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## **Three Mile Island Resources**

**Title:** PANE Newsletters, 1979

**Date:** 1979

**Location:** TMI-Hossler

### **Contact:**

Archives & Special Collections  
Waidner-Spahr Library  
Dickinson College  
P.O. Box 1773  
Carlisle, PA 17013

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# P. A. N. E.

PEOPLE AGAINST NUCLEAR ENERGY  
OF THE MIDDLETOWN  
AREA

P.O. BOX 268  
MIDDLETOWN, PA 17057

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MIDDLETOWN, PA 17057

## WRITE A LETTER TODAY

### State and Federal Officials

President Jimmy Carter  
The White House  
Washington, DC 20500

H. John Heinz, III  
U.S. Senator  
Rm. 1145, Federal Square Station  
Harrisburg, PA 17108  
233-5849

Senator George W. Gekas  
Senate of Pennsylvania  
Main Capitol Building  
Harrisburg, PA 17120  
561-2603

Governor Richard Thornburgh  
Main Capitol Building  
Harrisburg, PA 17120  
787-2500

Congressman Allen Ertel  
U.S. Congressman  
Paxon Street, Hbg. East Mall  
Harrisburg, PA 17111  
564-8963

Representative Rudolph Dininni  
House of Representatives  
Main Capitol Building  
Harrisburg, PA 17120 564-6201

### Middletown Borough Officials- meet the 3rd Monday of each month at 6:45 p.m.

Mayor Robert G. Reid  
314 Grant Street  
Middletown, PA 17057  
944-4764

Mr. Robert K. Bitner  
Council President  
635 Adelia Street  
Middletown, PA 17057  
944-3258

### Councilmen

Mr. Rodney R. Waltermeyer  
34 N. Catherine Street  
Middletown, PA 17057  
944-6071

Mr. Earl W. Bright, III  
213 S. Catherine Street  
Middletown, PA 17057  
944-5454

Mr. Melvin H. Seiders  
128 E. Emaus Street  
Middletown, PA 17057  
944-5749

Mr. John H. Enos  
61 E. Main Street  
Middletown, PA 17057  
944-1330

Mr. Dennis C. Lebo  
322 Pine Street  
Middletown, PA 17057  
944-6867

Mr. David Judy  
31 Maple  
Middletown, PA 17057

Dr. Vincent A. Tritch, Jr.  
354 E. Roosevelt Avenue  
Middletown, PA 17057  
944-5486

Mr. Andrew Burger  
1000 Briarcliff Road  
Middletown, PA 17057  
944-0272

### Other Important Addresses

Dauphin County Commissioners  
Dauphin County Courthouse  
Market and Front Streets  
Harrisburg, PA 17101  
255-2741

Chairman John Ahearne  
U.S. Nuclear Regulatory Com.  
Washington, DC 20555  
Office - 301-634-3323  
Ask to circulate your letter  
to 4 other commissioners

Ms. Susan Shanaman, Chairman  
Pa. Public Utility Commission  
North Office Building  
P.O. Box 3265  
Harrisburg, PA 17120  
Office - 783-3601  
Ask that your letter be  
circulated to other Commissioner:

Nuclear Information Resource  
Service 1-5 p.m.  
toll free 1-800-424-2477

Governors Action Center  
Hotline 1-800-932-0784

Clifford Jones, Secretary  
Dept. of Environmental Resources  
9th Floor Fulton Building  
Harrisburg, PA 17120  
Office - 787-2814

NRC Middletown Office  
782-4014  
Wed. eve. until 8 p.m.  
Sat. a.m. 9 to noon

Walter W. Cohen, Cons. Advocate  
Office of Consumer Advocate  
14th Floor Strawberry Square  
Harrisburg, PA 17120  
Office - 783-5048



# P.A.N.E.



Alternatives to nuclear power should be explored. But before considering areas like coal and solar several items should occur first. (1) We must see how energy is used and question that use. (2) We must practice conservation to make sure that the electricity we do need is used at peak efficiency.

Conservation - This doesn't mean making do with less. It means doing more with the same amount -- improving the efficiency of energy use. There is alot that our industrial and commercial sector can do. They can probably make better in-roads to energy conservation than you or I, but we've got to do our part. Desk lamps are more efficient than ceiling lights, where practical. Fluorescent lights should be used rather than incandescent. Heat pumps are efficient in areas where air temperatures do not often go below 20° F. In 1971 55% of all gasoline used by cars went for urban trips of one mile or less. ABC Evening News recently reported that if each licensed driver would drive 3 miles less each day, we could make up for the expected Iranian oil shortfall which will probably occur next Spring.

