping," or declaring that "Low-level waste = high-level risk" and "Hosts make ghosts."

Following the speeches, some officials from Venango, Clarion and Forest counties said they were glad to hear more about the issue, but that they were not swayed by Newcomb's speech and would not want a nuclear-waste facility in their area.

Newcomb explained the components of the site selection process, which since July 1995 has included a provision requiring that a municipality volunteer before its land could be used as a site for the facility.

"We want to ensure that there is broad-based support in a host municipality before we go there ... because, after all, we are going to live in that municipality," he said.

The municipality which houses the site would receive numerous benefits, Newcomb said, including 70 new jobs, direct annual payments and a host of other potential benefits which would be negotiated case-by-case.

Above all, he said, ChemNuclear is dedicated to making the storage site safe. "Safety is our number one priority. It is the most important reason for everything we do with this project," he said. Newcomb said ChemNuclear is selecting the site carefully to prevent contact between the waste and sources of water, and that the waste would be stored above ground level and sealed by three layers of concrete. In addition, he said the site would be equipped with an advanced detection system to immediately alert workers to any leakage.

(Continued on page 3, column 1)

TMI Plaintiffs Rebuffed by Supreme Court

from a January 20, 1997, Pennsylvania Law Weekly article

The United States Supreme Court rejected an appeal last week by 42 people who filed lawsuits over the Three Mile Island nuclear accident in Pennsylvania 18 years ago. Without comment, the court let stand rulings that said a change in federal law meant their lawsuits were filed too late.

The TMI nuclear power facility near Harrisburg released radiation into the atmosphere on March 28, 1979. As a result, more than 2,000 people sued. The appeal acted on last week was on behalf of 42 people who missed Pennsylvania's two-year deadline for suing and filed their lawsuits in Mississippi, which has a six-year deadline.

But Congress in 1988 amended the Price-Anderson Act, a federal law dealing with liability risks associated with nuclear energy, to apply Pennsylvania's two-year statute of limitations to all TMI lawsuits. The 1988 amendments retroactively nullified the lawsuits filed in Mississippi, and the justices were urged to rule that such an effect violated due-process rights. The Philadelphia-based 3rd Circuit had rejected that argument last July.

Three Mile Island Alert

Three Mile Island Alert (TMIA) is a non-profit citizens' organization dedicated to the promotion of safe-energy alternatives to nuclear power, especially the Three Mile Island nuclear plant.

Formed in 1977 after the construction and licensing of TMI Unit-1 and the construction of the infamous Unit-2, TMIA is the largest and oldest safe-energy group in central Pennsylvania.

TMIA members interested in specific aspects of nuclear power are encouraged to join one of TMIA's committees. These committees include:

- Radiation Monitoring
- Low-level Radioactive Waste
- Health Effects of TMI
- Nuclear Plant Security

This newsletter is published approximately 6 times per year.

Publisher - Kay Pickering
Editor - David Raeker-Jordan

Three Mile Island Alert
315 Peffer Street
Harrisburg, PA 17102
Phone: (717) 233-7897
FAX: (717) 233-3261

NRC Staff Identifies Troubled Plants

from a January 29, 1997, NRC Press Release

The Nuclear Regulatory Commission staff advised the Commission today that it has identified 14 nuclear power plants that warrant increased NRC regulatory attention. The plants were placed on the NRC watch list earlier this month at a meeting during which senior NRC managers conducted their semi-annual review of the performance of operating nuclear power plants and fuel cycle facilities.

The plants are:

Crystal River Unit 3, operated by Florida Power Corp. near Crystal River, Florida (listed for the first time);

Dresden Units 2 and 3, operated by Commonwealth Edison Co. near Morris, Illinois (first listed in June 1987, removed in December 1988, and added again in January 1992);

Indian Point 3, operated by the New York Power Authority near Buchanan, New York (listed in June 1993);

LaSalle Units 1 and 2, operated by Commonwealth Edison near Ottawa, Illinois (listed for the first time);

Maine Yankee, operated by Maine Yankee Atomic Power Co., near Bath, Maine (listed for the first time);

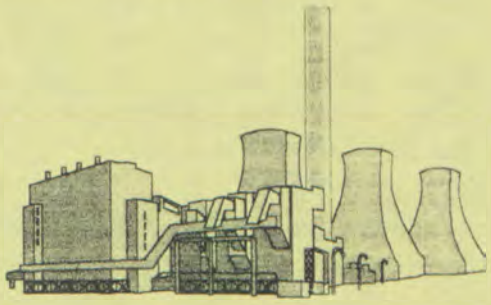
Millstone Units 1, 2 and 3, operated by Northeast Utilities Service Co. at Waterford, Connecticut (first listed last January);

Salem Units 1 and 2, operated by Public Service Electric and Gas Co. near Salem, New Jersey (listed for the first time); and

Zion Units 1 and 2, operated by Commonwealth Edison 40 miles north of Chicago (first listed in January 1991 and removed in January 1993).

The staff also informed the Commission that it has identified a trend of declining performance at Illinois Power Company's Clinton plant near Clinton, Illinois, and at Wisconsin Electric Power Company's Point Beach facility near Manitowoc, Wisconsin.

[Editor's note: Texts of letters to utilities with plants on the watch list or with a declining trend are available on the NRC's Internet home page at this address: http://www.nrc.gov/OPA. The transcript of the Commission briefing is also posted.]



(Continued from "Pros and Cons," page 1)

Also speaking were Jan Beichner and Scott Wohlstein on behalf of Stop The Organizations Raping Mankind (STORM) and Susan Hahnfeldt from Protect the Environment And Children Everywhere (PEACE).

Judith Johnsrud, originally scheduled to speak for STORM, was unable to attend the meeting. Speaking first, Beichner emphasized the possible health risks associated with nuclear-waste storage and said local municipalities should not be swayed by benefits offered by the state. "Before anyone gets excited about the bribes, they must look at the risks," she said. "Is a low-level waste dump dangerous for you and your community? Only you can decide by educating yourself about the issues and the facts," she said.

At Beichner's request, Scott Wohlstein of Mobilwave Co. spoke to highlight the economic risks of hosting the facility. "The bottom line is, you can't expect businesses to stay in this community...if you don't keep your house clean," he said.

Following Newcomb's speech, Hahnfeldt criticized ChemNuclear directly, accusing the company of misleading the public. "There is no safe dose of radiation. ...Though classified as low-level, waste targeted for this dump is high-risk. Low-level waste is a misnomer," she said. "After six years, [they are] still trying to sell...this nasty piece of work under the guise of low-level. It's low, all right."

During a question-and-answer period following the speeches, as many protesters rose to give speeches of their own, Clarion County Commissioner Keith Martin stood to declare his opposition to the waste site. "Clarion County is not interested in what you have to sell," he said, to loud clapping and yells from the protesters. Martin's colleague, Commissioner Sally Minich, said later she heard a lot of good points made during the presentations, but she would not comment on what she thought of locating the waste site in this area. "It's a problem that needs addressing, and I don't have the answer," she said.

Venango County Commissioner Bob Murray said he was glad for the opportunity to hear both sides of the issue, but that the commissioners do not want the storage facility in Venango County.
"Our main concern is from the economic point of view," he said. "This county needs to be focusing on job creation and economic development. I'm concerned that if this site locates here, it will be the last business to locate here."

Forest County Commissioner Samuel Wagner said he doesn't see his county ever wanting to volunteer to host the site."We're obviously following the whole process as close as we can to determine if that will be a possibility," he said. "This is something we need to learn more about, not just public officials but the public as a whole. This is an issue that's not going to go away."

NRC Receives Application from DOE for License to Store TMI Fuel Debris

from a January 14, 1997, NRC press release

The Nuclear Regulatory Commission has received an application from the Department of Energy (DOE) for a license to store core debris from the Three Mile Island-2 reactor in dry storage casks at the Idaho National Engineering Laboratory (INEL) complex in Butte County, Idaho.

DOE shipped the debris from the damaged reactor core to INEL between 1986 and 1990 and stored it in a spent fuel pool in the Test Area North facility of the complex. The dry cask storage installation DOE plans to construct and operate will be about 25 miles away--but still within the INEL complex--in the Idaho Chemical Processing Plant.

Before deciding whether to issue a license, the NRC staff will prepare an environmental impact statement and will conduct a technical evaluation of the application to determine whether it meets NRC requirements. The term of the license, if granted, would be 20 years.

No Place for Nuclear Leftovers

from January 31, 1997, The Morning Call (Allentown) and The Washington Post articles

Faced with a mountain of nuclear waste and a shortage of places to put it, a coalition of governments and utilities from 36 states asked a judge yesterday to hold the Clinton administration to a 1998 deadline for opening a dump site for spent commercial nuclear fuel. The coalition, which includes 46 state agencies and 33 power companies, filed papers in the U.S. Circuit Court of Appeals demanding that the Department of Energy honor a 1982 commitment to take control of stockpiles of highly radioactive wastes that are piling up at power plants around the country.

Local utilities Pennsylvania Power & Light Co., PECO Energy Co. and GPU Nuclear Co. joined with Pennsylvania and New Jersey in suing the federal government. The action was taken six weeks after Energy Department officials acknowledged in a letter to electric utilities that it cannot meet a Jan. 31, 1998, deadline for accepting spent nuclear fuel from commercial nuclear plants.

The petition also seeks to free utility companies from paying additional money into a fund for the construction of a still-unbuilt storage site. More than $ 12 billion has gone into the fund in the past 15 years.

They want a federal appeals court in the District of Columbia to:

*Order the Department of Energy to accept depleted nuclear fuel starting Jan. 31, 1998, a date established in a 1982 law.

*Allow electric utility companies with nuclear plants to stop paying fees into a federal fund for cleanup costs and instead to put the money in escrow until a burial site is opened.

Utilities have paid $ 7.4 billion into the fund and owe another $ 2 billion, the lawsuit says. Investment interest puts the balance at $ 12 billion.

In Pennsylvania, home to five nuclear power plants, utilities have paid $ 500 million, the lawsuit says. PP&L customers alone have contributed $ 15 million a year since 1983, the company says. Like many utilities, PP&L that year signed a government contract for disposal of spent fuel from its plant along the Susquehanna River in Luzerne County, starting next year. The radioactive material is left upon depletion of the uranium pellets that fuel reactors. Roughly 30,000 tons already is stored in underwater holding tanks at plants across America.

Authorities envision a national repository 100 miles from Las Vegas, underneath Nevada's Yucca Mountain. But concern over material that remains lethal for centuries, opposition from Nevada and other delays prompted the government last month to admit that no site will be open before 2010. The delays are forcing utilities to create additional storage space at many plants, a process that the industry says is expensive and forces its customers to pay twice for fuel storage.

PP&L now stores spent fuel rods in water alongside each reactor at Susquehanna. If necessary, there's enough room for five more years' worth of used fuel, said Herbert D. Woodeshick, a top executive there. But PP&L had hoped to begin storing the material in special canisters outside the plant this fall, Woodeshick said.
Contractor-related concerns have delayed that plan until next year

Operators of the three other nuclear plants in eastern Pennsylvania yesterday reported no immediate need for extra on-site storage capacity. But two are considering it. One nuclear power plant operates near the Lehigh Valley: Limerick, run by Philadelphia-based PECO, in upper Montgomery County. Its storage capacity will last until 2009, spokesman Bill Jones said. PECO has four years' capacity at a separate facility near the Maryland line near Peach Bottom, York County. Jones said alternative storage is being considered there. Capacity at Three Mile Island, near Harrisburg and operated by a sister company of GPU Energy Co., Reading, extends beyond 2014, spokeswoman Laura Karinch said.

Radioactive Rail Cargo Exposed

from a January 28, 1997, The Morning Call (Allentown) article

A carload of slightly radioactive parts from a nuclear power plant was accidentally exposed at the Conrail rail yard in Allentown on January 26, and hazardous waste specialists were sent in, the federal Nuclear Regulatory Commission said yesterday. NRC spokeswoman Dianne Screnci said the door of a rail-car container holding about 40,000 pounds of steam turbine diaphragms was found slightly open while workers prepared to send the plastic-wrapped parts to a decontamination site in Koppel, Beaver County, northwest of Pittsburgh.

"Some of the bracing on the car collapsed and the (rail-car container door) cracked open," she said. "They're still trying to get it closed. That's all we know right now." The cargo was from the Monticello nuclear plant near Minneapolis, Minn. The rail car had mistakenly been sent to Dockside, N.J., then re routed through Allentown. The level of contamination in the parts posed "no significant risk," Screnci said. The parts themselves apparently knocked the car door open during transit.

Screnci said hazardous waste specialists from the Pennsylvania Emergency Management Agency, the state Department of Environmental Protection and Conrail were still investigating the mishap at press time.

NRC begins plant design inspections

from a December 2, 1996, Energy Report article

The Nuclear Regulatory Commission (NRC) began the first in a series of special design inspections to ensure license compliance after recent findings that some plants were operating contrary to their license.

A six-member team began the first of the series at the St. Lucie Nuclear Power Plant in Florida. The second will begin shortly at Three Mile Island Unit 1 in Pennsylvania, and the third at Washington Nuclear Project-2 in the State of Washington. Similar inspections will be performed periodically over the next two years at other plants.

[Editor's note: The inspection of TMI Unit 1 found that an emergency pump system designed to get coolant to the reactor core in case of emergency was only pumping air when used under some circumstances.]

NRC said the inspections will focus on reviews of the plants' original design and configuration, and conformance with the licensees' safety analysis report. Each inspection team will be made up of engineers from NRC and design specialists from either Stone & Webster or Sargent & Lundy, architect and engineering firms with which NRC has contracted.

Last month, the NRC ordered all power plant operators to submit comprehensive information within three months on their efforts to maintain accurate designs after commission inspectors found design documents at many plants do not show what actually exists.

State Sues U.S. To Get Ward Valley Site

from a February 1,1997, Associated Press article

Saying that his patience was spent, Gov. Pete Wilson said Friday that California is suing the federal government in an effort to obtain 1,000 acres of the Mojave Desert for a low-level nuclear waste dump, known as Ward Valley.

California has already licensed Idaho-based U.S. Ecology to build the dump 18 miles from the Colorado River near Needles. But safety concerns, and the fact that another of the company's dumps in Nevada is already leaking, prompted U.S. Interior Department officials last year to order additional soil and water testing at Ward Valley.

Dan Hirsch of the Committee to Bridge the Gap, which opposes the dump, accused the Wilson administration of suing to try to block environmental testing. "It sends a very loud signal that the governor knows the nuclear project is unsafe and will leak like all of this company's other dumps," Hirsch said. "It is cowardly and shameful," he said. "I think this is the last gasp of the Ward Valley project."

The state's lawsuit, filed in U.S. District Court in Washington, asks the court to compel the Interior Department to turn over the land. A move in January 1993 by President George Bush's administration to transfer the land to the state was blocked by a federal judge in San Francisco.

Thermo-Lag Laggards Put on Notice

from a November 11, 1996, Inside NRC article

NRC intends to tell the licensees for 22 units they need to expedite their plans for resolving inoperable Thermo-Lag fire barriers. According to a report to commissioners, staff plans to urge licensees to bring their inoperable fire barriers into compliance by the end of 1997 -- which would be nearly six years after the barriers were declared inoperable by the agency.

Licensees whose schedules extend beyond 1997 will be called in and asked to explain the necessity for the longer schedules. If NRC is not satisfied, it may take enforcement action or even issue orders directing the licensees to comply by the end of next year, according to the agency's October 31 semi-annual status report.

NRC has already met with the Tennessee Valley Authority about Sequoyah-1 and -2, who set its schedule for Thermo-Lag compliance at January 2000 or nine years after the problem was first brought to light. (It was a 1975 fire at another TVA plant, Browns Ferry, which led to the NRC fire protection regulations with which Thermo-Lag is in conflict. As a historical footnote, Browns Ferry was also among the last of the plants to "comply" with those regulations after their initial adoption in 1980.)

Licensees for the following plants have schedules for Thermo-Lag resolution extending beyond 1997 and are therefore candidates for the so-called "management meetings," staff says: Turkey Point-3 and -4; Perry; Davis-Besse; Susquehanna-1 and -2; Crystal River-3; Millstone-1 and -2; Three Mile Island-1; Peach Bottom-2 and -3; Limerick-1 and -2; Oyster Creek; Hatch-1 and -2; St. Lucie-1 and -2; Vogtle-1 and -2; River Bend; Summer, and Clinton.

There have been 14 exemption requests filed in connection with returning Thermo-Lag to compliance, according to the report. One, from Virginia Power Co.'s North Anna-1 and -2 was approved. One, from GPU Nuclear's Three Mile Island-1, was denied. Two, from Florida Power & Light Co.'s Turkey Point-3 and -4 and Maine Yankee Atomic Power Co.'s Maine Yankee, were withdrawn. The remainder are either "on hold," which appears to mean under consideration for withdrawal or resubmittal, or under active review, staff said.

The denied TMI-1 submittal was for a fire barrier with an endurance rating of less than one hour. North Anna's exemption, which was approved, involved the cover plates on openings through charging pump cubicle walls not being fire rated.

TMIA Security Committee Update

TMIA Security Committee chairman Scott Portzline was interviewed for a recent PBS program on nuclear terrorism. "America's Defense Monitor," produced by the Center for Defense Information, is not shown on the local affiliate, but a copy of the show is available from TMIA. He discusses the 1993 intrusion at TMI and the World Trade Center terrorists' training camp only 30 miles from TMI. The terrorists threatened to attack nuclear targets and performed a night-time mock assault on an electrical substation near the training camp.

Scott was also the guest on a national radio talk show. The Art Bell show can be heard on the internet at http://www.artbell.com using "Real Audio" software. Select the January 28, 1997, program under "Archived Shows."

