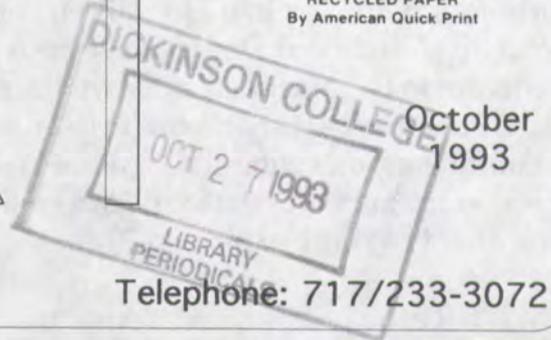


THREE MILE ISLAND

ALERT

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Questions Raised Regarding How Much Fuel Remains at TMI-2

GPU Nuclear estimated there could be as much as 850 kilograms of nuclear fuel remaining in TMI-2. However, based on their own video camera and visual inspection of the facility, they estimate what's actually there is more likely about 608 kilograms. Though that's more than enough for the reactor to reach criticality, they say the material is dispersed through the reactor and rendered harmless by the borated water in which it is submerged.

Interestingly, a GPUN technician named Distenfeld, in completing a fuel storage agreement with the Department of Energy, predicted there was 1,322 kilograms of fuel remaining in the reactor, more than twice their official estimate of 608 kilograms. This was based on the amount of fuel in the reactor at start-up minus what's now in DOE's possession. Though remote, accidental criticality with this amount of fuel is a "real possibility," concluded Dr. Michio Kaku, a nuclear physicist.

GPUN Commissioned Norman Rasmussen to critique the Distenfeld study, but nowhere in the Rasmussen report is Distenfeld's name found. Rasmussen concluded there was 935 kilograms of fuel remaining at the bottom of TMI-2. According to the NRC supervisor at TMI-2, Dr. Mike Masnik, Rasmussen's study is the "best estimate" of what's actually there. Rasmussen concludes that super-criticality could result with the removal of the borated water, a scenario thought to be unlikely, but possible during an explosion, fire or crash.

Advisory Panel Holds Last Meeting

September 23, 1993 marked the last meeting of the Advisory Panel for the Decontamination of Three Mile Island Unit 2. Held at the Harrisburg Hotel, the meeting, hosted by Lancaster Mayor Arthur Morris, had a long agenda which featured two presentations from TMIA's Eric Epstein; presentations by GPU Nuclear staff on Post-Defueling Monitored Storage (PDMS), Decommissioning Funding, Long-Term Plans for TMI-2, on the evaporation (2,233,134 gallons since January 1991); and reports from NRC staff. During public comment, Epstein, TMIA security specialist Scott Portzline, and Planning Council Members Deb Davenport and Kay Pickering spoke on behalf of area residents.

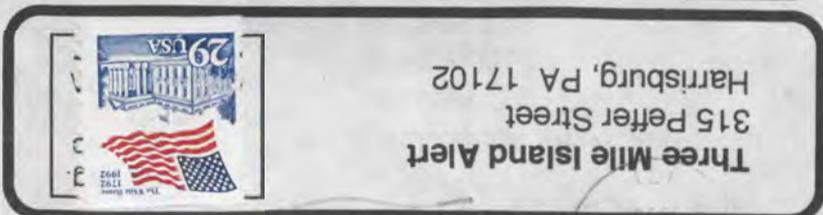
Pickering Lauded by County Commissioners

Though public reports would lead one to believe Dauphin County Commissioners rarely agree on anything, they are unanimous in their appreciation of the job Kay Pickering has done for TMIA and the people of South Central Pennsylvania. All three—Russ Sheaffer, Sally Klein, and Tony Petrucci—signed a letter expressing their appreciation for Kay's involvement with the Advisory Panel over the years.