## SOME INFORMATION ON COAL

Coal should probably be considered a transitional source of fuel, even though we have centuries of supply. About half the electricity used in the U.S. is produced by burning coal.

On average, the coal industry kills one worker every two working days. Coal miners are also subject to pneumoconiosis by inhaling microscopic coal dust particles. In 1969, a comprehensive mine safety law was passed by Congress but is enforced inconsistently.

In 1960, 32% of total coal production came from surface mines. Following the mining, mineral sulfides in the soil combine with moisture to form sulfuric acid. This mixes with the run-off water and pours into rivers and lakes. In 1977, President Carter signed the Federal Strip Mine Control & Reclamation Act so that the coal operator will return the strip mine to a good condition.

Some, but not all, of coal's pollutants can be controlled or removed with the use of mechanical devices either before, during, or after combustion. Various ways to trap particles are (1) electrostatic precipitators, (2) fabric filters, and (3) washing coal. Sulfur dioxide (SO<sub>2</sub>) is difficult and expensive to control. SO<sub>2</sub> removal scrubbers can be used to drench the stack with a spray of limestone dissolved in water. The limestone absorbs the SO<sub>2</sub>, but then the contaminated limestone sludge has to be disposed of properly. The scrubbers also trap a significant amount of particulates during the process. A 1974 EPA (Environmental Protection Agency) report concluded that scrubber desulfurization units were reliable and effective although some utilities complain about their costs. In the long run, it is cheaper to use eastern coal that is higher in sulfur with a scrubber, than to ship east, western coal that may be lower in sulfur.

There have been some new developments in coal technology that may provide an economically effective way to handle sulfur dioxide and nitrogen dioxide pollution. A process called atmospheric fluidized bed coal combustion uses boilers that eliminate these pollutants from coal burning. Fluidized-bed coal combustion boilers have considerable potential as small decentralized boilers for industrial or commercial/residential use. The spent bed material is more stable than the wet limestone sludge produced by scrubbers. The spent bed material may be used to manufacture low-grade building material and as roadbed fill.

Another coal technology of great interest now is coal gasification. This is a coal cleaning technique that has been in use for 50-60 years. The gas is a by-product of coke and was used in street lights in the 1920's. It has not been attractive since natural gas became widely available.

All energy producing processes involving combustion create thermal pollution. The main problem comes from production of carbon dioxide (CO<sub>2</sub>). Build-up of CO<sub>2</sub> raises the earth's temperature by slowing down the escape of heat into space. This build-up causes what is known as the greenhouse effect. As a result there is a fear that weather patterns may be altered that could bring on extensive disruptions to land use and agriculture.

To use coal we must demand the safest, cleanest coal possible, even though it means lower profits for the coal industry. With proper mine safety and miners' rights, with adequate pollution controls and a strict program of land restoration, coal can continue to serve as an interim source of energy.

Following is a list of the specific violations found against Metropolitan Edison by the NRC office of inspection and enforcement. A violation is the most severe infraction of NRC regulations. Lesser offenses also cited by the NRC are not listed.

1. For an undetermined period of time, the flow path of two emergency feedwater systems was made inoperable by feedwater header isolation valve closure. On three occasions prior to the accident, all three emergency feedwater systems were blocked during improper test procedures. The violation contributed to the accident—\$5,000 fine.
2. The health of workers and their protection from exposure of radiation levels in excess of NRC standards is the responsibility of the utility. Met Ed was found in violation of these standards in the following instances:
  - For two days after the accident, the doors to the auxiliary building were neither locked nor guarded, even though high levels of radiation were known to be present in the building.
  - Two persons were allowed to enter the auxiliary building after the accident wearing no radiation monitoring device.
  - Radiation levels in the auxiliary building and in other rooms at the plant were taken at periods during which personnel were allowed to enter the areas.
  - An auxiliary operator was allowed to enter the auxiliary building and receive substantial exposure to radiation, totaling 3.87 rems—far exceeding NRC standards.
  - A nuclear engineer was allowed to enter the auxiliary buildings when the radiation levels were too high to be measured by the monitoring equipment provided him. He received at least 4.175 rems of radiation.
  - A chemistry foreman was allowed to repeatedly enter a room where high levels of radiation were present, resulting in an exposure to 4.1 rems of radiation.
  - A chemistry foreman was allowed to handle a reactor coolant sample without adequate protection, exposing his hands and forearms to 147 rems of radiation.
  - A radiation protection foreman was allowed to handle coolant samples without adequate protection, exposing his hands and forearms to 44 rems of radiation.
  - Several individuals received skin contamination, but no actual measurements of the exposure rates were made.