Scott attended a November NRC briefing on lost and stolen nuclear materials. There are about 9,000 licensed devices that are missing. Steel mills have inadvertently smelted nuclear devices. Decontaminating a steel can cost as much as $100,000,000. The cost of disposing of a licensed device can cost as much as $20,000. The fine for illegal disposal is only $2,000.

TMIA Security Committee website is located at: http://pages.prodigy.com/nuclear.terrorism.

Pennsylvania Launches Deregulation of Utilities

from a December 27, 1996, Central Penn Business Journal article

In December 1996, Pennsylvania became the fourth state to deregulate its electric companies, which means any company can sell electricity in the state using the existing network of wire. But what's being deregulated is the generation portion of consumer bills, the cost of generating power. The transmission and distribution costs, heavy lines from the power plant and the power lines leading into homes, will remain regulated.

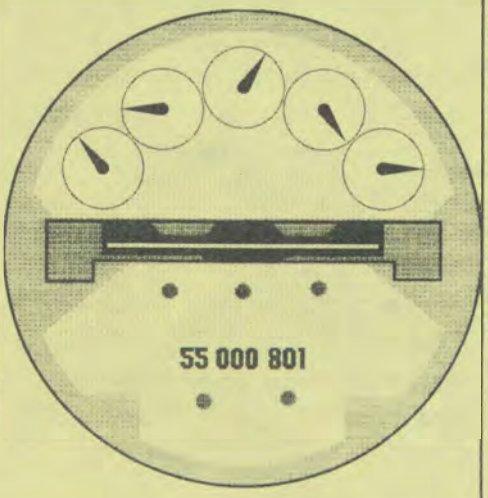
Open competition, also called retail wheeling, was pushed in the state Legislature through separate bills sponsored by Rep. Frank Tulli, R-Dauphin, and Sen. David Brightbill, R-Lebanon. By the year 2001, all 5.2 million Pennsylvania customers will have the choice of picking which company supplies their electricity. By early 1998, the state Public Utility Commission should know how much utilities can charge customers for so-called "stranded cost" -- expensive long-term investments such as nuclear power plants. That's where the battle will begin, according to state Consumer Advocate Irvin Popowski.

Meanwhile, electric companies have already restructured their wholesale business, separating electric generation from transmission and delivery. These efforts response to competition in the wholesale electric market created by the 1992 National Energy Policies Act.
One factor that drove the deregulation debate is the disparity in electric costs. Pennsylvania rates are in the highest 25 percent of electricity rates among other states, according to the Energy Information Administration of the U.S. Department of Energy.

PUC Commissioner John Hanger, a Democrat who supported open competition, suggested that competition could result in a 16.61 percent rate cut for PP&L residential customers and an 8.32 percent rate change for Med-Ed customers.

"Competition should be free and open, providing small business equal and direct access to all available generators of electricity," said Tim Lyden, Pennsylvania director of the National Federation of Independent Business.

The biggest question is: Will consumers see reductions in their monthly bills as a result of the new law?



Pennsylvania DEP Urges Homeowners to Test for Radon

from a December 31, 1996, PR Newswire article

The Pennsylvania Department of Environmental Protection (DEP) has a New Year's resolution that is easy to keep, relatively inexpensive to do, and will benefit the entire family -- test your home for radon.

"[Winter is the best time] to test your home for radon since levels of the radioactive gas tend to be at their highest," DEP Deputy Secretary James W. Rue said. "The levels peak during this time since homes are closed tightly."

DEP urges all homeowners to test for radon and fix it if the level is four picoCuries per liter or higher. Testing is the only way for persons to know for sure if they are at risk from radon.

Do-it-yourself radon test kits are available at many hardware or home improvement stores for less than $20. Companies can also be contracted to test homes. More information on radon, including a list of certified radon businesses, is available by calling DEP's Radon Hot Line at 1-800-23RADON (1-800-237-2366) or visiting DEP's web site at http://www.dep.state.pa.us (choose information by environmental subject/radiation protection/radon).

Connecticut Yankee Owners Vote to Retire Nuclear Plant

from a December 9, 1996, Inside NRC article

The joint owners of the Connecticut Yankee nuclear plant at Haddam Neck voted December 4 to permanently close the unit after nearly 29 years of service. Built at a cost of $ 94.6-million, Connecticut Yankee started commercial operation in 1968. Last week, the joint owners voted to begin the anticipated $ 400-million decommissioning process.

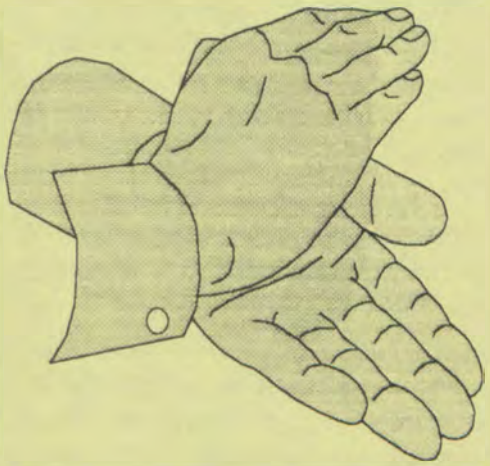
The public announcement December 4 was not unexpected and came a scant 15-minutes after the vote. An economic analysis on the 616-MW Westinghouse PWR showed its owners could save $ 100-million by shutting Connecticut Yankee and buying replacement power instead. Connecticut Yankee, with 11 more years on its operating license, now joins a growing list of nuclear units suffering premature deaths, including Portland General Electric Co.'s Trojan; Yankee Atomic Electric Co.'s Rowe; Southern California Edison's San Onofre-1; Public Service Company of Colorado's Fort St. Vrain; the Sacramento Municipal Utility District's Rancho Seco, and GPU Nuclear Corp.'s Three Mile Island-2.

Northeast Utilities (NU), whose wholly owned subsidiary Connecticut Light & Power Co. operates the Connecticut Yankee plant, initially shut the unit in July of 1996 after discovering a problem with the operability of the containment air fans at the unit under certain conditions. That problem was since discovered to be generic to the industry and became the subject of an NRC generic letter, 96-06. When it shut down, Connecticut Yankee joined NU's three-unit Millstone station in extended outages. Millstone's troubles began in late 1995 as one-by-one the units were shut down and ordered not to restart without NRC permission. All three Millstone units are on the NRC's problem plant list. [See p.2 for List].

Extensive operational, procedural, and material problems at Millstone were said not to exist at Connecticut Yankee, but after the July shutdown and subsequent operational mishaps this summer, NRC became more suspicious of that assertion and required NU not to restart Connecticut Yankee until it could demonstrate that that was indeed the case. The unit had already become subject to extensive NRC scrutiny and was in line for more, as well as potentially expensive repairs and responses when late in the summer co-owner New England Electric System called for the economic analysis that ultimately spelled its doom.

"The low cost of replacement power, combined with the relative small size and age of Connecticut Yankee, make it in our customers' best interests to permanently retire the unit," said Bruce Kenyon, president and chief executive officer of NU nuclear. The decision to shut the unit came the same day NRC was meeting with NU officials to discuss numerous apparent violations of NRC requirements at the plant, as well as at Millstone, which could lead to substantial fines.

NU is planning an economic analysis on Millstone-1 as well, a spokesman said. Millstone-1 is the oldest of the three-unit Millstone station. It is also the unit which, because of its unauthorized refueling practices, launched NU and the industry onto the cover of Time magazine and into a regulatory period of strict enforcement of compliance with requirements from which they have yet to emerge. NU spokesman Tony Nericcio could not say when the Millstone-1 analysis was due but said NU officials are confident that its operation will remain, as now, economically viable.



Ukraine Closes One Reactor, But Reopens Another

from a December 1, 1996, Associated Press article

Ukraine shut down a nuclear reactor at Chernobyl yesterday, but immediately announced plans to restart another at the disaster-ridden plant.

The announcement clouded prospects for the final closure of Chernobyl, the site of the world's worst nuclear accident ten years ago. Chernobyl's only other working reactor, No. 3, is scheduled to be shut down in 1999.

The country's Nuclear Energy Committee, citing Ukraine's energy crisis, said reactor No. 2 would be temporarily restarted at the end of 1997. The reactor has been idle since a massive fire in 1992, and President Leonid Kuchma has repeatedly said it would not be restarted. A committee spokesman would not say how long the reactor would be restarted.

Engineers shut down Chernobyl's 19-year-old reactor No. 1 yesterday, slowly cutting power until the 1,000 watt RBMK reactor stopped at 10:40 p.m., Ivan Sharshin, duty engineer at the plant, said.

Board Ponders Raising $94 Million for N-Dump

from a January 31, 1997, The News and Observer (Raleigh, NC) article

A regional commission heard plenty of suggestions but little consensus Thursday on how it should finance a low-level radioactive waste disposal project that is slowly running out of money. So far, $ 91 million has been spent on the project, with about $30 million coming from North Carolina and the rest from the compact. At least $ 114 million more is needed for licensing and construction, but the compact has only about $ 20 million available.

Two factors account for the shortfall. First, South Carolina dropped out of the compact in 1995. That eliminated the compact's source of funding: fees charged to companies that send their waste to a radioactive waste landfill in Barnwell, S.C. In addition, a North Carolina waste authority has continued to invest money in studies of the Wake site, although regulators have warned the land may be geologically unsuitable for waste disposal. Even if the authority obtains a license, some of its top officials are unsure whether companies will use the facility. Cheaper disposal sites are now available in Utah and South Carolina.

At Thursday's meeting, acting authority director John Mac Millan said that waste generators might have to commit funds to the disposal facility if they want it to become a reality.

Congressional Energy Votes Available Online

Voters who want to hold members of Congress accountable on questions of safe and sustainable energy policy may be interested in a new feature of the Critical Mass Energy Project's web site (http://www.essential.org/CMEP).

A voting index (located in the Resources section of the home page) contains a record of how each member of Congress voted on a variety of energy policy questions in recent years.

The vote index is not a comprehensive list of every vote with an impact on the nation's energy policy. Rather, recorded votes were selected as indicators of where members of Congress stand on specific questions. Thus a budget reconciliation bill that contains a BTU tax as one of many provisions is not on the page, while a procedural motion that pertains strictly to the survival of a wasteful reactor program is.

For more information, contact Michael Grynberg at grynberg@citizen.org.

Activists Launch Fourth Drive to Shut Maine Yankee

from a January 23, 1997, Portland Press Herald article

With $ 25 and a new campaign theme, Maine's determined cadre of anti-nuclear activists launched their fourth campaign to shut down Maine Yankee. William S. Linnell II said a new political action committee called Cheaper, Safer Power will begin collecting signatures to force a November 1998 referendum vote on a plan to close the Wiscasset nuclear power plant by Jan. 1, 2000. He said nuclear power is no longer the best buy for the buck.

"If successful, we will begin the new millennium with cheaper, safer power," Linnell told reporters during a press conference. He said Cheaper, Safer Power opened for business this week with $ 25 in the bank and the intention of organizing "a real live, grass-roots citizens' effort." Linnell charged that Central Maine Power Co., which owns 38 percent of the plant, pays more for the power Maine Yankee produces when it is on line than it does for replacement power when it is off line. Maine Yankee, racked by problems for much of the past two years, has been closed since Dec. 5 for repairs and is not expected to reopen until next month.

Linnell's pitch goes to the heart of Maine Yankee's long-standing argument for staying open. During three successive referendums in the 1980s, CMP argued that closing the plant early would drive up electricity costs. Mark Ishkanian, CMP spokesman, acknowledged Wednesday that replacement power is cheaper than nuclear power today, chiefly because of $ 30 million worth of safety improvements the plant must make to satisfy the concerns of nuclear regulators. But he said that, over time, nuclear power remains the best buy. "It's less expensive for us to continue to operate in a safe and reliable manner than it is to shut down and buy replacement power," he said.

The Maine Nuclear Referendum Committee tried three times during the 1980s to close the nuclear power plant, launching referendums in 1980, 1982 and 1987. All three failed despite highly publicized disasters at other nuclear power plants. During each referendum, Maine Yankee and its owners argued successfully that closing the plant before its scheduled decommissioning in 2008 would cost utility customers millions more in higher electricity rates. Supporters spent millions getting that message across, including a record-breaking $ 4.7 million in 1987 that dwarfed the MNRC's $600,000 campaign.

Now, a decade later, Maine Yankee is in trouble again. Its owners must spend $ 30 million this year to address safety concerns raised by the federal Nuclear Regulatory Commission during inspections last fall. And, in an unusual move that acknowledged its troubles, owners hired Entergy Corp., a Louisiana company with a reputation for turning around failing nuclear power plants, to improve day-to-day operations at the Wiscasset plant.

Since the referendum won't be held until November 1998, Maine Yankee has ample time to improve that rating by getting its prices down and performance up. "It gives Maine Yankee time to rebuild the confidence of the Maine people," said Gov. Angus King. He said he would vote to keep the plant open if the referendum were held today but would be monitoring its progress. "I'll be watching as closely as anyone else."

But Linnell claimed Wednesday that public momentum for a shutdown is building. "The tide has turned," he said. While safety questions lurked beneath the surface during earlier campaigns, Linnell said they were out in the open today as a result of the NRC's investigation. And, while CMP can once again spend millions trying to defeat this referendum, it can no longer claim that nuclear power is the best buy for today's buck, Linnell said. "Maine Yankee is imploding" he said.

Maine May Join Only Three Other States In Stockpiling Potassium Iodide

from a December 8, 1996, Portland Press Herald article

A state advisory committee on radiation has recommended that Maine join Tennessee, Alabama, and Arizona in stockpiling potassium iodide near nuclear power plants as a public health measure. The final decision rests with Gov. Angus King, who has indicated he will support the panel.

Potassium iodide has become a fast-moving issue in the controversial field of nuclear power. The action thrusts Maine into the forefront of a debate that's taking place worldwide. The debate in Maine has followed a familiar pattern.

On one side are people at odds with nuclear power plants. On the other is Maine Yankee. In the middle are public officials, trying to use science and policy to resolve an issue charged with controversy and emotion. Last week, state officials decided to come down on the side of caution.

The thyroid is a small gland in the neck that secretes a hormone used by the body to regulate growth and metabolism. Scientists know that when the gland is exposed to radioactive forms of iodine - as would likely be released into the air in a major nuclear accident - the radiation will be absorbed and could lead to cancer and other illnesses. They also know the radioactive iodine can be blocked by ingesting potassium iodide, a stable form of iodine known by its chemical symbol KI.

Potassium iodide pills are stockpiled now at fire stations, jails, nursing homes and other institutions within 10 miles of Maine Yankee. These facilities were chosen because if the plant ever had an accident in which high levels of radiation were released, some people wouldn't be able to evacuate the area right away. To head off the risk of a preventable cancer, rescue workers and confined residents such as prisoners would be able to take potassium iodide until they could leave the area. Now, however, those policies are being reconsidered.

Part of the reexamination stems from lessons learned after the 1986 Chernobyl nuclear plant explosion in the former Soviet Union. High levels of thyroid cancers are now being seen in children who were living near the plant and its radiation plume, particularly in Belarus.

By contrast, residents in nearby southeastern Poland, who were given potassium iodide after the accident, have reportedly not suffered a rise in thyroid cancers. That has led Belgium, Switzerland, and France to set up potassium iodide distribution programs near nuclear plants.

Three states now stockpile potassium iodide - Tennessee, Alabama and Arizona. Eddie Nanney, Tennessee's deputy director of radiological health, says his state has stockpiled KI near the Sequoyah and Watt's Bar power plants for 10 years. At the start, the pills were distributed to homes. But after the medicine's shelf life expired - in about five years - officials decided to stockpile the drug at the county level. That has avoided the "logistical nightmare," Nanney says, of supplying people who move in and out of the area, lose the bottles or have expired medicine. "If people wish to get some," Nanney said, "they can contact the county health departments."

Maine's current policy on potassium iodide is based on two core assumptions: An accident resulting in a major radiation release at Maine Yankee is very unlikely; and residents and visitors would be evacuated long before it became necessary to distribute the thyroid-protecting drug.

Clough Toppan, the director of Maine's health engineering division, says the experience at Three Mile Island showed that containment buildings at U.S. reactors do a good job of holding back radioactive gases and releasing them slowly. "It's not too Pollyannaish," Toppan says, "to think that there would be many hours before there would be any release." Toppan also dismisses analogies to Chernobyl, because the plant there lacked American-style containment systems. But anti-nuclear groups counter that, in a massive accident involving the melting of a plant's nuclear core, a release could happen in this country.

For its part, Maine Yankee has tried to play down the issue of potassium iodide by citing current federal and state policy that favors evacuation.

Opposition To Use of Plutonium For Reactor Fuel Grows

from a December 9, 1996, Critical Mass Energy Project press release

A growing coalition of national, international, and grassroots groups today announced vigorous opposition to a plan by the U.S. Department of Energy (DOE) that could lead to the use of approximately 50 tons of plutonium from nuclear bombs as fuel in U.S. commercial nuclear reactors. The DOE today released a Programmatic Environmental Impact Statement (PEIS) on plutonium disposition that advocates investigating two options - use as fuel or immobilize in glass for permanent storage of excess military plutonium.

One of the options involves combining plutonium and uranium into mixed-oxide(MOX) fuel pellets for use in nuclear power reactors. The other is to vitrify (encapsulate in glass) plutonium into a waste form. The pursuit of the MOX option would undermine a 20-year United States policy to avoid the civilian use of plutonium. In addition, if a MOX fabrication plant were in operation, there would be renewed pressure for the DOE to increase the reprocessing of irradiated (spent) fuel to isolate plutonium which could then be used as MOX.

"This is a stunning reversal of the prudent foundation of U.S. nonproliferation policy designed to keep nuclear weapons out of the hands of terrorists and rogue states," said Jim Adams, Senior Analyst for the Safe Energy Communication Council. "Opposed by many scientists, experts and the public, developing the MOX option would open a dangerous Pandora's box," he concluded.