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Steps Continue Toward PDMS

Forty-four of the original 71 requirements and commitments established for placing TMI-2 in Post-Defueling Monitored Storage have been completed. The remaining 27 requirements and commitments are to be concluded by November 17, 1993. Before the NRC allows TMI-2 to enter PDMS status, GPUN must satisfy all the TMI-2 license conditions, meet the remaining 27 requirements and commitments, and submit a "readiness to enter PDMS" letter to the NRC 30 days prior to their proposed entry to PDMS status. PDMS would continue until Unit 1 is ready for decommissioning, sometime after its license expires in 2014.

TMI-1 Refueled

One worker said, "The brass here figures if one woman can have a baby in nine months, maybe nine women can have a baby in one month. So they're bringing in more than a thousand workers and are aiming to have this shutdown one of their shortest ever."

Though we question the logic, the TMI refueling went right on schedule. The reactor shut down September 10 and was up and running by mid-October. During the six-week shutdown, 80 of the 177 fuel rods were replaced, tests were conducted, parts were replaced, and maintenance was performed.

As there is no repository for spent nuclear fuel, the on-site high-level nuclear waste dump at TMI now has 80 more fuel rods, bringing the total to more than 500 which have accumulated since the plant started operating in 1974. According to GPU Nuclear's Mary Wells, there's enough space in the on-site dump for all the fuel rods the plant will use until its operating license expires in 2014.

Five More Radiation Monitors Deployed

Five more radiation monitors that measure alpha, beta, and gamma radiation have been deployed within two miles of Three Mile Island as part of the settlement between Eric Epstein and GPU in the PDMS case. Samples from the monitors, located on the east and west shores, will be collected weekly and analyzed by personnel from Dickinson College. Under the agreement GPU will spend more than \$1 million on equipment, its maintenance, and data analysis over the next seven years.

Whistle Blower Wins \$1 Million Settlement

Former Westinghouse engineer Terry Dysert won a million-dollar settlement in a trial on his allegation that he was fired and blackballed from the nuclear industry for blowing the whistle on problems with Westinghouse's reactor vessel level instrumentation systems (RVLIS). He uncovered the problems while working at Georgia's Vogtle reactor. The RVLIS systems are a required modification of Westinghouse plants stemming from the TMI Action Plan. The trial was heard before a jury in Philadelphia on September 20.

Jersey Dodged Limerick Fuel, Philly Didn't

A last-minute appeal by the State of New Jersey to stop the transport of nuclear fuel from the closed Shoreham reactor to the Limerick nuclear facility failed when the route was changed to avoid New Jersey territory. With the legal roadblock removed, shipment of the fuel began in strict secrecy, with the first load arriving at Limerick September 28. The fuel went by barge from Long Island to Philadelphia, then by train along the edge of Philadelphia's business district and through a half-mile tunnel next to the Philadelphia Art Museum. The original plan called for the fuel to go by train through New York City, but that plan was abandoned when it met widespread public opposition.

Please renew your membership, then give more to support TMIA activities

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Intervention Fund Contribution: \$10 \$20 \$50 \$100 MORE (Checks in the amount of \$50 or more can be made payable to the TMI Legal Fund for tax deduction purposes.)

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Tomsk: Russia's Latest Chernobyl

Though western media reports of an accident at a reprocessing plant called Tomsk-7 sounded quite benign, an Australian publication reports that the accident was quite severe. Tomsk-7 is a vast, sprawling complex 'the size of Paris' where spent nuclear fuel from military production reactors is reprocessed. So while reports of 'no off site consequences' had a reassuring ring to them, there were hundreds of square kilometers contaminated on-site.

Up to 100,000 people work at the complex, a military "closed city" 15 kilometers from the city of Tomsk in Siberia. Tomsk was to be the reprocessing and disposal site for the plutonium from war-heads destroyed under the START treaty. It also accepted tons of spent fuel from closed Soviet military reactors and, in 1991, accepted commercial reprocessing contracts with France and South Korea.