Total penalty for all violations is \$15,000.
3. Changes in the way certain valves were to be turned as recommended by NRC specifications had not been made prior to the accident. Total fine for this violation is \$10,000.
4. The utility failed to maintain, establish, and implement procedures for several important components of plant operation:
  - An automatic relief valve required to be closed at temperatures above 130 degrees remained open at 283 degrees before operators decided to manually close it. Total fine is \$630,000.
  - Operators consistently interrupted and bypassed specifications for maintaining pressure inside the reactor. An emergency backup system to maintain important pressure levels was turned off. Total fine for this violation is \$5,000.
  - Two emergency diesel generators designed to supply special cooling capabilities for the reactor in the event of an accident were manually turned off and were not turned on until five hours after they were needed. Total fine for this violation is \$4,000.

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HOW CAN I HELP? PANE has monthly meetings which are advertised in the Press & Journal "TMI News" section. Plan to attend the next meeting. PANE has retained a public interest law firm to represent Middletown area residents in the NRC Hearings in February, 1980. These hearings will determine whether TMI #1 will be allowed to restart. Donations for the legal fund are desperately needed. Send whatever you can to PANE Treasurer, P.O. Box 268, Middletown, PA 17057.

## WHY WE DON'T NEED NUCLEAR POWER IN MIDDLETOWN.

### EVACUATION

In a February 4, 1974 letter, Met-Ed wrote to Middletown Borough officials that "even the worst possible accident postulated by the AEC (Atomic Energy Commission) would not require evacuation of the borough of Middletown . . . it can be seen that it is unnecessary to have specific evacuation routes identified. . . ." SOURCE - Washington Post (Crisis - Three Mile Island, Special Report).

How will you be notified about evacuation?

Will you meet your children in Wilkes-Barre or at the Farm Show?

What if there is 6 inches of snow?

Will you have enough money to leave?

Will you have enough gasoline?

Who will direct traffic?

What about vehicle accidents halting the flow of outbound traffic?

### CONFIDENCE, FAITH & TRUST

On March 29, 1979, Met-Ed and state officials advised people in Central PA that the crisis had passed. The reactor, they told us, was under control and the problems had been solved. On March 30, we evacuated.

On March 29, 1979, GPU sent out a press release assuring the public that unit II was "in shutdown, cooling off mode with the normal heat removal and temperature control systems functioning." TMI II is still not shutdown.

Quote from Harold Denton: "We did not have from the very first day the kind of things we needed to get from the licensee to judge what had occurred and what to do about it. This utility was not prepared to cope with this kind of accident."

### HEALTH

Nuclear reactors add radiation to our environment. We already get enough natural radiation. All radiation releases - no matter how small - affect living tissue.

Many types of cancer are known to result from radiation. The most common type is leukemia but recent studies have shown that bone marrow and soft tissues like the pancreas, brain, kidney lung and large intestine also developed radiation induced cancers.

Workers in nuclear industries are allowed to receive 10 times more radiation than the general public and, in special cases, 70 time more in a year's time.

Many authorities say only 1 to 2 cancer deaths will occur because of radiation from the March 28 accident. This is because they are using an ad hoc report which was tabulated only to April 7. Try to remember, most of the stack monitors went off-scale on the first day and many other monitors were not working. As a result, what was measured will result in few deaths, what wasn't will always be a mystery.

### INSURANCE IN THE EVENT OF A NUCLEAR ACCIDENT

If your home is destroyed, don't count on your homeowner's coverage -- it has a total exclusion. Read it.

If your auto is destroyed, don't count on your auto policy -- it has a total exclusion.

Total compensation for all victims of a nuclear accident is limited to \$560 million, under the Price-Anderson Act passed by U.S. Congress in 1957.

What if you can't return to your home for 10 years? The funds you recover will amount to a few cents on each dollar you've invested in your property.