The PEIS failed to formally consider the economic and nonproliferation factors weighing against the use of MOX. These issues were discussed in other documents that were not subject to the strict standards required by the National Environmental Policy Act. "It is important that Secretary of Energy Hazel O'Leary weigh the cost and nonproliferation factors that were kept out of the PEIS before arriving at a final decision," noted Paul Leventhal, President of the Nuclear Control Institute. "Plutonium fuel in commercial reactors makes no sense from a cost standpoint and is downright dangerous from a proliferation standpoint. Vitrification makes sense from both perspectives and should be her first choice," concluded Mr. Leventhal.

The pursuit of the MOX option will send the wrong signal to other countries about a change in the U.S. position on nuclear fuel policy. "Using the MOX fuel option for plutonium disposition will take longer, be more expensive, and encourage world-wide use of plutonium, a key component of nuclear weapons," stated Maureen Eldredge, Program Director for the Military Production Network, a coalition of grassroots organizations. "There is no good rationale for continuing down this dangerous path. If this is an example of how the U.S. shows strong leadership on international security issues, we are in big trouble."

"Greenpeace opposes any recommendation by the DOE to use plutonium as nuclear fuel. The decision to use MOX is a wrong-headed and risky reversal of U.S. nonproliferation policy and is being made to the satisfaction of the plutonium industry in Russia, France, Britain, and Japan," said Tom Clements, a spokesman for Greenpeace International. "We will vigorously work to oppose the use of plutonium fuel and promote its treatment as nuclear waste," he concluded. Bill Magavern, the Director of Public Citizen's Critical Mass Energy Project, declared, "Citizens groups across the country have stopped previous attempts to use plutonium as a reactor fuel and we will fight this proposal as long as a better alternative exists - and immobilization is a better alternative."

Furthermore, the U.S. is worried about the intention of Russian leaders who are leaning towards the development of a MOX industry to deal with surplus plutonium from the dismantlement of nuclear weapons. "The most important result of a decision to pursue a MOX option will be to encourage

(Continued on page 15, column 3)

Gallium Residue Complicates Plutonium Conversion

from a January 27, 1997, New York Times News Service article

Nuclear weapon scientists say that plutonium the Energy Department wants to take out of surplus bombs and turn into fuel in civilian reactors contains an element that will not only interfere with the conversion but will also cause chemical problems after the fuel is used.

The element, gallium, can be removed from the plutonium through a chemical process the Energy Department uses, but this generates large quantities of wastewater contaminated with radioactive materials. A cleaner removal process has been tested successfully on a small scale, but it will take more work to develop the process so that it can be used on the tons of material that would be needed, experts say. Such a process could take years to develop and test, they say, and even with the cleaner system, engineers would still have to decide how much residual gallium would be tolerable in reactor fuel. Two scientists at the Los Alamos National Laboratory in New Mexico, in a paper to be published this week by a nongovernmental environmental group, say that the gallium will have to be removed if the Energy Department wants to convert the plutonium in reactors. Another option, the department says, is to mix the plutonium with highly radioactive waste and embed both in steel canisters filled with glass. The scientists' paper will appear in Science for Democratic Action, which is the newsletter of the Institute for Energy and Environmental Research, a nongovernmental, Washington-based group concerned with nuclear weapons production.

It is not clear how pressing a problem the gallium issue is because disposing of plutonium in reactors is not expected to begin for several years. Opponents of converting plutonium are mainly worried about the spread of nuclear weapons, but have raised the issue of gallium, noting that it adds yet more cost and uncertainty to the concept.

In October, when the Energy Department announced a "dual track" strategy of preparing for plutonium use in reactors and for disposal by mixing it with radioactive waste, the department said that "gallium removal operations are believed to be unnecessary."

But in a table estimating costs, the department listed "adverse variations" that included removing gallium, and said this might add $200 million to the $1 billion cost to turn the plutonium into fuel and to prepare reactors to use it. In a reactor, the plutonium would be combined with uranium in a form called mixed oxide, and abbreviated as MOx.

According to one of the Los Alamos scientists, Dr. Carl A. Beard, project director for nuclear fuels research and development, there is no estimated cost of developing the cleaner process.

The fact of the gallium in plutonium was declassified about a year ago. Gallium does not play a role in nuclear fission, but it makes the plutonium easier to manufacture into bombs and keeps stable over a wider temperature range, according to government officials. Converting the metal plutonium in weapons into the ceramic form used in reactor fuel requires baking it at high temperatures, and that turns the gallium into a gas. The gas will turn back into a metal on the furnace walls, which will cause problems, according to Beard. In addition, gallium chemically attacks zirconium, the metal that is used to make fuel rods. "Suppose you have 1 part per million in MOx, and over a 100-year period, it turns out to be bad for confinement," said Dr. Arjun Makhijani, the president of the Institute that is publishing the paper. "What are you going to do?"

Beard said in a telephone interview that a concentration of 40 or 50 parts per million would probably be acceptable. "I'm confident, but my confidence doesn't necessarily provide full justification for a limit," he said, adding that more scientific work was needed. In a separate article in the newsletter, Makhijani argued that using plutonium in civilian reactors would require modifications and new licenses for the reactors, and would make the spent fuel more difficult to handle.

Environmentalists Deliver 40,000 "Don't Waste America" Signatures to President and Senate Majority Leader

from a February 11, 1997, NIRS press release

On February 11th, environmentalists delivered "Don't Waste America" petitions containing 40,000+ signatures to President Clinton and Senate Majority Leader Trent Lott, one day before the Senate Energy Committee was originally scheduled to vote on S. 104--better known as the "Mobile Chernobyl Act." The Nuclear Information and Resource Service (NIRS) also gave Clinton and Lott a list of 126 environmental and citizens organizations on record against S. 104 and the identical bill from last Congress, S. 1936.

[Editor's note: At press time, the Critical Mass Energy Project reported that the Senate Energy and Natural Resources Committee vote on S. 104 had been delayed until Feb. 26.]

Although S. 104's lead sponsors are Sens. Murkowski (R-Alaska) and Craig (R-Idaho), informed sources indicate that the bill is a priority for Senate Majority Leader Trent Lott, who has decided to make it a centerpiece of G.O.P. environmental legislation this year. President Clinton's intention to veto the bill was reaffirmed by Department of Energy Deputy Secretary Thomas Grumbly in a Senate Energy Committee hearing last week. Last year, S. 1936 passed the Senate 63-37--a margin sufficient to sustain a presidential veto. The House did not vote on a similar measure (HR 1020), and comparable House legislation has not been introduced this year.

"S. 104 panders to the worst environmental instincts," said NIRS Executive Director Michael Mariotte, "it reflects only outright NIMBYism (Not in My Back Yard). But the American people are smarter than that. They want real solutions to environmental problems, not quick fixes that make

problems worse. Nor do they want yet another financial bail-out for the irresponsible nuclear power industry, which this legislation shows to be the biggest NIMBY of all."

"The nuclear industry has implied in numerous advertisements that centralized 'interim' storage means that radioactive waste would only be located in one remote region of Nevada," said Mariotte. "In fact, nuclear waste would continue to be stored at every operating reactor, meaning that the number of existing nuclear waste sites would increase by one and decrease by zero." S. 104 would establish an "interim" high-level nuclear waste dump near Yucca Mountain, Nevada, which is being studied as a possible permanent storage facility. Current law explicitly prohibits placement of an "interim" dump in Nevada precisely to avoid prejudicing the site characterization process.

Under S. 104, transportation of high-level nuclear waste would occur over highways and railways in 43 states and the District of Columbia, leading to fears of a catastrophic "Mobile Chernobyl" in the event of a serious transportation accident. Upwards of 80,000 waste shipments could be made over the next 30 years under the bill, depending on the size casks used and transport methods chosen. To date, some 2400 shipments of high-level waste have been made in the U.S., mostly small amounts of fuel from nuclear submarines. Seven accidents have occurred--a rate of one accident every 343 shipments, which would predict some 268 accidents in years to come.

"While no high-level waste transport accident has yet resulted in radiation release," said Mary Olson of NIRS' Radioactive Waste Project, "the risks are real. The nuclear industry said the scenario for the Three Mile Island accident

(Continued on page 15)

(Continued from page 14)
was 'incredible,' but that disaster ruined their credibility forever. Russians were told the odds of an accident at Chernobyl were 1 in 10,000 years, but that year turned out to be 1986. Soothing assurances of safety sound hollow given this industry's record and the enormous stakes involved."

"S. 104 is an environmental nightmare in every way," added Mariotte. "It would pre-empt every possible federal, state and local environmental law, including the Clean Air Act, Clean Water Act, Safe Drinking Water Act, and more. It would unfairly limit the scope of the required Environmental Impact Statement to exclude such basic topics as whether an 'interim' waste dump is even needed. It would set outlandishly high radiation exposure standards. If Sen. Lott stakes his party's environmental claim on this unneeded and dangerous bill, he will lead his party to an environmental Waterloo."

"Fortunately," said Mariotte, "opposition to S. 104 is bipartisan and growing."

"Radioactive waste is a terrible thing to mind," added Olson, "but it is the responsibility of the nuclear utilities to mind their waste until a permanent solution is at hand. The nuclear industry isn't seeking safety, they just want to hand off the title to and liability for the waste to the taxpayers."

Environmental and citizens' organizations against S. 104 (and S. 1936) include NIRS, Public Citizen, Greenpeace, Natural Resources Defense Council, League of Conservation Voters, League of Women Voters, Sierra Club, Military Production Network, Physicians for Social Responsibility, Friends of the Earth, Indigenous Environmental Network, Three Mile Island Alert, and many more.

Besides unanimous environmental opposition to S. 104, such legislation is also opposed by major religious organizations, including Union of American Hebrew Congregations, United Methodist General Board of Church and Society, National Ministries of the Presbyterian Church (USA) and office for Church in Society, United Church of Christ. In addition, numerous city governments are on record against the concept, including Los Angeles, Denver, St. Louis, Philadelphia, Decatur, GA; Takoma Park, Mt. Rainier and Greenbelt, MD, among others; as well as county governments such as Ventura and Santa Barbara, CA, Marshall and Anson, NC, and many more.

The "Don't Waste America" petitions neither support nor oppose any specific legislation. Rather, they outline five specific points any radioactive waste legislation should encompass. S. 104 is in direct opposition to all five points. Signatures were collected by NIRS, local environmental groups, and the Greenpeace Tour Project.

(Continued from "Opposition Grows," page 12)
Russia to produce more weapons-usable plutonium from used nuclear reactor fuel. It will help create a surreal cycle by which Russia will make spent fuel out of weapons plutonium only to extract more plutonium out of the reactor spent fuel, thereby perpetuating the threat of theft and diversion," said Dr. Arjun Makhijani, President of the Institute for Energy and Environmental Research in Takoma Park, Maryland. Another major concern for coalition members is the impact of the DOE providing significant subsidies to the nuclear power industry to facilitate the use of MOX in commercial reactors. "This smells like polluter pork to me," said Anna Aurilio, a staff scientist with the U.S. Public Interest Research Group. "It is scary that utility executives would be bribed to keep operating their aging, uneconomic reactors," she added.

"We have major problems in the U.S. with nuclear power wastes, and now DOE is going to spend hundreds of millions of tax-payer dollars to subsidize failing, uneconomic reactors, which will generate wastes more dangerous and complicated than what we have today," declared Mary Olson, a spokesperson for the Nuclear Information and Resource Service. "The concerns of citizens in reactor communities, who will be directly affected by the use of MOX fuel, did not influence the development of this policy, but they will have a lot to say about whether it will be implemented," she concluded.

NH Nuclear Plant Faces Bankruptcy Again

from a February 1, 1997, Associated Press article

The twin domes of Seabrook Station nuclear power plant -- one reactor running, the unfinished steel shell of the other rusting in the salt air -- symbolize the 1988 bankruptcy of Seabrook's biggest investor, Public Service Company of New Hampshire. As the state moves to introduce competition among electric utilities by early 1998, Seabrook also serves as a reminder that Public Service could go bankrupt again.

The state's utility restructuring law, passed in May, is designed to give New Hampshire electric customers quick rate relief and move the state's highest-in-the-nation electric rates toward the regional average. To accomplish that, New Hampshire has become the first state to consider an aggressive, market-based approach to determine how much each utility will be allowed to recover from ratepayers in so-called "stranded costs" -- the utility's past investments and contractual obligations.

New Hampshire's approach is being closely watched because most other states considering deregulation appear likely to let utilities recover all of their stranded costs from ratepayers during the transition to competition. New Hampshire's law demands that utilities and their investors share the burden.

"It is crystal clear that in New Hampshire ... it's only going to be partial recovery," said Andrew Weissman, a Washington lawyer and long-time utility consultant who is advising one of Public Service's biggest customers, Cabletron Systems Inc. of Rochester. The proposed formula for making utilities and their customers share the burden was devised by Richard La Capra, a consultant to the state Public Utilities Commission.

It starts with the average electric rate per kilowatt hour for the region and, for each utility, subtracts the cost of buying, generating, transmitting and distributing power. Whatever is left can be billed to customers as "interim stranded costs" for two years.

The formula's supporters say any expenses that push a utility's rates above the regional average represent bad management in the past. That's the portion they say shareholders should absorb or management should minimize by aggressively cutting costs.

If the commission adopts the approach, everyone will have two years to evaluate the effect of competition on rates, the cost of power and utility investors. The commission then would hold hearings to determine final stranded cost payments for each utility. Most utilities would recover less than half of what they are seeking, Weissman estimates.

Public Service, the state's largest utility with more than 400,000 customers, and its parent company, Northeast Utilities of Berlin, Conn., oppose the market-based approach. "For us, that would mean bankruptcy," said Public Service spokesman Martin Murray.

Consumer advocates say bankruptcy wouldn't necessarily hurt Public Service's customers -- and could even be good for them. "Will the lights go out? I don't think so," said Charlie Higley, senior energy analyst for Public Citizen, a nonprofit group founded by Ralph Nader.

"We are opposed to having the utilities bailed out for their bad management decisions, especially investing in nuclear power," he said. "Bankruptcy is something that happens in the real world. ... Shareholders need to take responsibility for their investments." Both Public Service and state regulators have good reason to avoid another bankruptcy, however. Bankruptcy could postpone competition by giving a federal bankruptcy judge control of Public Service's rates and tying up the state in lawsuits for years.

The utilities argue that because state regulators approved or mandated the construction of power plants and other long-term obligations, the utilities are entitled to full recovery from customers. They say they should only be forced to assume risk for decisions they make in the future.

TMIA Is Twenty Years Old!!

Let's Celebrate!

When: Wednesday, March 26, 1997

Where: Lakeside Lutheran Church
Third & Division Streets, Harrisburg
(please enter from rear parking lot)

Dinner, Music, Speeches

6:00 **Dinner**
Pasta, sauces, bread, salad
by Allan Hetrick of Warm Springs Lodge

7:00 **Music and Presentations**

7:30 **Guest Speaker: David Lochbaum, Union of Concerned Scientists**

Mr. Lochbaum is Nuclear Safety Engineer for the Union of Concerned Scientists. He leads UCS's efforts to ensure the safety of nuclear power in the U.S. by monitoring licensed commercial nuclear plants to identify and publicize safety risks of all kinds.

Yes, I Will Attend the 20th Anniversary Celebration

Name_____ Phone_____

Address_____ Zip_____

_____# of adults at $6 each = $ _____
_____# of children at $4 each = $ _____

Total for 20th Anniversary Celebration $ _____

I'd Also Like to Renew My Membership

Membership: ❑ $20 Regular Member ❑ $50 Sustaining Member ❑ $100 Patron

RETURN TO: **TMIA, 315 Peffer Street, Harrisburg, PA 17102**

The official registration and financial information for Three Mile Island Alert may be obtained from the PA Department of State by calling toll free, within PA, 1-800-732-0999. Registration does not imply endorsement.

TMIA Alert

TMIA
315 Peffer Street
Harrisburg PA 17102

HARRISBURG, PA
FEB 21
1997
171

inside...

PRINTED ON
RECYCLED PAPER
By American Quick Print

Three Mile Island Alert

The Newsletter of Three Mile Island Alert June 1997

TMI Not Prepared For An Emergency

from a May 1, 1997, Harrisburg Patriot-News article and a March 17, 1997, Inside N.R.C. article

GPU Nuclear's (GPUN) Three Mile Island is the only U.S. nuclear plant ever to declare a general emergency, so one might think the emergency response staff there would be particularly attuned to the conditions that lead to one. Apparently, they aren't. During a March 5 emergency drill at the plant, the GPUN response team failed to recognize that conditions at the plant had deteriorated to the point where a general emergency should have been declared, NRC said.

In fact, the NRC team reviewing the emergency exercise found enough flaws to warrant issuing GPUN a confirmatory action letter (CAL) that directs the company to deal with the weaknesses found during the exercise. It is the second CAL GPUN has gotten in two weeks. In addition to failing to recognize that a general emergency should have been declared, the GPUN team at first incorrectly evaluated steam generator tube leakage, NRC said.

An NRC team which evaluated the TMI exercise determined there were four areas of weakness: 1) during the drill, the emergency response organization did not recognize conditions at the facility had degraded to the point that it was necessary to declare a "general emergency"; 2) initially, the response organization incorrectly evaluated steam generator tube leakage; 3) the technical analysis of the simulated accident conditions provided to response organization managers by the technical support staff was inadequate; and 4) the response organization staff did not assess the need for protective action recommendations to off-site officials when dose projections appeared to indicate protective action guidelines would be exceeded beyond the 10-mile emergency planning zone.

Analysis of the simulated accident conditions -- done by the technical support staff and given to response organization managers -- was also inadequate, the NRC review team found. Finally, the agency concluded that although dose projections appeared to indicate that protective action guidelines would be exceeded beyond the 10-mile emergency planning zone, the GPUN team didn't assess the need for getting protective action recommendations to off-site officials.