The explosion happened when two of three extraction cycles had been completed on some highly radioactive materials. Because this material had gone through two of the three extractions, instead of large quantities of very highly radioactive fission products, there was only uranium, plutonium, and possibly zirconium, ruthenium, and niobium involved. It blew the top off the underground stainless steel and concrete tank in which the blast occurred, and led to a fire that burned for one and a half hours before it was extinguished. Officials there said at least three similar explosions had happened during the 1960s.

Greenpeace claims Russian air force pilots detected a radiation plume at an altitude of 3,000 meters northeast of the facility. An area of about 120 square kilometers of forest is said to have been contaminated. Friends of the Earth UK claims the International Atomic Energy Agency was officially notified of the explosion 12 hours after it had heard media reports. The IAEA has no powers to inspect installations such as Tomsk-7 or Hanford and it has never carried out a safety inspection there, nor do they have any knowledge of safety systems at Tomsk.

In the immediate aftermath of the accident, all reprocessing activities were halted at Tomsk, but plant officials said the plant would go back on line "in a few weeks."

Cracks Developing in Nuclear Reactors

A three-inch crack has been found in the reactor vessel shroud at Carolina Power & Light's troubled Brunswick-1 reactor. The reactor has been shut down since April 1992 for safety reasons and will remain closed until the crack can be repaired. But three similar, one-inch cracks were found at Brunswick-2 several months ago, and the plant was allowed to restart. Similar cracks have been found in European reactors in 1991, but this is the first time such cracks were found in the U.S. They are said to be signs of premature plant aging.

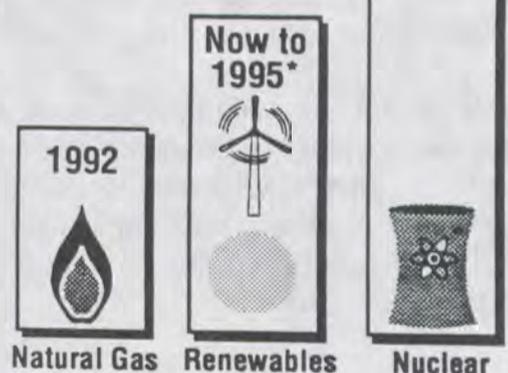
An NRC spokesman described the shroud's function as "a piece of equipment inside the reactor that provides a flow path for cooling water downward and around the reactor's fuel core." A cracked shroud could shift position under accident or natural disaster conditions and jam the plant's control rods, preventing a shutdown.

Conservation More Efficient Than Nuclear as Electricity Generator

In Sacramento, California, residents in 1989 voted to shut down the Rancho Seco nuclear power plant, not out of safety concerns, but economic ones. The plant was simply too expensive for them to operate. SMUD, the Sacramento Municipal Utility District, lost \$575 million in 1989 as the plant was often down, requiring the purchase of expensive replacement power. Since the plant closed, however, customers have used less electricity and have been spending wisely on conservation measures. For example, SMUD pays homeowners to turn in their old refrigerators and replace them with super-efficient models. It provides rebates for air conditioner replacements and pays homeowners to increase insulation. SMUD has planted 28,000 shade trees ("air conditioners with leaves") and taken other measures that have resulted in a 42 megawatt drop in demand. Co-generation plants that burn natural gas and provide steam to local manufacturers are planned, as are wind turbines, geothermal and solar devices to make up the 300 megawatts needed to cover the lost capacity of the Rancho Seco plant.

Renewable Energy: It's Ready Now

To help combat global warming, solar and other renewable energy units can be built twice as fast as nuclear power plants. Let's compare when plants would be ready:



Popular Calendars Again Available from TMIA

The 1994 "Carry It On" Peace Calendars from the Syracuse Cultural Workers are again available for \$10.00 from Three Mile Island Alert. This is the 23rd edition of the calendar which is a celebration of multi-cultural diversity. This year's calendar features a portrait of Rosa Parks (for February, African American History Month), a delightful portrait of two older women dancing together for March (Women's History Month), and other dramatic art. TMIA's supply usually sells out, so those wanting them are urged to call TMIA (233-7897) to place orders.