"The public is protected by Price-Anderson." Herman Dieckamp GPU - MET-Ed Report No. 1  
May 10, 1979.

ECONOMICS

Utility rates are based on a "cost-plus" formula. Firms can charge customers for all generating costs and investments -- this is the "cost." The "plus" is calculated as a percentage of the utility's investment. The more the firm invests, the more money they make, and the higher your utility bills are.

The average nuclear power plant finished today costs \$1,050 per kilowatt of capacity; coal-fired plants cost \$675 per kilowatt. The cost to build nuclear power plants is climbing about 16% a year. Coal about 9%. By the mid-to-late 80's, it will cost \$2,000 a kilowatt for nuclear and \$1,000 a kilowatt for coal.

The rate of profit for investors in nukes is based not on costs, but on capital invested by the company (its rate base) which consists of the cost of buildings and equipment. Nukes are very expensive. Investors in nuke utilities are guaranteed a 9 to 15% profit.

It is only by continuing to make capital investments that utilities can reap the advantages of tax loopholes. This has encouraged utilities to build expensive nuclear plants.

Since 1972, utilities with more than 5% of their power generated by atomic plants received rate hikes 27.3% higher than non-nuclear firms.

The price of nuclear fuel, uranium, has gone up in price 600% since 1973. There is not enough uranium in the U.S. to support all proposed reactors past the year 2000.

The Council on Economic Priorities reported that in 1976 forced shutdowns of nukes cut their output to only 54% of their capacity.

In 1976, it was estimated that \$9 billion had been spent in subsidies for nuclear research and development, paid for by our tax dollars. If these costs had been paid by utilities, your electric bill would have been 50% higher. At the same time, minimal funding is being spent on alternate energy sources.

2 to 4 times more jobs per dollar will be created by solar investment than nuclear investments.

The Chairman of General Public Utilities makes \$240,000 a year.

DECOMMISSIONING

A nuclear power plant's life is 30-40 years. TMI #2 was scheduled to be decommissioned in 2009. The plant must be either continually guarded into the indefinite future or dismantled and the radioactive materials moved to a storage site at enormous cost.

Estimates of the cost of decommissioning worn out nuclear power plants, which remain intensely radioactive for years after they're closed, range from \$50 to \$100 million per plant.

Preliminary plans for decommissioning must be filed with the NRC, and the records show that most companies would prefer to leave their old reactors intact, either encasing them in concrete or welding them shut.

ENERGY NEEDS

TMI #1 and #2 supply about 30% of all electricity generated by Met-Ed (Evening News 4/13/79); Prior to 3/28/79 Met-Ed had 44% more electric generating capacity than it needed. (The Guide 4/18/79); 18% excess in generation capacity is a basic requirement for utilities; nationally we have a 33% excess. (Time Magazine 4/16/79).

In 1978, a Pennsylvania electric firm had 47.5% excess generating capacity, meaning it could produce 47.5% more electricity than was required during the day of greatest demand (peak usage) of the entire year. 15-20% is the recommended figure by the U.S. government. Many utilities have similar excess generating capacities.

The Army Corps of Engineers has estimated that reactivating small hydro-electric dams could provide the equivalent of 26 large nuclear units. There are 70 operating today.

Charles Komanoff, an energy consultant, has evidence that electricity from newly completed nuclear plants is twice as costly a source of useful heat or mechanical energy as OPEC oil burned directly.

WASTE - Reactors contain fuel rods packed with uranium. The uranium covered by water, fissions producing tremendous heat & steam which turn a turbine. What happens to the uranium? It forms hundreds of dangerous radioactive elements with half-lives. Examples: Radioactive Iodine 131, 8 days; Strontium 90, 28 yrs; Cesium 137, 33 yrs. & Plutonium 24,000 yrs. If you have a lb. of plutonium with a half-life of 24,000 yrs. you'll have 1/2 lb. in 24,000 yrs. & 1/4 lb. in 48,000 yrs., etc. 1/6 to 1/3 of the fuel rods are removed annually. They are stored on site at TMI in huge pools that are extremely hot & radioactive because no other way is known to safely dispose of them. Every nuclear plant produces several hundred lbs. of plutonium per yr. plus large quantities of other radioactive materials. By the year 2020, this country will have made 30,000 tons of plutonium. It remains dangerous to humans for a half million yrs. It can get into your body & cause a variety of cancers.