In the March 12 CAL, Region I

(Continued on Back Page)

TMIA Celebrates Twenty Years

On March 26 TMIA celebrated its 20th anniversary with an evening of dinner, music, and speeches. About 50 members, former members, and friends enjoyed an evening of delicious food, music, and short, informative speeches. Along with thanking those who attended the celebration, TMIA wishes to thank all those members who took the opportunity to renew their memberships and those who sent a special contribution.

In addition to the front page coverage of the celebration in the Patriot-News, Harrisburg Mayor Stephen Reed declared March Three Mile Island Alert Month. In an official proclamation, the mayor said that "the city of Harrisburg extends its fervent regard and appreciation to Three Mile Island Alert and its legions of supporters for their policies and the positive contributions they have made to our community, state, and nation." The Pennsylvania House of Representatives presented TMIA with a citation "celebrating the momentous occasion of its twentieth anniversary of service to the community."

TMIA wishes to thank all of its members, past members, friends, and political allies.

Three Mile Island Alert

Three Mile Island Alert (TMIA) is a non-profit citizens' organization dedicated to the promotion of safe-energy alternatives to nuclear power, especially the Three Mile Island nuclear plant.

Formed in 1977 after the construction and licensing of TMI Unit-1 and the construction of the infamous Unit-2, TMIA is the largest and oldest safe-energy group in central Pennsylvania.

TMIA members interested in specific aspects of nuclear power are encouraged to join one of TMIA's committees. These committees include:

- Radiation Monitoring
- Low-level Radioactive Waste
- Health Effects of TMI
- Nuclear Plant Security

This newsletter is published approximately 6 times per year.

Publisher - Kay Pickering
Editor - David Raeker-Jordan

Three Mile Island Alert
315 Peffer Street
Harrisburg, PA 17102
Phone: (717) 233-7897
FAX: (717) 233-3261

TMI May Have Harmed Neighbors: UNC Researcher's Results Finally In Print

from a February 24, 1997, The News and Observer (Raleigh, NC) article
By Tinker Ready, Staff Writer

Ever since the 1979 nuclear plant accident at Three Mile Island, the conventional wisdom has been that it was regrettable and costly - but that no one was hurt. For two years, University of North Carolina researcher Steven Wing has been trying to make the case that the conventional wisdom is wrong. No one would listen. Three scientific journals refused to print his paper; a judge threw the findings out of court, and some of his fellow epidemiologists dismissed him as an anti-nuclear activist who let his personal views cloud his objectivity.

Today, Wing's contrarian assessment of the nation's worst nuclear plant accident will finally see the light of day. His paper appears in the current issue of Environmental Health Perspectives, the journal of the National Institute of Environmental Health Sciences in Research Triangle Park. Wing has concluded that certain forms of cancer have increased substantially among people who were downwind of the plant in central Pennsylvania when the accident caused the release of radiation into the atmosphere. "I think our findings show that there ought to be a more serious investigation of what happened after the Three Mile Island accident," he said.

At General Public Utilities, the company that operates Three Mile Island, a spokesman said further review is not necessary, because Wing's peers have dismissed his work as biased. Reviewers at Environmental Health Perspectives say, however, that Wing's work is scientifically sound.

Disagreements are not unusual in science. Legitimate studies have produced conflicting findings on the health risks of breast implants, high-voltage power lines, birth control pills and coffee. But Wing's unsettling report - which could reverse years of thinking about the accident - seems to have touched a nerve.

The 'incident':

On March 28, 1979, Pennsylvania officials informed residents that there had been an "incident" at Three Mile Island, a nuclear power plant next to the Susquehanna River south of Harrisburg, but that there was "no danger to public health and safety." A second announcement the same day said the situation was "more complex" than previously believed. Since that day, the power plant's neighbors have been told the amount of radiation released by the plant would not harm them. Many, such as Eric Epstein - who now runs a radiation watchdog organization called Three Mile Island Alert -

(Continued on page 3)

(Continued from page 2)

don't buy it. They've seen too many cancers and odd illnesses. In Epstein's view, the plant operators "got away with murder." He tells of neighbors who vomited and lost hair after the accident - symptoms of radiation poisoning. Trees and farm animals died or produced mutated offspring, he said. Then came the miscarriages, he said, and finally the cancers. "What you see are alarming cancer clumps - leukemia, melanoma, things that you wouldn't expect in younger people."

As harrowing as they sound, stories such as Epstein's bear no weight in the world of science. They are called anecdotal evidence, and they are disregarded unless they can be backed by numbers.

Before Wing completed his work, the definitive study on Three Mile Island, published in 1990, found a 30 percent increase in lung cancer risk among a group of neighbors who were downwind during the intense radiation releases. The Columbia University scientists who performed the study concluded, however, that other environmental factors were far more likely to be responsible. The study also concluded that there was no increase in adult leukemia as a result of the accident.

Essentially, the study concluded that no one got sick from the Three Mile Island accident. That is where Wing, who had published a study on increased cancer rate among nuclear workers, came in. Lawyers representing 2,000 plant neighbors who claimed accident-related health problems invited him to take another look at the data. Wing initially declined, saying he held the authors of the Columbia study in high regard. "I had no reason to think that there was any rationale for doing a re-analysis," he said. "I subsequently decided I was wrong."

A different approach:

Wing had his change of heart after looking closely at the way the Columbia team had chosen and analyzed the available data. He thought there were better ways to accurately measure the accident's impact. Working with the same data but taking a slightly different statistical approach, Wing reached a different conclusion. "Lung cancer went up stepwise in relation to exposure to the plume," he said, referring to the cloud of radioactive vapor that escaped the plant.

Where the Columbia study found a 30 percent average increase in lung cancer risk among one group of plant neighbors, Wing found an 85 percent increase for the same group. But he also looked at different configurations of residents - based on their proximity to the escaping radiation - and found some locations with lung cancer rates four to six times higher than the local average.

Wing also found a different result on leukemia. The original study found little or no increase in adult leukemias and a statistically unreliable increase in childhood cases. Wing, however, concluded that people who were downwind during the most intense radiation releases were, on the average, eight to 10 times more likely to get leukemia than others living within a 10-mile radius of the plant.

But when Wing submitted his findings to journals for review, he was told the conclusions were impossible. Years earlier, scientists had settled upon a working estimate of how much radiation was released during the accident, and that amount was too low to cause cancer or any other disease. "It is difficult to believe that a presidential commission, Pennsylvania health physicists, and local scientists all erred in estimating the radiation release from TMI," wrote one of the anonymous reviewers who help journal editors decide what to publish.

'Can't be wrong':

Rejections came in from the New England Journal of Medicine and the Journal of the American Medical Association. Those journals are the biggies; they reject good studies all the time. But Wing's paper was also rejected by a journal in his own field, The American Journal of Epidemiology. Some of the journal reviewers were positive, he said. Others were outraged. "Basically, they say all these people can't be wrong," Wing said. "I don't know if they are wrong."

What he does know, he said, is that his study showed that the incidence of cancer goes up in direct relation to estimated radiation exposure levels. "We cut the numbers a bunch

(Continued on page 12)

Consumer and Environmental Groups Unite In Opposition to the PUC's PECO Decision

from a May 22, 1997, PR Newswire article

Pennsylvania State Senator Vincent J. Fumo (D-Philadelphia) joined today with Philadelphia area consumer organizations and state environmental groups in harshly criticizing the decision of the Pennsylvania Public Utility Commission (PUC) to permit PECO Energy Company to recover $1.1 billion in unprofitable investments from its customers.

"Today's decision by the PUC to disregard the strongly worded opinion of Administrative Law Judge Louis Cocheres and award PECO $1.1 billion at the expense of ratepayers is offensive and without justification," Fumo said. "The commission has yet to grasp the concept that electric competition was intended to provide meaningful rate relief to Pennsylvania consumers. It was never designed to eliminate shareholder risk for the benefit of Wall Street!"

Consumer activist Lance Haver stated that "for too long this commission has ignored the needs of Pennsylvania consumers, and now, when faced with an opportunity to uphold the well reasoned recommendation of Louis Cocheres to reject PECO's bailout request, the commission turned its back on consumers again."

On April 14, PUC Administrative Law Judge Louis Cocheres recommended that the PUC deny PECO's application to recover $3.7 billion in so-called "stranded costs" from its current customers. Cocheres ruled that it would be inappropriate for PECO to receive approval to recoup its costs under an expedited 120-day process, as the company had requested. The judge also pointed out that the 3-percent rate reduction being offered by PECO was not "a meaningful break for consumers," as intended by the deregulation law. Cocheres forcefully stated that the expedited proceeding "was so compressed in time as to make it impossible to render a well reasoned decision which is fundamentally fair to customers and in compliance with the Act."

"The facts, the law and common sense all pointed to a rejection of PECO's bailout request," said Andrew Altman of the Clean Air Council. "Unfortunately, politics got in the way. Now PECO will get a war-chest from consumers, giving it an unfair competitive advantage over new, less polluting energy suppliers. This is bad news for consumers, for air quality, and for the public," Altman added.

If left unchallenged, today's decision will allow PECO to charge its ratepayers for the construction and operation of its unprofitable nuclear power plants, even if customers choose to purchase their electricity from other providers. This would deny the meaningful benefits of a competitive market to PECO's current customers.

Haver noted that, despite the representations of the PUC to the contrary, it is important for observers to realize that there was not a single party to these proceedings, with the exception of PECO, that objected to the recommendation of Judge Cocheres to reject the securitization request of PECO. All the PUC had to do was uphold the recommendation of one of its most experienced and trusted judges, and reconsider PECO's request as part of the company's comprehensive restructuring filing that is now pending before the PUC. PECO would have lost nothing other than the opportunity to ram a billion dollar request through the PUC in 120 days.

"Even the judge's alternative recommendation that PECO only be permitted to recover $328 million is generously tripled by this decision of the PUC," Haver observed. Senator Fumo, the consumer groups and the environmental organization all vowed to continue their opposition to PECO recovering any money from ratepayers.

"We anticipate that many of us will appeal today's decision. There are serious questions supported by the

(Continued on page 11, column 2)

Utility Groups Plan to Lasso Customers

from a March 14, 1997, Central Penn Business Journal article

This summer, in a few Dodge Cities across the state, the highly regulated market of local electric monopolies will start turning into the Wild West of utility deregulation. Dozens of companies are expected to ride into town with a variety of strategies for cutting electric costs. But with less than one-third of electric bills actually at stake, residential customers may find that once the dust has settled, their bills look about the same.

On the other hand, commercial companies that use larger amounts of electricity could benefit, said Irwin Popowsky, state consumer advocate. Small businesses fall in between: They will likely see more savings than residential customers but less than big manufacturing companies. The state's pilot program to allow competition in some areas could be of interest to them. "For small-business customers it's worth looking into," said Popowsky. Overall, though, deregulation is not a panacea.

"The immediate savings may not be all that great. It could be somewhat less than 5 percent," said Frank Cassidy, president and CEO of Energis Resources, an Edison, N.J., company which plans to sell electricity in Pennsylvania by mid-year. "It could be a decade or more until you see lower rates," said Popowsky.

Local utility Pennsylvania Power & Light Co. recently announced plans to let 54,350 of its 1.2 million customers choose their electricity suppliers as early as July. But only charges to generate the electricity (on average 2.4 cents out of a 7.5 cents per kilowatt hour rate) will be up for grabs on the free market, said Dan McCarthy, PP&L spokesman in Allentown.

In similar fashion, GPU Energy, parent of Met-Ed and Penelec, will allow 23,000 of Met-Ed's customers and 28,000 of Penelec's customers to choose their own energy source, offering an average credit of 3.05 cents per kwh if customers say they are about to switch to an alternate supplier.

The two plans are part of a mandatory, statewide pilot program in which 250,000 customers from all the major investor-owned electric utilities will have the opportunity to choose their electric supplier. It will end in 1999, when one-third of the state will be deregulated; two-thirds will become deregulated in the year 2000, with the entire state deregulated in 2001.

Yet just how many customers will opt to join the pilot programs and subject themselves to potential dinner-time calls from telemarketers remains to be seen. "You tell most consumers about utility deregulation and they'll say, 'Oh no, not that," said Jamie Wimberly, vice president of the Consumer Energy Council of America Research Foundation. Some customers could save up to 40 percent of their generation costs (13 percent of their total power bill), said Wimberly, who worried, nonetheless, that customers might not be savvy enough to shop for the best deal, or know it when they see it. He's pushing to create a standardized bill which would show the various hidden charges factored into utility rates.

One such hidden charge would be "stranded costs"--expenses for such things as construction of nuclear-power plants, which utilities are allowed to recover through a competitive transition charge (CTC) added to all customers' bills, regardless of which electric supplier they choose. Both PP&L and GPU say they have stranded costs which they plan to recover through CTCs--measures which GPU spokesman Ray E. Dotter said help to "level the playing field."

But Popowsky noted that the savings for customers will depend on how much the state Public Utility Commission allows local utilities to charge customers for recovering those stranded costs. Hardest hit by deregulation could be rural-electric cooperatives. Nationwide, they have on average only six customers per every mile of line, compared to suburban and urban companies' 35 customers per mile of line, said Chris Mele, manager of state

(Continued on page 11, column 1)

Senate Votes on S. 104 - Veto Margin Maintained!

from an April 15, 1997, Critical Mass Energy Project Action Alert

Today's 65-34 Senate vote passing S.104 shows that the nuclear industry's dangerous radioactive waste shipping and dumping scheme still lacks the votes to override a presidential veto. The bill as it now stands can not be enacted.

The bill would mandate transportation of highly toxic irradiated fuel from the nuclear reactors that generate it across 43 states by truck and rail through densely populated communities to a new "interim" storage dump in Nevada. S.104 would also weaken health, safety and environmental rules for a potential permanent repository under study at Yucca Mountain, Nevada. Since evidence shows that Yucca Mountain probably can not meet the standards required for a repository, the nuclear industry is trying to change the standards. S.104 would park radioactive waste above-ground in Nevada even if Yucca Mountain is found unsuitable as a repository. Then the waste would either have to be moved again, or would remain in "interim" storage indefinitely without the safeguards of a permanent repository.

President Clinton, Vice-President Gore, the Department of Energy, Environmental Protection Agency, Council on Environmental Quality and Office of Management and Budget have correctly opposed this legislation. S.104 would jeopardize public health and safety in order to bail out nuclear utilities.

There is no legitimate rationale for moving highly irradiated nuclear fuel away from operating reactors. Storing the waste at the reactors is seven times less expensive than the "interim" storage proposed by Sen. Murkowski's bill, and on-site storage avoids the risks of needless transportation of radioactive waste.

The bill's supporters now turn to the House of Representatives, which will likely consider nuclear waste legislation soon. H.R 1270, the Nuclear Waste Policy Act of 1997 was introduced for the nuclear industry on April 10 by Fred Upton (R-MI).

While there is cause for optimism, we should not breathe easily yet. The nuclear lobby will no doubt try to place pressure on the President, the House, and the swing senators, and we need to exert a countervailing force. Please call your Representative and ask him or her to oppose H.R. 1270, S. 104's House counterpart, and any similar legislation.

The Capitol Switchboard number is (202) 224-3121. Direct line and fax numbers as well as E-mail addresses for Representatives and Senators can be found on Critical Mass' voting index (http://www.essential.org/CMEP).

GPU Adds TMI-1 to Auction

from A May 6, 1997, The Electricity Daily ARTICLE

Is it a bull market for sellers of electric generating capacity? GPU Inc. thinks it might be, based on the interest generated by its offer of the Oyster Creek plant in New Jersey. [see story, page 16]. GPU said last week that, in light of the interest it has had in the elderly, relatively high-cost nuke, it is also willing to entertain bids for Three Mile Island 1, the undamaged plant that is the sister to TMI 2, which melted down in 1979.

Unlike Oyster Creek, TMI is a low-cost plant that is not scheduled for possible early retirement. The possible sale reflects a bit of a change in GPU's corporate strategy. "There is so much surplus power out there," said spokesman John Fidler, "that it is no longer a high concern for us where we get that

We May Be Two Steps Away From a Nuclear Accident

by Scott D. Portzline, TMIA Planning Council

The most troublesome safety issue of "retail wheeling" may be that it creates a situation where nuclear plants are only two steps from a serious accident. These concerns are currently being voiced by Nuclear Regulatory Commission Chairman Dr. Shirley Jackson.

Here's how it can happen:

The electrical grid may become unreliable because the intricacies of transmission of electrical power have not been completely worked out. When the grid fails, a nuclear plant shuts down (unless operating at low power). The reactor trips and the plant stops producing electricity. But, because the grid has failed, there is no offsite source of power to operate the equipment necessary for bringing the reactor to a safe shutdown.

Nuclear plants rely upon their own diesel generators in such a situation. However, these generators are unreliable. For example, just a few years ago Three Mile Island's diesel generators were inoperable for three months and nobody knew it.

Even without diesel generators, coolant can be circulated by steam-powered pumps. A bank of batteries supply power to the control room and the valves that will permit that operation. The batteries will only last four hours. At the end of that time, if power on the grid is not restored, the reactor will go completely out of control and experience a "beyond design basis accident."

Just last year, a huge part of the western United States electrical grid totally collapsed for more than 10 hours. Four nuclear plants were automatically shut down. Two experienced complications. Fortunately the diesel generators supplied power for the time needed to restore the grid.

Here is what NRC Chairman Shirley Jackson says about the dangers:

"Another area of concern to the NRC is electrical grid reliability, or security. NRC reviews in recent years have left no doubt that a Station Blackout at a nuclear power station is a major contributor to reactor core damage frequency. Events of this type are defined as Loss-of-Offsite-Power events, coupled with the inability of the onsite emergency diesel generators to provide power to necessary plant safety equipment. Although Station Blackout events have been extremely rare to date, there have been a number of Loss-of-Offsite-Power events. There also have been instances where diesel generators at plants have not been operable for periods of time.