Tennessee Valley Authority Continues Building Nukes

While commercial utilities have scrapped plans for nuclear plants for a variety of reasons, the reality of the economics and safety concerns don't seem to impact the country's last bastion of nuclear power, the government's own Tennessee Valley Authority. Though no plants are being built elsewhere in the country, the nuclear industry has found an oasis where it hopes to rekindle itself. Today TVA plans to complete four more reactors and refurbish two others. With no shareholders to take the hit for unwise management decisions, unlike investor-owned utilities, TVA's customers will either pay higher prices or U.S. taxpayers will bail the Authority out in the event of a crisis. According to Stephen Smith, director of the Tennessee Valley Energy Reform Coalition, TVA is able to pursue its nuclear program because it remains virtually unregulated. "Every other utility is accountable to some kind of outside regulatory agency," says Smith, noting that TVA is not regulated by any state public service commission. So, while regulators nationwide are steering utilities away from nuclear power and towards conservation measures, no such pressures come to bear on the TVA.

News Notes

Thomas Linzey, Green Party candidate for Governor of Pennsylvania, announced his candidacy in the Capitol Rotunda on October 18. Linzey, a law student at Widener University and environment advisor to Barbara Hafer during her gubernatorial bid, is running on a environmental and grassroots oriented platform. Information about the candidate is available in the TMIA office or directly from the candidate: 510 Lawrence Drive, Harrisburg, 17109. 717/545-0124.

Donald L. Ballmann, Ph. D., is the new Licensing Director for the Pa. Low Level Radioactive Waste Disposal Facility Project. He has 20 years experience in the selection and licensing of sites for nuclear power plants and waste disposal facility projects. You can write him in care of his parent company, ChemNuclear, Suite 200, 750 East Park Drive, Harrisburg, 17111. Telephone 717/561-1522.

Greenpeace has asked that our readers be encouraged to write their representative in Congress to co-sponsor H.R. 2488, the "Pollution Prevention and Incineration Alternatives Act" and the "Chlorine Zero Discharge Act," both authored by Representative Bill Richardson (D-NM). They also ask that you write Bill Clinton and ask that he keep his promises on incineration. The White House, 1600 Pa. Avenue, N.W., Washington, D.C. 20050.

Several members of the Supreme Soviet of the Republic of Belarus will be in the Harrisburg area from October 23 - 25 and be briefed by TMIA activists on the citizens' radiation monitoring network, changes in the way environmental laws are enforced since the accident, and the effects of the accident on livestock and vegetation. Also in the Belarussian delegation will be a member of the Belarus Academy of Science who serves on the Chernobyl Commission. The visit is sponsored by ECOLOGIA of Harford, Pa.

TMIA has information on the New England Safe Energy Conference being held Sunday, October 24 in Bedford, New Hampshire. The conference will observe the 20th anniversary (October 1993) since a new civilian nuclear reactor was ordered and built in the U.S. The agenda includes an address from Dr. Vladimir Chernousenko, who directed the cleanup effort in the 10-kilometer zone around the Chernobyl reactor. TMIA friends Bob Pollard (Union of Concerned Scientists), Dr. Judith Johnsrud (Environmental Coalition on Nuclear Power), Scott Denman (Safe Energy Communications Council), and Paul Gunter (Nuclear Information Resource Service, NIRS) will also be presenters.

Despite Clinton campaign promises to promote mass transit to liberate Americans from single passenger motor vehicles, Amtrak has created a stir by announcing the cancellation of two morning trains to Philadelphia, thereby forcing commuters into their cars. To protest, write Amtrak's Customer Relations Office, Washington Union Station, 60th & Massachusetts Avenue, N.E., Washington, D.C. 20002. Copy Bill Clinton. The public comment period is open to October 31. Schedule changes go into effect November 1.