Science Magazine July 1979 states in regards to the use of glass to store radioactive waste, "While glass is suitable for use in a 'first demonstration' of a waste solidification and disposal system, it is generally inferior to crystalline materials such as ceramics. Glass is highly susceptible to reaction and leaching if exposed to water and high temperatures." As a result research efforts must begin on the possible use of ceramics. We've been waiting 30 yrs. for the problem to be solved, we'll probably have to wait alot longer before an answer is found, if ever.

The cost figures which Met-Ed uses in its newspaper ads relative to the production of a kilowatt hr. of electricity using nuclear power doesn't include any cost associated with spent fuel waste disposal. Utilities should be charged today for the ultimate disposal of their atomic waste rather than burden future generations. Presently there are 5,000 tons of spent commercial

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# THE PANE PILL

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In May you signed a petition asking for the shutdown of TMI as a nuclear generating facility forever. PANE (People Against Nuclear Energy) composed of Middletown area residents circulated the petition. Since then we have held several meetings, developed an interim charter and have made considerable progress in stimulating citizens and governmental action to shutdown TMI. We thank you for signing the petition and encourage your continued support. Most of our efforts have not been well publicized because we work on manpower not money-power. If you have been wanting to get involved and into PANE, become a member and join a committee. If you don't have the time to work on a committee, be certain to become a member and attend the meetings. Keep informed. EVERYONE IS ALWAYS WELCOME AT PANE MEETINGS.

The purpose of PANE is to work in every lawful way to advocate the cold shutdown of nuclear reactors on TMI. PANE is in favor of other types of alternative energy uses on TMI to produce electricity, if such generation is necessary on TMI.

Political action by area citizens has accomplished several items. Several meetings and discussions with Congressman Ertel and his staff has resulted in his increased awareness of the problems. Several area Borough Councils and Township Supervisors have passed resolutions regarding TMI. NRC Commissioner Peter Bradford visited several PANE members in Middletown; as a result, he has taken a very strong stand on the psychological issues of TMI. Congressman Ertel brought NRC Commissioner Victor Gilinsky to Middletown. Middletown area citizens listened and asked questions. The psychological aspects were very apparent in terms of the increased anxiety if TMI reopens with nuclear generation.

There are several PANE committees operating at this time. If you are interested in helping, attend the next meeting and complete the sign-up sheet located in the meeting room. The committees are as follows: Physical Health, Mental Health, Membership, Charter, Regional Coordination, Public Education, Press, Fund-Raising, Technology.

## Helpful Addresses

Nuclear Regulatory Commission  
1717 H Street, N.W.  
Washington, DC 20555  
202-492-7000 (Call Collect)

NRC Public Information  
King of Prussia  
215-337-5000 (Call Collect)

Our Pa. Senator for Middletown area  
Pennsylvania Senator George Gekas  
Pennsylvania Senate  
Harrisburg, PA 17120  
561-2603

Our U.S. Senators for Middletown area  
U.S. Senator H. J. Heinz, III  
233-5049 (local)  
U.S. Senator Richard Schweiker  
732-3067 (local)  
Russell Senate Office Building  
Washington, DC 20510

Our U.S. Congressman for Middletown area  
U.S. Congressman Allen Ertel  
Longworth Building  
Washington, DC 20510  
564-8963 (local)

Pennsylvania Dept. of Environmental Resources  
Bureau of Radiological Health  
Third and Locust Streets  
Harrisburg, PA 17101  
Director Tom Gerusky

Met-Ed Public Information  
944-0303

Our Pa. House of Representative member for  
Rudy Dininni  
Middletown area.  
House of Representatives  
Harrisburg, PA 17120  
564-6201

An NBC News Documentary will be shown Tuesday, September 18 at 7:30 p.m. in the MCSO. The 55-minute film will discuss radioactive waste and its disposal. Everyone is welcome.

TMI News - 7/30/79 - About 4,000 gallons of water was released without being tested for strontium 90 (half-life 28 years), on 7/26 and just reported today. 8/1/79 - U.S. Representative Robert Walker of Lancaster County called on the NRC to lift the plant operating license held by GPU (Lancaster Intell.). 8/2/79 - President of GPU spoke to the Lancaster Rotary Club on 8/1 (Lancaster Intell.). 8/2/79 - Met-Ed said it revised its testing procedures for processed water to be discharged in the wake of the furor which arose over the company's oversight in conducting a test for strontium last week (Harrisburg Evening News). 8/3/79 - An NRC report listed 16 possible violations of radiation protection regulations which includes workers being exposed to excessive doses.