"In 1996, two electrical disturbances (within a five-week period) on the Western Grid caused 190 plants to trip off-line, including several nuclear units. Nuclear plants are designed to withstand unexpected trips. However, events of this type cause unnecessary challenges to plant safety systems.

"In reviewing these events, the Western Systems Coordinating Council listed the following contributing factors: high Northwest transmission loads; equipment out of service; inadequate maintenance of right-of-way; operation in a condition in which a single failure would overload parallel lines, triggering cascading outages; communication failures to neighboring utilities, prior to the disturbances; and no response to earlier events.

"Therefore, the NRC is convinced that economic deregulation must proceed with a sensitivity to, and an understanding of, the vulnerability of nuclear plants to Loss-of-Offset-Power events. This means that transmission network governance structures must reflect that standards of performance, operational criteria, and training of personnel are critical oversight issues, which all must be factored in, and properly addressed, as deregulation proceeds. Whatever form network governance structures assume, their authority needs to be strong enough to assure that these considerations are enforced."

[For more information on safety and deregulation see the TMIA web site: www.envirolink.org/orgs/tmia.]

Critics of Maine Yankee Say There Is Still The Problem of Nuclear Waste

from a May 29, 1997, Portland Press Herald article
By Clarke Canfield, Staff Writer

Longtime opponents of the Maine Yankee nuclear power plant are confident the plant will never again produce power - but they aren't celebrating yet. Critics say tons of nuclear waste must still be disposed of and worry that a company could still buy the Wiscasset plant at a bargain price and bring it back online. [see story, page 9]. They plan to continue being the nuclear watchdogs they have been for years, working with little public fanfare in the anti-nuclear battle.

"I think it's more than likely that they're all done," said William Linnell, spokesman for Maine Safe Energy, an anti-nuclear group. "But we don't intend to let them up until we know they're dead."

The eight utilities that own Maine Yankee announced Tuesday that they will shut down the troubled Maine Yankee plant unless a buyer can be found. The plant, which has not operated since December, was deemed too costly to repair and run safely. Nuclear critics said the incessant scrutiny they placed on the plant forced the public, the Nuclear Regulatory Commission and Maine Yankee itself to take a long look at how the plant was run. In the end, concern about the cost of correcting safety problems was the overriding factor in the plant's demise, nuclear opponents said.

In fact, said Stanley Tupper, a Boothbay lawyer and former congressman, the plant's problems might have been worse had there not been advocacy groups keeping a keen eye on Maine Yankee. "I think it would have been far worse had we not spoken up over the years," he said.

Ray Shadis, a vocal opponent of Maine Yankee since 1979, when he helped organize a referendum drive to ask voters whether they wanted to shut down the plant, said Maine Yankee's announcement lends "authenticity to what we've been trying to tell people for a long time." But Shadis and others don't plan to relent from their approach just because the plant will probably close. "Our job wouldn't be over even if the owners took a gun, shot a hole in the reactor and said, 'This is it, it's over,' and handed the deed to the state of Maine," said Shadis.

The anti-nuclear power movement in Maine goes back to the 1960s, when the Atomic Energy Commission began issuing construction permits for the Maine Yankee plant. The opposition in Maine and nationwide reached new heights after a radiation leak at Three Mile Island nuclear plant in Pennsylvania in 1979. More than any other, that event lit a fire under the anti-nuclear movement and spurred the first of three referendum drives that asked voters in 1980, 1982 and again in 1987 whether Maine Yankee should be shut down for good.

Although the measures failed, the nuclear opposition endured. Judy Barrows of Richmond, who helped form Safe Power for Maine in the 1970s to oppose a proposal to build a nuclear plant on Sears Island, said power companies would try to get away with shortcuts unless they were under constant scrutiny. "It's knowing that unless you keep an eye on them and that they know someone's watching, that - and this sounds a bit dramatic - they'll get away with murder," she said.

Much of the opposition to Maine Yankee over the years has come behind the scenes. Demonstrations and marches in Maine never reached the level they did in New Hampshire, where 2,000 chanting protesters 20 years ago stormed the site where the Seabrook power plant was being built. A small army of National Guardsmen and police made 1,414 arrests, locking up protesters for two weeks and making New Hampshire the focus of national attention.

In Maine, many of the nuclear opponents have worked quietly and

(Continued on page 9)

(Continued from "Maine Yankee," page 8)
without fanfare or attention. Rather than perform acts of civil disobedience, they have tracked cancer rates in Lincoln County, monitored radiation levels, created models showing decommissioning costs and gathered information.

Tupper characterizes Maine's nuclear opposition as "sensible, moderate opposition." Although much of the work was done out of the public spotlight, it was effective, he said. Even with Maine Yankee conceding it can no longer operate safely and efficiently, nuclear critics say they'll continue keeping an eye on the plant and preaching the shortcomings of nuclear power.

Maria Holt of Bath, a former state legislator, said she'll keep her Geiger counter in her house to monitor radiation levels in the area. And she'll continue to lecture against nuclear power. "In the long run it will end up being the most costly form of power man has ever devised," she said. "And it kept us from developing cleaner, safer forms of power." Linnell said there will always be a need for nuclear watchdogs. It's the nature of the industry, he said.

PECO Looking To Buy Old Nukes

from a May 26, 1997, Engineering News-Record article
By Paul Kemezis

Philadelphia-based PECO Energy Co. jolted the electric utility industry earlier this month by announcing that it has begun talks to buy the problem-plagued Maine Yankee nuclear plant in Wiscasset, Maine. If the sale occurs, it would be the first time any group has purchased an operating U.S. nuclear plant.

As electricity deregulation approaches, most utilities see the 110 nuclear plants in the U.S. as liabilities that will be hard to sell off but equally difficult to operate competitively. But PECO, the former Philadelphia Electric Co., has taken the opposite tack. Relying on proven nuclear engineering skills and energy trading capabilities, it says it is looking for bargains on nuclear capacity to support its national power marketing business.

The key to the strategy, says PECO spokesman Bill Jones, is to obtain the nuclear assets at a low price that matches actual market conditions. He says PECO is still evaluating the 25-year-old, 920-Mw Maine Yankee plant, closed since last December for safety violations.

Maine Yankee owners say that due to increasing safety costs, the plant's long-term economics are questionable. CMP President David Flanagan also warned shareholders to be "realistic" and accept a deal favorable to PECO.

Maine Yankee went through a $40-million steam generator repair job in 1995 and its safety problems appear fixable in the short term. Also, it is located in the New England market which is set to be fully deregulated by mid-2000 and has become a magnet for power sellers looking to buy old plant capacity or build new projects. In Maine itself, two new independent power projects totaling 500 Mw have been announced since January and two mothballed units will be reactivated in June.

PECO is already brokering energy from the Seabrook plant in New Hampshire under a marketing contract and observers say that under the right conditions selling nuclear energy in a competitive environment is feasible. "It can be done," says Dan Allegretti, New England manager for Enron Corp. "But you have to get the plant to run well."

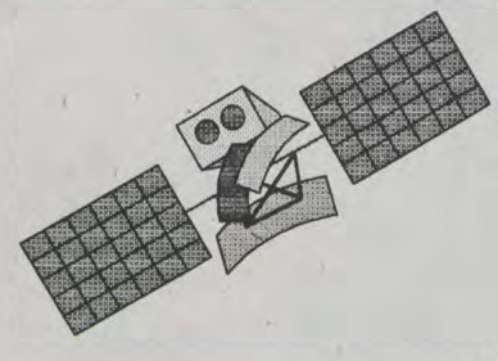
One recent report by a gas industry group claims that 40% of the 96,000 Mw of nuclear capacity in the U.S. will be at financial risk in an open market situation and could be shut down in favor of new gas capacity. Also recently put on the block by utility GPU Inc. are its Oyster Creek and Three Mile Island Unit 1 plants in New Jersey and Pennsylvania, respectively.

Space Nuke Set to Fly

from April/May 1997, War & Peace Digest

Activists who have long opposed NASA's planned launch of the Cassini space probe this October took their protest to Europe in March in an attempt to build pressure from abroad and prevent a possible catastrophe. The probe will be launched by a Titan IV rocket and will carry 72.3 pounds of plutonium-238, the largest amount of nuclear material ever used in space. The Titan IV has malfunctioned in the past, including an occasion in 1993 when it exploded, destroying a $1 billion spy satellite system.

In 1999, if everything goes right, the Cassini will orbit Venus, swing back toward earth, and then slingshot around the earth, gaining sufficient speed to reach Saturn. In the unlikely event that the probe erroneously re-enters the earth's atmosphere and disintegrates, however, NASA predicts that the plutonium-238 would expose half the world's population to radiation hazards.



Refrigerator Efficiency to Increase

from a May 3, 1997 Sustainable Energy Coalition update

On April 23, Department of Energy Secretary Pena announced "a strong new [refrigerator] standard supported by environmentalists, efficiency advocates, state energy officials, utilities, and manufacturers." according to the American Council for a Energy Efficient Economy (ACEEE).

"The new agreement provides for a 30% improvement in the energy efficiency of the most popular models of refrigerators. ... [T]he administration has been under considerable pressure from some manufacturers to publish a final standard that would delay the effective date of the rule until the year 2003."

In a 2-page news release issued by ACEEE and others, supporters praised Secretary Pena "for issuing forward-looking energy-efficient standards for new refrigerators that will reduce pollution and save consumers money." It added that the new energy-efficient refrigerators to be produced after July 1, 2001 "will eventually save U.S. consumers over 25 billion kilowatt-hours of electricity every year, equivalent to the power typically supplied by eight large (500 MV) baseload power plants."

News Notes

☛The Pennsylvania Wildlife Federation will hold its 4th Annual Environmental Congress on October 25 and 26, 1997, at Dickinson College in Carlisle, PA. The Congress is an educational symposium for the environmental and conservation community. For further details, contact the PWF at (717) 232-3480.

☛Quotable Quote -- A TMIA member in York, PA sent us a commentary from her local newspaper. The commentary, which made reference to a new study showing increased cancer rates resulting from the 1979 TMI accident [see story, page 2], criticized TMI for blaming its recent problems on poor press coverage. "What is at issue here", wrote Warren Evans, a resident of Wrightsville, PA, "is not negative press coverage or conflicting cancer studies but a dying industry trying to defend an outdated technology that can be unforgiving in the case of serious accident or a terrorist threat."

☛Media Directory: The SUN DAY Campaign has just published the 4th edition of its "National Directory of Sustainable Energy Periodicals" which provides an annotated list of 800 periodicals that report on renewables, energy efficiency, and related environmental issues. In addition to addresses, most entries include a brief description of the periodical as well as phone and fax numbers. Many entries include an e-mail address or a website address. The 75-page directory is $15/copy (including postage) from the SUN DAY Campaign, 315 Circle Avenue, #2, Takoma Park, MD 20912.

(Continued from "Lasso customers," page 5)
relations with the Pennsylvania Rural Electric Association.

As such, they can ill afford to lose their revenues as energy providers, explained Jim Corrigan, a partner of Agnew & Corrigan, the Lancaster advertising agency developing PREA's marketing and advertising campaign. PREA's 13 members in Pennsylvania aren't required to launch pilot programs, but have already started an ad campaign to build customer loyalty spots. But members don't yet know who'll be in their own markets. "You don't know who the 'enemy' is," Mele said.

Obviously, existing utilities will compete with one another. Both PP&L and GPU Energy say they plan to spin off companies to go after each other's customers. And some PREA members may try to lure customers away from neighboring companies, said Corrigan.

Natural-gas companies and suppliers are also moving into the electricity market. For example, Pittsburgh-based Consolidated Natural Gas Co., which distributes natural gas to 1.8 million customers in Ohio, Pennsylvania, Virginia and West Virginia, has been snatching up interests in power plants in the Northeast and California in an effort to transform itself into a one-stop, energy-services shop, according to Hoover's company profiles.

Enron Corp., the country's second-largest buyer and seller of natural gas, is in the process of purchasing electric utility Portland General, making it the country's largest wholesaler of electricity, said Mark Palmer, Enron' s director of public relations. The Houston-based company captured 15 percent of the market share in a 15,000-customer pilot program in New Hampshire, said Palmer. It reduced generation costs from 3.5 cents per kwh to 2.29 cents.

A third breed of companies, energy brokers, will buy electricity on the wholesale market, then sell it to customers in value-added package deals. One such broker, Energis Resources, hopes to capture market share by simplifying the deregulated market for customers. The new company plans to offer energy-efficiency consulting services, so customers can save on their overall electricity bills, said President/CEO Frank Cassidy.

In a similar Massachusetts pilot program, 30 percent of the market went to companies selling "green energy." Enron found that more than 70 percent of customers would opt for renewable energy, even if it cost a little more, said Palmer. GPU's Dotter, however, cautioned that emerging companies may offer unreasonably low rates just to capture market share. Palmer countered, "A lot of times programs designed by utilities are just that--pilot programs designed by utilities."

(Continued from "PUC's PECO Decision," page 4)
judge's opinion -- about the lack of adequate time to responsibly review this case and about the irrevocable nature of the decision," Altman said. "This is not the final word on this matter, but instead is the beginning of a long and unfortunate process forced on Pennsylvania consumers."

Haver said that PECO still has the option of ending this matter quickly by committing to a meaningful rate reduction, which would halt the opposition. "As far as I am concerned, it is up to PECO whether or not ratepayers will realize any real benefit from the deregulation act," Haver said.

The Pennsylvania environmental organizations who have opposed the securitization request of PECO are: the Clean Air Council, the Sierra Club, Citizen Action, the Pennsylvania Public Interest Research Group, the Grass Roots Alliance for a Solar Pennsylvania, Philadelphia Solar Energy Association, Trout Unlimited and the Nonprofit Energy Savings Investment Program.

For more information, please contact Gary Tuma of Office of Senator Fumo, 717-787-5662, or Lance Haver of Philadelphia Consumer Groups, 215-424-1441, or Andrew Altman of State Environmental Groups, 215-567-4004.

(Continued from "UNC Researcher," page 3)
of different ways and always came up with the same findings," Wing said.

Still, his work failed to persuade a judge to consider a lawsuit filed by Harrisburg residents who said they had become sick after the accident. The judge called Wing's work "marginally scientifically reliable." The judge subsequently threw out the suit, but the plaintiffs appealed. Others have suggested that Wing's work is tainted by having been financed by the litigating neighbors.

"His reinterpretation was done to help the plaintiffs win the lawsuit," said Laura Karinch, a spokesman for General Public Utilities. Wing said his personal views and source of support made him more skeptical. He noted that some of his critics have accepted funds from the nuclear industry.

"My opinion is that nuclear power is a bad idea," Wing said. "However, I feel that high technical standards are particularly important for anybody who challenges the accepted wisdom about issues that are dear to the scientific establishment, because we will be scrutinized far more than those whose findings do not depart from what is expected."

The reviewers at Environmental Health Perspectives found that Wing's work held up under scrutiny. Journal chief Gary E.R. Hook said three reviewers "considered the data scientifically sound and the article worthy of publication." The author of the study that Wing reinterpreted disagrees, and her comments also appear in the journal. Maureen Hatch, now head of the department of epidemiology at Mount Sinai Hospital in New York City, called Wing's work "tendentious and unbalanced." "It has an aggrieved feeling on behalf of the people in the area, in that they were done in or not done right by these early professionals," she said. "That is not a tone that one is accustomed to seeing in a scientific paper."

For example, she takes issue with the suggestion that vomiting and hair loss among plant neighbors were caused by radiation sickness. Only huge doses of radiation - far higher than imaginable during the accident - can cause radiation sickness, she said. Wing simply attaches a new interpretation to a slightly different result, she said. Hatch's study - funded by a court-appointed monitoring group - also found a slight increase in cancers near the plant, but she and her associates chose to interpret it differently. "We looked with greater skepticism in the increase that we saw," she said. "We thought that that was some kind of stress effect. Hopefully, some of the follow-up work will be able to settle that."

Follow-up in progress:

That follow-up work is under way at the University of Pittsburgh, where scientists are conducting a long-term health study of Three Mile Island's neighbors. The study could ultimately solve this puzzle, since certain radiation-induced cancers take more than five years to emerge and wouldn't have registered in previous studies. Rick Engberg, a statistician working on the Pittsburgh study, and chief investigator Evelyn Talbot said both of the earlier studies have value, although neither is perfect. The data they are based on is less than reliable, but it was the best available at the time, they said. "You could argue this point either way," Engberg said. "There is enough ammunition to make a decent argument for either side."

Wing's study doesn't prove the accident caused cancer, but "his data does show a hint of something" worth following up on, Engberg said. Wing says that is all the acknowledgment he wants. He says he thinks the accident made people sick - but if someone can come up with another explanation for his findings, he's willing to consider it. In the meantime, he still seems to be smarting from the experience. It is too soon to tell whether the study will be "bad for his career," as one colleague warned him before he began.

"For me, the lesson from the TMI story is that researchers should not be closed-minded about evidence, even if it disagrees with status quo beliefs," he said. "Scientists are supposed to be open-minded and critical, but we don't always live up to the ideal."

Recycling/Deregulating Radioactive Waste

by Judith Johnsrud, Environmental Coalition on Nuclear Power (ECNP)

Author's Note: The Depleted Uranium Education Project is to be commended for drawing attention to this significant source of radioactive contamination left over from the Cold War and for working to help the victims of Gulf War Syndrome.

The March 25th New York Times article by Matthew Wald on Depleted Uranium (DU) is more than informational. It puts us on notice. It is an early warning that the U.S. Department of Energy plans to recycle massive quantities of radioactive waste -- 1,250,000,000 pounds of DU -- into the commercial marketplace for reuse in consumer goods.

In addition to fabricating its DU into shielding blocks for use at remaining nuclear weapons sites, as Wald reports, the DOE hopes to be able to dump its surplus DU onto the open market to be smelted, refabricated, and then reused in a wide array of consumer products. "Slightly radioactive" building materials, cars, furniture, cooking utensils and other items, as well as bullets and tanks, will be produced and sold, with no warning labels.

This dense, radioactive, toxic metal form can be reused again and again, perhaps eventually being dumped into municipal solid waste landfills, still radioactive. There will be no way for the individuals coming into contact with these materials to be able to measure them or to know how many "permissible doses" they may be receiving.

What is important about these potentially numerous minute doses is that all exposures to ionizing radiation, including those from naturally-occurring background, carry a risk to the recipient of premature death from cancer or leukemia, genetic defects in future generations, and a host of other non-cancer illnesses and diseases that are associated with impaired immunity. Developing embryos and rapidly-growing young children are most vulnerable.

Depleted uranium, from which the fissionable isotope U-235 has been removed for nuclear weapons or reactor fuel, is U-238, with a half-life of 4 ½ billion years. Its decay chain includes extremely hazardous radioactive thorium, radium, radon, the radon "daughters" and lead. The Times article did not stress that all of these decay products of DU also pose biological dangers to human health and to other inhabitants of our biosystem essentially forever.

In recent months, the DOE has been actively pressing the Environmental Protection Agency (EPA) to set dose standards for the exposure of members of the public to radioactively-contaminated scrap metal -- the discarded equipment and structural steel components from aging nuclear power plants, for example -- so that DOE can get rid of them without having to pay the high costs of their long-term safe storage in isolation. Currently there are no regulations setting public exposure limits for contaminated metals.

Instead, the Nuclear Regulatory Commission (NRC) allows release of contaminated materials and wastes by its licensees on a case-by-case basis. The NRC uses regulatory "guidance" that was adopted in 1974. This "Reg Guide" lacks numerical limits and is merely guidance, not an enforceable formal regulation. Dangerous loads of radioactive scrap metal are being detected at scrap yards with increasing frequency, according to EPA regional officials and the Scrap Metal Dealers Association. One recent NRC report noted doses that were more than 500 times the maximum limit that a member of the public is allowed to receive from an operating nuclear power plant.

For related information, contact the following groups at the e-mail addresses:

Environmental Coalition on Nuclear Power (ECNP) <johnsrud@csrlink.net>,
Nuclear Information and Resource Service (NIRS) <nirsnet@igc.apc.org>, or
Sierra Club Nuclear Waste Task Force <winchester@ocean.fsu.edu>.

Sweden to Switch Off First Nuclear Plant in 1998

from a February 11, 1997, The Christian Science Monitor article
By Martha Andersson, Special to The Christian Science Monitor

The Swedish government's decision last week to close two nuclear reactors has touched off one of the hottest political debates here since the decision to join the European Union 2-1/2 years ago. The closure of the two reactors marks the beginning of a phaseout of all 12 of Sweden's nuclear power plants. News of the announcement has saturated the media and has Swedes weighing in on both sides of the nuclear-energy debate.

"Everybody has strong feelings," says Bo Hoistad, a professor of nuclear physics at Uppsala University, about 60 miles north of Stockholm. "It's almost like religion - you simply believe or don't believe in [nuclear power]." The decision by the minority Social Democratic Party, which was brokered with the Center and Left Parties, stems from a 1980 referendum and subsequent parliament ruling to phase out the use of nuclear energy by 2010.

Under the agreement announced Feb. 4, the government said it would close two reactors in southern Sweden. The first will be closed by July 1998. The second will close before July 2001 if the resulting loss of electricity production can be compensated for through the use of alternative energy sources and conservation.

More than half of Sweden's electricity comes from nuclear power. The government said it would meet the deficit through consumer energy savings, wind and water power, and bio-energy, such as using fast-growing trees for fuel for energy plants. Other reports indicate that coal and petroleum would make up more than 60 percent of the energy supply after the first reactor's closure, with another 25 percent coming from bio-energy and other alternative sources.

Companies like Volvo and SCA, the country's biggest forestry group, have spoken out against the nuclear decommissioning. The owner of the reactors has vowed to fight the decision. Lands Organization (LO), the nation's largest trade union normally friendly with the Social Democrats, also decried the decision.

But politics has also played a key role. With a 1998 election on the horizon, the Social Democrats are under pressure to keep previous campaign promises both to close nuclear reactors and halve unemployment by 2000. In the early 1990s, the economy took a downturn and unemployment jumped from 2 percent to about 13 percent. It now hovers around 12 percent. The Social Democrats themselves are split over the issue. The party has both pro-nuclear trade unionists and antinuclear environmentalists.

In the 17 years since the nuclear referendum, translating it into practice has proved difficult. In 1991, for instance, a target date for closure of a nuclear reactor set for 1995-96 was rescinded when it was discovered the closure would not be economically feasible. Despite government spending on alternative energy sources, they remain problematic. Solar power doesn't work well in northern Sweden, where the sun doesn't even crest the horizon for more than two hours a day in December and January. Hydropower has proved to be the most successful form of alternative energy, but the government cannot build any dams on four major rivers because the public wants to keep them in their natural state.

Perhaps taking a cue from earlier failures, the government this week removed the 2010 deadline for final phaseout, and instead indicated that the goal would be accomplished as soon as practically feasible.

Widespread concerns remain, however, about the high cost of securing replacement energy sources and the threat to jobs from closing the reactors at a time of record unemployment. "It's too early to tell [what the impact will be]," says Lars Bjordal, a book conservator who lives in Uppsala. "Ordinary people cannot [bear] all these price increases, but it doesn't mean I think nuclear power is safe."

Panel Says Leave Anti-Radiation Pills To The Feds

from a April 4, 1997, Copley News Service article

The federal government should stockpile enough anti-radiation pills for the general public in case of a catastrophic nuclear plant accident, an advisory panel to the U.S. Nuclear Regulatory Commission agreed Friday. But the panelists rejected a proposal that would allow states to distribute the potassium iodide pills to those who live near nuclear plants, fearing it would interfere with evacuation plans.

Roy Wight, manager of Illinois' Office of Nuclear Safety, told the advisory panel that the pills would give people a false sense of security and encourage them to ignore evacuation orders. And pre-distribution of pills wouldn't be effective because people would misplace them over their seven-year shelf life, he said. "I have difficulty finding my allergy pills when spring comes," he said. There is no scheduled date for the Nuclear Regulatory Commission to take up the issue.

The panel's recommendation left both proponents and critics of the proposed policy dissatisfied. To be most effective, the pills have to be taken within a few hours of exposure. "This sets the (federal) government up to lose because it can't distribute the pills effectively," said Alan Nelson, a lobbyist for the Nuclear Energy Institute which represents the industry. "It's a lose-lose situation."

David Kraft, director of the Evanston-based Nuclear Energy Information Service which has pushed for distribution of the pills before any catastrophe occurs, also expressed concern. "This is one of those small interventions that could have a major impact on the victims and the bureaucrats don't want to do it for stupid reasons," Kraft said. Joining the nuclear industry, the Illinois Department of Nuclear Safety also advocated no change from the existing federal policy, which was adopted in 1985. It says that pre-distribution or stockpiling of the pills for the general public is not required of the states. Illinois currently keeps only enough pills for emergency workers and people such as hospital patients who can't evacuate.

The policy has been debated since the near-meltdown at the Three Mile Island nuclear plant in Pennsylvania in 1978 when officials discovered a shortage of the pills and manufacturers were working 24 hours to produce more. "Clearly, we want to be in better shape than we were at TMI," said Mike Jamgochian, a Nuclear Regulatory Commission staff member.

Potassium iodide protects against cancer by blocking radioactive iodine from the thyroid. But critics of its widespread distribution argue it doesn't protect the rest of the body from other radioactive substances. One of the arguments against distributing the pills to the general public was that it would suggest a lack of confidence in the nuclear industry as well as state emergency plans. "You scare people," said George Apostolakis, an advisory panel member who is a professor of nuclear engineering at the Massachusetts Institute of Technology. "I think that's a disservice to the public."

Oyster Creek May Close In 2000, Unless A Buyer Can Be Found

from an April 14, 1997, Inside N.R.C. article

Because the cost of generating electricity at GPU Nuclear's Oyster Creek is too high, the nuclear plant might be closed nine years before its operating license expires, the company announced April 10. GPU said it is "exploring the options of either the sale or early retirement" of the 670-MW BWR, in light of increasing competition in the deregulating electric market. Fred Hafer, GPU Inc. president and chief operating officer, said the decision to consider Oyster Creek's sale or early closure "is driven almost exclusively by the move to deregulation."

The electricity generated at Oyster Creek costs GPU Energy about 1.5 cents more per kilowatt-hour than the current market price for energy, and while GPU can't predict with certainty what future prices will be, continuing to operate Oyster Creek until its license expires in 2009 "may not be in the best interest of our New Jersey customers or our shareholders," Hafer said.

If a decision is made to prematurely shutter the plant, the closure "would likely take place in about 2000," GPU said. In a 90-minute telephone news conference, GPU officials put the unit's current operating costs at around 3.7 cents per kilowatt-hour, while the going market price is around 2 to 2.5 cents/KWH.

Hafer acknowledged that, for GPU to continue operating the unit past 2000, future market prices would have to be considerably higher than current projections assume, or state regulators would have to specifically order continued operation. That operation would have to be subsidized, he added. Hafer said that, while he knows of no market projections that approach Oyster Creek's 3.7 cents/KWH level, more firm numbers will be forthcoming as electric industry restructuring proceedings in New Jersey and Pennsylvania move ahead.

GPU plans to include the Oyster Creek shutdown or sale options in a July filing with the New Jersey Board of Public Utilities. The filing is part of the BPU's restructuring effort. Dennis Baldassari, president of GPU Energy, said the company is confident it can offset the generating capacity lost if Oyster Creek is shut down by using other New Jersey-based capacity and/or through enhancements of the transmission system. He said that replacing Oyster Creek's output with a cheaper generating source could result in a rate decrease. Baldassari added that revenue gathered under current rates will be adequate to cover GPU's net investment in Oyster Creek, as well as replacement power and decommissioning costs.

GPU plans to use the so-called "dismantlement" option to decommission Oyster Creek, but might have to take a different tack if the unit closes early because waste disposal facilities might not be available at that time. GPU officials said the unit's spent fuel would sit in the spent fuel pool until 2005. If DOE was then in a position to take spent fuel -- presumably at an interim storage facility -- GPU would start shipping fuel there. If no federal facility is available, the utility would either keep it on site, or send it to a non-governmental interim storage site, again presuming one is available.

Though it cost only $ 90-million to build Oyster Creek, additional capital investment over its 28-year operating life have pushed GPU's remaining net investment to $ 700-million. T. Gary Broughton, president and chief executive office of GPU Nuclear, Inc., attributed the additional investment to items such as a new radioactive waste treatment facility and NRC-imposed improvements mandated after the Three Mile Island-2 accident.

Asked if the company would sell the unit for $ 700-million, Hafer jokingly suggested that a reporter should "make the check out to 'cash.'" He added, "If you had $ 700-million and were interested in purchasing the plant, that's what it would take." Asked if it is likely

(Continued on page 17)

(Continued from "Oyster Creek," page 16)

GPU will find someone interested in buying a used, 28-year-old nuclear plant, Hafer said "we'll give it our best shot and see what happens." He suggested that a utility that already operates several nuclear units might be able to drive down overhead costs to the point where Oyster Creek is generating power at a competitive price. "It is conceivable that another (utility) could run it cheaper," he said.

If no buyer can be found and Oyster Creek is prematurely shut down, it will join the growing list of units that have not run their full licensed lifetimes. These include Connecticut Yankee Atomic Power Co.'s Connecticut Yankee, Portland General Electric Co.'s Trojan, Southern California Edison's San Onofre-1, Public Service Co. of Colorado's Fort St. Vrain, the Sacramento Municipal Utility District's Rancho Seco, and GPU's Three Mile Island-2.

The oldest plant still operating is Consumers Power's Big Rock Point, which went commercial in 1965. That unit's license expires in 2000, but Consumers is considering shutting it early because of economic pressures (Nucleonics Week, 27 March, 11).

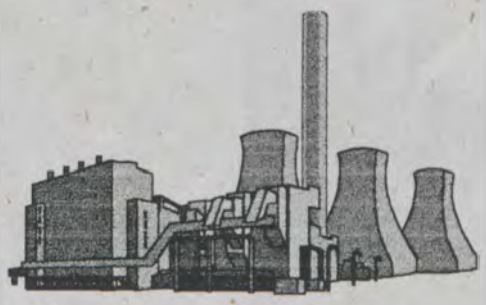
Steve Unglesbee, a spokesman for the Nuclear Energy Institute, downplayed the generic significance of another possible early shutdown, "GPU is like any prudent company and has to balance the interests of its customers and shareholders, and that means continually considering all possible options for its facilities," Unglesbee said. "In light of that, its decision to look at selling or retiring Oyster Creek is simply prudent and far-sighted business planning." "The decision will be made in light of GPU's market options and strategic plans and also on specific factors related to that plant," he added. "When that decision is made, based on GPU's information and circumstances, that decision will be unique to GPU and Oyster Creek."

GPU's Broughton echoed that thought, noting that Oyster Creek's relatively small size and the fact that it is a single-unit station are economic disadvantages not faced by larger, multi-unit nuclear plants. He also dismissed the argument that Oyster Creek might be shut down simply because it is older and too costly to maintain.

But Paul Gunter, an anti-nuclear activist with the Nuclear Information & Resource Service, said GPU's decision to explore an early Oyster Creek shutdown is further evidence that the cost of operating and maintaining older reactors makes them uncompetitive in a deregulating electricity market. Gunter charged that GPU "has historically been giving low-ball estimates of operating and maintenance expenses, and that is catching up with them." He added that recently discovered cracking of the core shroud at Oyster Creek's "sister unit," Nine Mile Point-1, is another bit of "ever-increasing evidence of early aging in some very expensive components."

GPU's Broughton noted that his utility examined and fixed the core shroud during Oyster Creek's last refueling outage and that the cracks found at Nine Mile Point were in a location different than those found at Oyster Creek. GPU will examine the shroud again during the unit's next scheduled refueling outage in the fall of 1998. If shroud cracks like those found at Nine Mile Point are discovered in Oyster Creek's shroud during the '98 refueling outage, and it looks like economics will shut down the unit in 2000, Broughton said he "didn't know" if the cost of fixing the cracks at that time could be justified, so it is possible that the unit could be shuttered even before 2000.

The early shutdown of Oyster Creek would also impact continued operation of GPU's only other remaining functional reactor, Three Mile Island-1. Overhead costs now split between the two units would have to be shouldered exclusively by TMI-1, Hafer noted. "That's going to be a significant challenge," Hafer said. "We're very sensitive to it."



(Continued from page 1)
Administrator Hubert Miller acknowledged that "simulator malfunctions, exercise controller actions, and scenario planning issues adversely affected this exercise and raised questions about the validity of the exercise as a performance measure," but he added that, even taking those problems into consideration, the agency still thinks that the identified weaknesses and problems are "important findings, requiring prompt corrective action."

Three Mile Island's poor performance during the March emergency drill served as a belated "wake-up call" to the NRC and plant operators that training and emergency preparedness has degraded in recent years.
Agency officials were not satisfied with the utilities analysis of the simulated emergency, describing it as vague and incomprehensive. They also said that the initial analysis failed to address why operator training was inadequate and what role or blame management shared for the decline.

TMI officials identified a number of reasons for the deficiencies -- flawed training, decreased resources and attention to emergency preparedness, lack of clear expectations for operators from management, and staff changes -- but they insist the plant is safe and that in a real emergency the plant could be safely controlled.

Regulatory officials said the initial TMI analysis focused mostly on training problems and did not look further to see if this was the result of poor techniques or flawed management.

TMI officials said they are looking at short-term actions, such as adding computers and staff, improving training and communications, and enhancing the critique and evaluation process. Company officials also acknowledged the need to better develop a formal set of expectations for employees. They also plan to investigate why training had declined over the past two to four years without management noticing.

TMI Alert

TMIA
315 Peffer Street
Harrisburg PA 17102

Non-Profit Organization
US Postage
PAID

Harrisburg PA
Permit No. 807

PRINTED ON
RECYCLED PAPER
By American Quick Print

Three Mile Island Alert

The Newsletter of Three Mile Island Alert November 1997

Three Mile Island Vents Radioactive Steam

from a June 21, 1997, New York Times article

The Three Mile Island nuclear plant vented steam with a trace of radioactivity today after a brief power failure shut down the reactor, said its operator, GPU Nuclear. The plant lost its outside power when one of two circuit breakers in the island's switch yard failed. Neil A. Sheehan, Nuclear Regulatory Commission spokesman, said the cause had not been determined. Though the reactor shut down automatically, its fuel continued to generate heat, and without power to run the pumps that carry the heat away, the plant's valves released steam.

Off-site power was restored 90 minutes after it failed, but by late afternoon the plant was still releasing steam because the pumps had not been re-started, said Laura Larinch, a spokeswoman for GPU Nuclear, the subsidiary of General Public Utilities that runs the plant.

[Editor's note: The EFMR Monitoring Network, a citizens' radiation monitoring group reports that its Low Volume Air Samplers did not detect any unusual radiation activity in the samples collected on June 24 after the emergency shut-down of TMI on June 21.]

GPU Nuclear To Pay $210,000 NRC Fine

from an October 14, 1997, The Energy Daily article

GPU Nuclear officials said last week that the company will pay a $210,000 fine levied by the Nuclear Regulatory Commission for violations identified at the Three Mile Island Unit 1 reactor.

In responding to the fine, Jim Langenbach, GPU Nuclear vice president and director of TMI, said the company has implemented immediate corrective actions to address the issues identified by NRC, and also has a number of long-term plans it will complete over the course of the next year. "We are committed--on behalf of our neighbors, regulators and employees--to the highest standards of operation at TMI, and we are making sure our corrective actions are comprehensive and permanent," Langenbach said.

The violations were identified by NRC during five different inspections conducted between November 1996 and May 1997. One of those inspections was an in-depth design inspection; TMI-1 was one of six power plants selected by NRC for such a review, which the agency decided to conduct after design basis issues were raised at Northeast Utilities' Millstone nuclear plant. It was in the course of that inspection at the 870 megawatt reactor that NRC identified inadequate engineering design controls, including incorrect inputs for certain design basis calculations, inadequate verifications to ensure designs would work as intended and inadequate safety evaluations prior to making design changes.

GPU Nuclear says it has improved the way it documents and maintains plant design information to assure that the information is translated accurately into plant procedures and modifications.

NRC also cited GPU for inadequate implementation of the plant's emergency preparedness program. Specifically, during the plant's emergency exercise March 5, the emergency director failed to declare a general emergency--the highest of four emergency classifications--when such a step was warranted, NRC said.

[See related story, page 2.]

Three Mile Island Alert

Three Mile Island Alert (TMIA) is a non-profit citizens' organization dedicated to the promotion of safe-energy alternatives to nuclear power, especially the Three Mile Island nuclear plant.

Formed in 1977 after the construction and licensing of TMI Unit-1 and the construction of the infamous Unit-2, TMIA is the largest and oldest safe-energy group in central Pennsylvania.

TMIA members interested in specific aspects of nuclear power are encouraged to join one of TMIA's committees. These committees include:

- Radiation Monitoring
- Low-level Radioactive Waste
- Health Effects of TMI
- Nuclear Plant Security

Three Mile Island Alert
315 Peffer Street
Harrisburg, PA 17102
Phone: (717) 233-7897
FAX: (717) 233-3261

WWW Address:
www.envirolink.org/orgs/tmia

Email Address:
tmia@pipeline.com

NRC Wants GPUN To Be Aggressive in Sizing Up Accident Dangers

from an August 4, 1997, Inside NRC article

NRC officials want GPU Nuclear Corp.'s (GPUN) staff at Three Mile Island to be "less conservative and more aggressive in sizing up the situation" when it comes to emergency response plans. GPUN representatives met with NRC staff July 25 to update the staff on what the utility has done since a March 5 emergency drill triggered an NRC confirmatory action letter (CAL). During the drill, the GPUN emergency response organization (ERO) failed to declare a general emergency when plant conditions warranted such a call (INRC, 17 March, 5).

NRC spokesman Neil Sheehan said, at the time, that members of the ERO team were too focused on the process, on doing things "by the book" and following procedures. He said they didn't realize a general emergency should have been declared until the drill was over. "Given TMI's history, it's not something we want to see happen," Sheehan said. TMI was the site of the country's worst nuclear power plant accident in 1979.

In the CAL, NRC Region I Administrator Hubert Miller said the ERO failed to "initiate protective action recommendations to off-site officials for residents outside the 10-mile emergency planning zone when dose projections appeared to indicate that protective action guidelines would be exceeded." He also criticized the ERO for not thoroughly analyzing simulated accident conditions.

Charles Hehl, NRC Region I director of the division of reactor projects, said GPUN was "five or 10 steps behind the curve" during the ill-fated drill. The emergency planning director "needed to demonstrate a better job of keeping up with realities," Hehl said. He added GPUN must "make sure the accident scenario is proactive in identifying and dealing with problems."

According to Laura Karinch, GPUN spokeswoman, the company's corrective actions have been aggressive. Drill participants were interviewed. The utility retrained the entire ERO to ensure members understand the expectations and responsibilities involved in recommending protective action for areas 10 miles or more away from the plant.

Karinch said improvements also were made in the dose projection outputs so doses could be more easily determined beyond the 10-mile limit. On April 25, GPUN met with Pennsylvania officials to review GPUN's dose assessment process. GPUN conducted a remedial exercise May 13.

TMI-1 Ends Operating Cycle That Included Record Run

from a September 11, 1997, Nucleonics Week article

GPU Nuclear's Three Mile Island-1 shut September 5 for eight weeks of refueling and maintenance, after 23 months of operation that included a record-setting continuous run.

GPU Nuclear employees and about 1,000 contract workers from Raytheon Nuclear, Inc. will put in some 180,000 hours of outage work, GPU Nuclear spokeswoman Laura Karinch said. All 177 fuel assemblies will be removed from the core and inspected, and about one third will be replaced. Other planned work includes inspection of about 30,000 tubes in the plant's two once-through steam generators, and maintenance on 30 control rods and three of the plant's four 9,000-horsepower reactor coolant pumps.

TMI-1 ran continuously for 616 days and 23 hours, breaking the 616-day 7-hour continuous run record for LWRs set in 1993-95 by Consolidated Edison's Indian Point-2. It scrammed June 21 on an overheated circuit breaker, and returned after just 182 hours of downtime.

This is TMI-1's twelfth refueling and maintenance outage. The unit began operating in 1974 and is licensed until 2014. [Editor's note: TMI-1 resumed full power on October 21, 1997.]

GPU to Sell All Generation Assets Totaling 5,300 MW

from an October 20, 1997, The Energy Report article

The Parsippany, N.J., based utility holding company said last week that it will sell its 34 New Jersey and Pennsylvania fossil-fired and hydroelectric power plants. The facilities have a combined capacity of 5,300 MW and a book value of $1.1 billion, according to GPU.

"Our business thrust is not to be in the generation business," said a GPU spokesperson. "We're not big enough, and we don't see ourselves with the wherewithal to become big enough."

GPU isn't interested in "using our resources to expand our generation capability enough to be a successful competitor in the merchant generation business," GPU Chair Fred Hafer said. The utility will decide how to handle its nuclear capacity separately.

The auction should take about a year to complete after state and federal regulatory approval. Goldman, Sachs has been hired to advise GPU on the process. Some of the money from the sale will go toward the $1.88 billion GPU also said last week it will spend to buy PowerNet Victoria, an Australian high-voltage electrical transmission company. [See related story, page 9.]

The utility owns two nuclear plants -- Oyster Creek and the infamous Three Mile Island. In April, GPU announced plans to sell the older Oyster Creek plant. Then it said it might include Three Mile Island as a package deal. Earlier this month, there was speculation that Peco Energy and Duke Energy, the nation's largest power plant operators, could be potential buyers. Peco has teamed with British Energy to form AmerGen expressly to buy nuclear plants in the United States.

TMI Contractor Supervisor Has Positive Drug Test

from an August 18, 1997, Inside NRC article

A contractor supervisor at GPU Nuclear Corp.'s Three Mile Island (TMI) tested positive for a controlled substance last week and was escorted from the site. Plant spokeswoman Mary Wells would not identify the drug or drugs thought to have been used. She said the contractor worked for Raytheon Nuclear of Philadelphia and had access to the entire plant. A positive drug test from someone on the supervisory level "is very unusual," Wells said.

Wells said that a positive drug test for TMI employees results in suspension, not immediate termination. "We don't just turn them out on the street. We offer an employee assistance program. If they have a drug problem and show a good-faith effort to be rehabilitated, we give them that opportunity," she said.

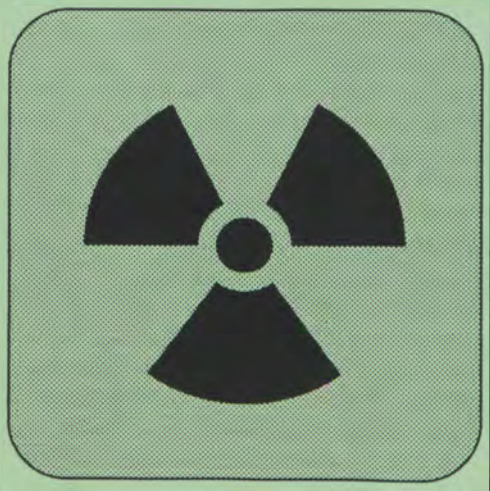
Ohio Dumps Its Radioactive Waste Dump

from the June 1997 The Nuclear Monitor (NIRS)

After spending $3.2 million on siting a low-level radioactive waste dump, the Midwest Interstate Low-Level Radioactive Waste Commission voted 5-0 on June 29 to end its quest to site a radioactive waste dump in Ohio, or anywhere else.

The Midwest compact had been working for 12 years to site a low level dump, first in Michigan, then in Ohio. Michigan was kicked out of the compact in 1991 when it stated that it couldn't find an appropriate site for a dump. The compact, composed of Ohio, Wisconsin, Iowa, Minnesota, Missouri, and Indiana, then picked Ohio as the dumpstate.

But more than 100 communities in Ohio passed resolutions against becoming dumpsites, and opponents were collecting thousands of signatures on petitions for a referendum which would have barred Ohio from becoming a multi-state dumpsite.



Groups Dispose of Lots of Money but No Radioactive Waste

from a July 7, 1997, St. Louis Post-Dispatch article

Regional compacts Congress created 17 years ago to bury low-level radioactive waste have spent hundreds of millions of dollars with virtually nothing to show for it. Not one of the 10 multistate compacts has opened a new dump in that time. And none of the five states that opted to go it alone plans to build one.

The seven states in the Southeast compact were to have opened a dump in North Carolina four years ago; the most recently revised target date is 2001. Opponents and regulators worry that the chosen site lies too near water and that radioactivity could leach into drinking supplies.

Indeed, radioactivity remains a rallying point throughout the country, with critics often linking the dump sites to the Chernobyl and Three Mile Island nuclear plant disasters.

Charles Hawkins, a Virginia state senator and a member of the Southeast Compact Commission, suggests the real problem is a lack of political will to find a way, and a place, for disposal.

The Midwest compact, which includes Missouri, made a decision last month - to opt out of the entire dump idea and look for another disposal solution. It reasoned that less radioactive waste was being produced and the dumps in Utah and South Carolina could handle what there was. Together, the compacts have already spent $400 million - on research, planning and site acquisition - without a single new repository up and running. The Northwest compact uses 100 acres on the nuclear reservation in Hanford, Wash., but only four others have even chosen sites.

The estimated cost to finish the projects has risen past $1 billion, far over the amount projected when Congress created the system in 1980. An early estimate for the Southeast compact's dump, for example, was less than $100 million, but estimates now stand at $216 million. Estimates for the five-state Central compact now approach $154 million, up from the original $31 million.

Meantime, most low-level wastes are being temporarily stored wherever they are generated, or shipped to the three existing repositories: private dumps in South Carolina and Utah and a corner of the federal reservation in Hanford.

There is no federal oversight of the cumbersome compact process because Congress wanted states to solve their own waste problems. "The problem from the start was there was no set time frame for anything," Hawkins says. "It was driven by the politics of the day, and the first rule of politics is you never make a decision until you have to."

NRC Proposes $80,000 Civil Penalty, Bars Two Former Workers for Records Falsification at Limerick Nuclear Plant

from an August 6, 1997, NRC press release

The Nuclear Regulatory Commission staff has proposed an $80,000 fine against PECO Energy Company for multiple examples of records falsification at the Limerick nuclear power plant in Limerick, Pa. In tandem with that action, the agency has issued orders prohibiting two of the former workers involved from taking part in NRC-licensed activities for several years.

PECO Energy, which operates the two-reactor plant near Philadelphia, first identified and investigated two incidents in which records were wrongly filled out and reported them to the NRC. Subsequently, the NRC's Office of Investigations conducted two separate investigations and concluded that records required by the NRC to be maintained had in fact been falsified.

In one of the cases, a chemistry technician and a former chemist at the plant, at the direction of a former chemistry manager, deliberately falsified a record of the time a sample was taken from the Reactor Enclosure Cooling Water System.

Plant technical specifications require that, with a radiation monitor inoperable, at least one sample be taken from the system at least once every 24 hours. On February 7, 1996, the sample was taken about one hour and 15 minutes late. However, the record was altered to indicate the sample was taken within the 24-hour period.

Under orders issued by the NRC, the former chemistry manager and chemist have been banned from activities licensed by the agency for five and three years, respectively. Both workers have been dismissed by the company.

The other case involved several occasions between April 3, 1995 and July 29, 1996 on which the records for required fire protection tests were falsified. Specifically, a fire protection technical assistant deliberately failed to properly perform a fire hose visual inspection surveillance test but stated in a document that the test had been carried out. Further, the worker deliberately failed to perform other such tests yet wrongly filled out the related documents to show that he had done so. Also, the employee failed to enter a specific area necessary to complete a fire suppression water system spray and sprinkler visual inspection, even though he signed documents indicating the task had been successfully completed.

NRC Region I Administrator Hubert J. Miller, in a letter to PECO Energy, wrote that not performing required activities, yet documenting on records that the activities were carried out, constitutes a "significant regulatory concern." In addition, Mr. Miller expressed concern as to whether plant staffers were fearful of discussing problems when they occurred.

"The NRC has previously issued documents emphasizing the importance of maintaining complete and accurate records of activities performed, such as in NRC Information Notice 92-30, issued on April 23, 1992, and NRC Generic Letter 93-03, issued on October 20, 1993. Those documents describe similar occurrences at other facilities," Mr. Miller stated.

"While the NRC is clearly concerned with the individuals who engaged in these activities at Limerick, the NRC is also concerned whether the situation involving the Primary Chemistry Manager is evidence that there have been at least pockets at Limerick where staff was fearful of raising problems when they occurred, notwithstanding generally strong corrective action processes at the site."

PECO Energy has 30 days to pay the fine or to request in writing that all or part of the penalty be withdrawn.

NRC Proposes $210,000 Fine for Pennsylvania Utility for Several Alleged Violations at Susquehanna Plant

from a July 23, 1997, NRC press release

The Nuclear Regulatory Commission has proposed a $210,000 fine against Pennsylvania Power & Light Co. for several alleged violations of agency guidelines at the utility's Susquehanna nuclear power plant in Berwick, Pa. The alleged infractions fall into two major areas: the misalignment of a circuit breaker for an emergency diesel generator that left it inoperable, and plant operators' repeated failure to detect this problem; and the improper deactivation of a containment isolation valve.

With respect to the emergency diesel generator alleged violations, commercial nuclear power plants are required to have multiple backup energy sources so that in the event of a loss of power, the reactor can be safely shutdown. Susquehanna, which has two reactors, is required to have four emergency diesel generators available for that purpose. Nevertheless, on June 14, 1996, non-licensed plant operators failed to detect a misalignment of a diesel generator auxiliary equipment supply breaker, which rendered that generator inoperable. The problem was not identified during three subsequent weekly equipment checks. All told, the generator was out of service for almost three weeks. However, in their equipment test records, the operators incorrectly reported that the circuit breaker was in the appropriate position.

Further, alarm tests that were supposed to have been done during rounds by the non-licensed operators were listed as having been performed when in many cases that did not occur. The operators failed to perform the required panel alarm tests on approximately 157 occasions between January and June 1996.

Given the number of individuals involved, the actual and potential impact on equipment, the duration of the problem and the lack of management and supervisory oversight that resulted in the failure to detect this widespread condition, the NRC is classifying these alleged violations in the aggregate as a Severity Level II problem, which constitutes a very significant regulatory concern.

According to the NRC, "[t]his case represents particularly poor licensee performance, as evidenced by 1.) the nature of the violations associated with the Severity Level II problem, including the inoperability of the diesel generator for almost three weeks and the number of employees involved; 2.) the extensiveness of the problem with inaccurate records; and 3.) the management and supervisory failures demonstrated by these violations.

Regarding the improper valve deactivation alleged violation, on July 30, 1996, a containment isolation valve was opened and deactivated for 24 hours, rendering the valve inoperable. The valve had been deactivated for preventive maintenance work but without the proper actions taken to comply with the plant's technical specification requirements.

The problem was significant because PP&L's incorrect interpretation of requirements would have allowed the valve to remain inoperable and open indefinitely. A fine of $50,000 has been proposed for that alleged violation.

A third alleged violation which was cited but for which no fine has been proposed involved a non-licensed operator's failure to follow administrative procedures for controlling the status of equipment associated with the Standby Liquid Control System. The system's purpose is to shutdown the reactor during an emergency by injecting a neutron-absorbing solution into it via the core spray system. On June 12, 1996, the operator repositioned a breaker switch, resulting in the de-energization of heat tracing for an operable standby liquid control pump for 34 hours.

Radioactive Materials Released into the Marketplace

from an October 7, 1997, NIRS press release

What do radioactive frying pans, zippers, dental braces on your kid's teeth, belt buckles, jewelry, and tableware have to do with nuclear bomb factories? The United States government is now converting old radioactive machinery left over from nuclear bomb factories into everyday items that will expose the public, unknowingly and repeatedly, to radiation. The Department of Energy (DOE) has just signed on to a precedent-setting contract with private companies including BNFL, a subsidiary of British Nuclear Fuels Ltd, that guarantees the company a profit on sales of the radioactively contaminated metal to the marketplace. As of the signing of the contract, title to the federally-owned radioactive metal waste was shifted to BNFL. Once stripped from the radioactive buildings, the radioactive metal will be transported to privately owned, state-licensed companies who will process and sell it on the open market. The scrap could be used for cars, I-beams of buildings, anything made with stainless steel. BNFL already has plans for a contract with a company (Ovonics) that makes nickel metal hydride batteries which could end up in items such as scooters, cars, computers and toys.

As atomic reactors and weapons factories close, decommissioning begins. There is an imminent danger that radioactive metal is and will be released into circulation. The amount of contaminated metal entering the marketplace is on the verge of a dramatic, exponential increase.

The threat comes from two directions:

First, there are specific contracts such as the DOE and BNFL deal to decommission parts of the immense bomb complex. This contract at Oak Ridge, Tennessee is both dangerous and a warning knell of more such contracts to come at Oak Ridge and across the country.

Second, US Environmental Protection Agency (EPA) and US Nuclear Regulatory Commission

(Continued on bottom of page 11)

PA DEP Encourages Homeowners to Test for Radon

from an October 1, 1997 PR Newswire article

Pennsylvania Department of Environmental Protection Secretary James M. Seif today urged all Pennsylvanians to test their homes for radon, an invisible gas that's the second-leading cause of lung cancer in the U.S. "High levels of radon have been detected in all 67 Pennsylvania counties," Seif said. "Testing is easy, inexpensive and the only way to know if your home has a radon problem."

Radon gas is produced from the natural breakdown of trace amounts of uranium in the soil. It seeps into homes through cracks in the foundation or walls, construction joints -- even through the water supply. Radon is measured in picocuries per liter of air (pCi/L). The federal government's action level (or level at which steps should be taken to reduce radon) is 4 pCi/L.

A 1989 study by DEP and the U.S. Environmental Protection Agency estimates that 40 percent of Pennsylvania homes have radon levels greater than 4 pCi/L, compared with the national average of just six percent. In fact, radon readings of greater than 20 pCi/L have been found in all 67 Pennsylvania counties and readings topping 100 pCi/L (or 25 times the action level) have been found in 60 of 67 counties.

The most common test for radon is a do-it-yourself, short-term charcoal canister test that's available for around $20 at most hardware and home-improvement stores. Homeowners can also hire a state-certified company or individual to do the testing. People are encouraged to use devices or testing companies that are certified to perform radon testing or mitigation work in Pennsylvania.

More information about radon and certification is available by calling DEP's Radon Hotline 1-800-23-RADON, or by visiting the DEP web site at http://www.dep.state.pa.us (choose Information by Subject/Radiation Protection/Radon).

NRC Staff Rates Susquehanna "Good" in Three Areas, Superior in Fourth Area of Latest Assessment

from a September 30, 1997, NRC press release

The Nuclear Regulatory Commission staff has rated the Susquehanna nuclear power plant as "good" in operations, maintenance and engineering, and "superior" in plant support in the latest Systematic Assessment of Licensee Performance (SALP) of the facility. The plant is located in Berwick, Pa., and is operated by PP&L, Inc. The assessment covers the period from August 6, 1995, through August 16 of this year.

Four functional areas of nuclear power plant performance are rated in NRC SALP reports: plant operations, maintenance, engineering and plant support. Ratings of Category 1 ("superior"), Category 2 ("good"), and Category 3 ("acceptable") are assigned.

In Susquehanna's previous SALP (which assessed the facility from February 27, 1994, through August 5, 1995), it was rated "superior" in all four areas.

"Operations management demonstrated a conservative approach to operation of the plant," wrote Hubert J. Miller, NRC Region I administrator, in a letter to PP&L. "In general, operations management responded aggressively to events to ensure operability and reliability of systems. However, some significant failures of licensed and non-licensed nuclear plant operators, to perform and document required equipment checks and inspections raised fundamental questions about the adequacy of supervisory oversight and communication of management expectations."

Concerning maintenance, Mr. Miller said: "Management oversight and involvement in response to high profile maintenance activities resulted in good corrective actions. However, human performance errors of consequence increased during this assessment period that resulted in equipment challenges including two reactor scrams [automatic shutdowns] and a reactor recirculation system runback."

Regarding engineering, Mr. Miller said: "[T]he quality of safety evaluations and operability evaluations remain a weakness that has continued from the last SALP period. In addition, several longstanding design and licensing basis issues were either not identified and/or properly corrected."

In the area of plant support, Mr. Miller said: "Overall, the performance in radiological controls was excellent as evidenced by extensive planning and effective implementation of radiological controls for outage work."

NewsNotes

Before the Big Bang: The Origins of the Universe, by Ernest Sternglass, Ph.D. In his latest book, Sternglass discusses the nature of the "primeval atom," as he conducts a brief tour of modern physics and cosmology. And he recounts his firsthand exchanges with scientific greats such as Albert Einstein, Louis be Broglie, Niels Bohr, and Richard Feynman.

1998 Peace Calendar on Sale. Once again, TMIA is offering the Syracuse Cultural Workers' Peace Calendar. This 27th edition of the Peace Calendar honors people's history with months on the Iroquois influence on early feminists, the 75th anniversary of the War Resistors League, Paul Robeson, the 1981 Women's Pentagon Action, and Jewish labor history in Chicago. The price is $10, plus $1.50 postage and handling. Call TMIA at 717-233-7897 to order, or write us at 315 Peffer Street, Harrisburg PA 17102.

TMIA is happy to announce we have a World-Wide Web Site and an email address. Point your browser to: http://www.envirolink.org/orgs/tmia or email us at tmia@pipeline.com.

NRC Rates Peach Bottom as "Superior" in Three Areas, "Good" in Fourth, in Agency's Latest Assessment of Plant's Performance

from a July 18, 1997, NRC press release

The Peach Bottom nuclear power plant has garnered performance ratings of "superior" for operations, maintenance and plant support and "good" for engineering in the Nuclear Regulatory Commission staff's latest Systematic Assessment of Licensee Performance (SALP) report for the facility. The two-reactor plant is located in Delta (York County), Pa., and is operated by PECO Energy Company.

The assessment covers the period from October 15, 1996 through June of this year.

Four functional areas of nuclear power plant performance are rated in NRC SALP reports: plant operations, maintenance, engineering and plant support. Ratings of Category 1 ("superior"), 2 ("good") or 3 ("acceptable") are assigned.

Peach Bottom's latest ratings are the same as those it received during the previous assessment period.

"The areas of operations and maintenance were rated Category 1 as a result of strong management oversight, excellent personnel performance, good planning and effective work control," NRC Region 1 Administrator Hubert J. Miller wrote in a letter to the utility regarding the report.

NRC staff found that in the area of operations, plant operators responded to problems in an outstanding manner and that actions to reduce operator attention-to-detail errors were effective. Regarding maintenance, the agency noted that personnel generally performed well, demonstrating good knowledge and good use of procedures.

"The area of plant support was also rated Category 1 with continued overall effectiveness of radiation protection, emergency preparedness, fire protection and security activities," Mr. Miller continued.

Engineering received a Category 2 rating because while overall performance in that area was good, there were several instances in which operating procedures, surveillances and tests were not consistent with the plant's design and licensing bases, or operational blueprints. Addressing that area, Mr. Miller stated that even though the material condition of equipment generally remained excellent, "some balance of plant equipment problems challenged operators, indicating continuing attention to equipment performance is needed. Also we found problems with the development and management oversight of efforts to implement the maintenance rule program."

GPU Announces Acquisition of Australian Company

from an October 12, 1997, PR Newswire article

GPU, Inc., announced today that the Australian State of Victoria has named it the winning bidder for PowerNet, the state's electrical transmission company. The purchase price is $1.88 billion. GPU, continuing its focus on its core delivery business, separately announced that it intends to begin a process that would lead to the sale of up to all of its non-nuclear generation assets through an auction. [See related story, page 3.]

Referring to the Australian purchase, Fred D. Hafer, GPU chairman, president and CEO, said, "The PowerNet acquisition further implements our strategy of expanding our ongoing efforts to grow our core infrastructure business in new markets. The purchase also better positions GPU to participate further in the Australian market."

NRC Reverses Potassium Iodide Stockpiling Policy

from a July 11, 1997, The Energy Daily article

The Nuclear Regulatory Commission has reversed its longstanding policy on potassium iodide stockpiling, saying it is not such a bad idea after all. Laissez-faire best describes NRC's traditional approach to the distribution of potassium iodide (KI), which when taken in pill form shortly after a severe nuclear accident, can stop the thyroid gland from taking up radiation.

Despite the recommendation of a presidential commission appointed in the wake of the Three Mile Island accident that states be required to stockpile the pills, which cost only pennies to produce, commission policy since 1985 has been to allow states to decide whether to stockpile KI. NRC neither discourages nor encourages its use.

Not all commissioners have agreed with this policy, however. Kenneth Rogers, whose second five-year term on the commission expired June 30, has fought vigorously over the years to make KI stockpiling mandatory and federally funded. His persistence paid off last week when NRC reversed its position. While stopping short of requiring mandatory stockpiling of the drug, NRC said it will pay for KI for states that request it.

Nuclear activists, like Public Citizen's Bill Magavern, hailed the decision, calling it "long overdue." Still, Magavern said NRC's new stockpiling policy does not go far enough. "It should be made mandatory. NRC is taking a strange, partial step in the right direction," he said. "It's kind of a mixed decision," he added, pointing out that the reversal is more so a function of politics and pragmatism than of a bona fide change of heart by NRC.

What changed are the circumstances: The Federal Radiological Preparedness Coordinating Committee (FRPCC) already has begun stockpiling the drug to make it available to any state for any type of radiological emergency at any time. FRPCC, which has responsibility for peacetime emergency radiological planning, has begun stockpiling KI in response to a 1995 presidential counterterrorism directive instructing federal agencies to reduce vulnerability to the potential use by terrorists of nuclear, biological and chemical weapons. As part of that directive, KI will be made available at states' request, along with a number of other chemical nerve gas antidotes, vaccines for anthrax, antibiotics and other medicines for use by the general public in the event of a terrorist attack.

In endorsing the FRPCC position, NRC agreed to foot the bill to stockpile KI, at a cost of up to $1.3 million in the first year, depending on how many states request it. The drug subsequently will need to be repurchased every seven years. Under NRC's revised position, the federal government would purchase the KI, but interested state and local governments still would be responsible for maintenance, distribution and subsequent costs.

Magavern said he is concerned that without a federal mandate for KI stockpiling, the nuclear industry simply will shift its fight against the policy to the state and local levels. Steve Unglesbee, a spokesman for the Nuclear Energy Institute, said the industry is comfortable with stockpiling KI along with a range of other medicines designed to mitigate terrorist acts, but that it still does not agree the drug should be mandatory in conjunction with domestic reactor operations.

Model Potassium Iodide program

by Scott Portzline, TMIA Planning Council
This outline by Three Mile Island Alert may prove helpful to your legislators.

Securing a Supply of Potassium Iodide (KI) for Protection of the Public During a Nuclear Accident

1. The United States Nuclear Regulatory Commission is now funding the supply of Potassium Iodide to prevent the uptake of radioactive iodine by people who would otherwise be exposed during a nuclear accident.

2. The Problem -- During a nuclear accident, radioactive iodine is absorbed by the thyroid gland.

3. The Solution -- Ingesting Potassium Iodide before exposure prevents the uptake of the radioactive iodine.

4. States and local governments can request funding by the NRC to secure a supply of Potassium Iodide.

5. States and/or local governments must arrange for the distribution of the supply.

6. Potassium Iodide is already available to emergency responders (TMI supplies the City of Harrisburg).

7. Potassium Iodide must be immediately available (using it after exposure is useless). (The shipment sent to the Harrisburg area during the TMI accident was never distributed because it was too late.)

8. There may be a few adverse reactions to ingesting Potassium Iodide when given to hundreds-of-thousands of people.

9. Potassium Iodide no longer has a limited shelf life. The issue of limited shelf life essentially has been resolved by new encapsulation technology.

10. A member of the Advisory Committee on Reactor Safeguards confirms that Potassium Iodide distribution should be considered as a "defense in depth" issue.

11. The National Thyroid Association supports the stockpiling and pre-distribution of Potassium Iodide.

12. The City of Harrisburg has indicated an interest in working with legislators to develop a model program.

13. Three Mile Island Alert is urging legislation to secure a supply for the entire state of Pennsylvania.

(Continued from page 7)

(NRC) are in various stages of rolling out the red carpet for these unacceptable practices, legalizing release of radioactive metal, other materials (plastic, concrete, etc.) and properties from regulated control. This is despite the public's consistent previous objections to such dangerous, irreversible policies. The most recent policies are suspected to have originated or been sanctioned in closed-door meetings of federal agencies (the Interagency Steering Committee on Radiation Standards) which operates in secrecy reminiscent in some ways of the Manhattan Project. DOE is already releasing and the EPA is developing standards to justify unrestricted radioactive releases into the public domain. NRC's highly objectionable rule setting allowable radioactive levels for buildings and property to be released has already been finalized.

Since the BNFL contract involves subcontracting to metal processors that are licensed by the state, the release of radioactivity is being permitted through Tennessee's authority as an "Agreement State" with the US Nuclear Regulatory Commission. Essentially, state-level regulators from one of the most nuclear states in the country, are setting defacto standard, using loopholes and exemptions, for routine contamination of the unsuspecting public.

"The government regulators are completely selling out and setting the stage for irreversible contamination of the planet. We made a big mistake creating this mess. There is absolutely no justification for spreading it around

(Continued on top of page 13)

NRC Underestimates Threat of Terrorism

by Scott Portzline, TMIA Planning Council

Transporting high-level nuclear waste represents a new opportunity for terrorists. The U.S. Department of Energy (DOE) and the U.S. Nuclear Regulatory Commission (NRC) analyses of terrorist attack against the transportation of spent fuel are inadequate. The studies were performed in the 1970s and 1980s and no longer reflect the capabilities of weapons available to terrorists.

The Nuclear Waste Project Office for the State of Nevada found:

"1. NRC underestimated the potential damage to the cask and its spent fuel as a result of an attack with explosives. The full-scale test conducted by DOE did not use weaponry equivalent to the currently best available armor-piercing weapons. NRC underestimated the damage and subsequent release of an attack using more than one weapon. The casks being designed today for future shipments have thinner walls and four-times larger payloads. NRC acknowledged that spent fuel subjected to higher burn-up (e.g., fuel that has been irradiated longer and consequently contains higher concentrations of certain radionuclides) would result in 45 percent greater consequences.

"2. NRC underestimated the potential health effects of an attack resulting in a release. The NRC analysis did not adequately assess health effects, especially health effects other than cancers, from the release of larger-than-respirable particles of spent fuel or from direct radiation resulting from loss of cask shielding. Such effects could be especially important for emergency response, law enforcement, and recovery and cleanup personnel. The NRC analysis did not specifically consider health effects for especially vulnerable members of the public such as pregnant women and unborn children.

"3. NRC did not evaluate the standard economic impacts of an attack resulting in a release. The NRC economic impact analysis did not consider the cost of securing the scene of the attack, recovering and removing the damaged cask, and cleaning up and disposing of all radioactive materials released by the attack. In certain locations, these costs could be high even for a very small amount of radioactive material released. NRC also ignored potential economic losses suffered by businesses in the vicinity of an attack.

"4. NRC did not evaluate the special economic impacts of an attack resulting in a release. From the standpoint of socioeconomic impacts, the NRC's single most significant finding was that a successful terrorist attack could actually breach a cask and cause a release of materials. For assessing economic and social impacts driven by public perception of risk and stigma, the amount of radioactive material released is less important than the credible possibility of a release in the event of an attack. NRC did not evaluate the economic and social impacts of such an attack or the impacts of public fear of an attack."

Anti-Tank and Armor Piercing Weapons Pose Major Threat

"There are serious questions about how well past NRC and DOE tests simulated the effects of weapons currently available for possible use by a terrorist group. Guerrilla armies around the world are known to be equipped with older anti-armor missiles such as the Soviet RPG-7 and the American M72. Such weapons may be considered obsolete relative to modern battle tank armor. However, with the ability to penetrate up to 10 - 14 inches of armor plate, they could pose a considerable threat to a nuclear waste shipping cask. Terrorists could conceivably obtain one of the dozen or more anti-tank weapons currently capable of penetrating 12 - 30 inches of tank armor."

(Continued from page 11)
and letting a few sloppy nuclear companies make a bundle out of the scrubbing, smelting and selling it in the open market," charged Diane D'Arrigo of Nuclear Information and Resource Service (NIRS).

"Unwitting consumers are subsidizing decommissioning costs as hunks of radioactive machinery and metal shielding are transformed into dinnerware and swingsets."

This raises some serious questions for the public: Will mothers need to take geiger counters with them when shopping for children's toys? How will you know if the metal used to make your child's orthodontic braces have traces of radioactive contamination from nuclear bomb factories?

The sole-source, noncompetitive contract between BNFL and DOE, signed in late August 1997, to decommission three huge uranium enrichment factories at the Oak Ridge, Tennessee nuclear reservation will cost an estimated $300 million and result in the release of an estimated 112,000 tons of radioactive nickel, copper, aluminum and steel scrap into commerce in the US and abroad. Once out into general use, the radioactive metal can be recycled, reused and resmelted over and over, disseminating radioactivity and multiplying exposures to the public and workers in any encounter with metal objects.

This large-scale release of radioactive metal into the public domain is being done in violation of the basic scientific and internationally accepted principles that there is no safe level of exposure to ionizing radioactivity and that exposures should be minimized and prevented. There will be no protection of the public, no warning, no notification, no verification of individual and multiple exposures.

"This is the tip of the iceberg--a horrifying, precedent-setting contract to spread radioactivity from nuclear weapons production into our daily lives," stated D'Arrigo. "And there will be more to follow at Oak Ridge, other atomic weapons sites and from nuclear power reactors from repairs and closures."

Please renew your TMIA membership

Name_____ Phone_____

Address_____ Zip_____

Membership: ❑ $20 Regular Member ❑ $50 Sustaining Member

❑ $25 Non-Profit Org ❑ $100 Patron

❑ $5 Low Income/Student ❑ $200 Club Member ❑ $10 Newsletter only

Intervention Fund Contribution: ❑ $10 ❑ $20 ❑ $50 ❑ $100

Checks of $50 or more can be made payable to the TMI Legal Fund for tax deduction purposes.

RETURN TO: **TMIA, 315 Peffer Street, Harrisburg, PA 17102**

The official registration and financial information for Three Mile Island Alert may be obtained from the PA Department of State by calling toll free, within PA, 1-800-732-0999. Registration does not imply endorsement.

TMIA Alert

TMIA
315 Peffer Street
Harrisburg PA 17102

HARRISBURG, PA
NOV 18
1997

A RED **X** Indicates That Your Dues Payment is Requested

PRINTED ON
RECYCLED PAPER
By American Quick Print