Less than half of the plants portable radiation detection devices were operational on March 23 (Lancaster Intell.). 3/3/79 - An NRC report, showing a puff of radiation twice as strong as anything previously revealed had come from the TMI stacks during the accident, was lost within the NRC (Washington Post). 3/3/79 - The Chairman of the Presidents Commission says operator error was only 1 of 10 or 20 factors that contributed to this accident. The water release of 7/26 was found to have less than 10% of the strontium allowed in Federal Regulations (Harrisburg Evening News). 3/4/79 - A nuclear physicist from City College of New York, Michio Kaku, toured TMI and said "The lesson of Three Mile Island shows gross negligence on the part of Met-Ed (and) in defects in the design of Three Mile Island." He also stated the gas and water at Three Mile Island wouldn't be safe to mix with the environment for another 100 years. (York Daily Record). 3/3/79 - A Londonderry Township ambulance driver received 2 millirems of radiation to his hand while assisting a Met-Ed employee to Hershey Medical Center. The employee received 25 millirems to his left arm. Also restart hearings for #1 may start in mid-February conducted in this area by the NRC (Harrisburg Evening News). 3/11/79 - Londonderry Township Supervisors approved a resolution on 3/10 opposing the reactivation of #1 and #2 until a series of conditions are met (Harrisburg Patriot). 3/11/79 - The Lancaster Intell. asserts that Met-Ed is involved in a public relations blitz. Met-Ed has budgeted \$20,000 for newspaper space in Lancaster, Lebanon, York, Harrisburg, Carlisle, Middletown. Guided tours are being conducted for community leaders and local public officials. Speaking engagements by GPU executives and showing the film at the observation center. The public relations staff numbers 15 full-time and 1 part-time. In April Met-Ed hired a Chicago based public relations firm whose contract expired on 6/30. They were paid approximately \$50,000 (Lancaster Intell.). 3/14/79 - Met-Ed would like to vent radioactive gas over a 30-day period this fall. This venting would be safer according to Met-Ed than storing the gas (Lancaster Intell.). 3/16/79 - Pa. Representative Harold Brown of Reading told the SVA, an anti-nuclear group in Lancaster, that the debate in the General Assembly over nuclear power should be very interesting. The state has no direct authority over nuclear facilities, but if passed a court fight will follow the legislation. (Lancaster Intell.).

Dr. Chauncey Kepford testifying to the House Science and Technology subcommittee on energy research and production said the radiation exposure reported to the public for March 23 to April 7 by the NRC "is a face-saving, even imaginary value, since it is not supported nor supportable by the NRC's own monitoring data." "Monitoring during the initial days of the accident was almost non-existent and to make matters worse, the stagnant air mass over the eastern U.S. at the time prevented radioactive materials released in those early days from being dissipated over the Atlantic Ocean contributing to a cumulative dose which received no consideration by the NRC." ". . . the NRC chose not to monitor beyond about 14 miles from the plant, or in the directions in which most of the population was located." (ECNP Newsletter, May 1979)

A former senior research cancer specialist at Roswell Park Memorial Institute says the body scans, which 721 citizens had, would not detect iodine 131 since alpha radiation emitters would only be picked up through urine analysis--which was not done. The body scans also would not detect beta radiation to the lungs which was received by people inhaling Xenon and Krypton. This inhalation most affected those with respiratory ailments. (ECNP Newsletter, May 1979)

Energy economist Charles Komanoff says capital costs of nuclear power to construct new power plants is very high compared to coal. The average cost per installed kilowatt was \$527 compared to \$303 for coal fired plants. In addition, the cost of nuclear waste disposal is unknown as well as decommissioning of the nuclear plant at the end of its 30 year life. Also missing from the costs of nuclear power are subsidies by the Federal Government for fuel and the Price Anderson Act. (Nuclear Information and Resource Service)

Nuclear plants are "clean" only because their primary emission--low level radiation--is invisible and odorless. Studies conducted by the Dept. of Energy's Environmental Measurement Lab indicate that nuclear plants produce approximately 360 times the radioactive dose commitment of a similar sized coal plant. (Nuclear Information and Resource Service.)

Dr. Ollie Larni showed the film "More Nuclear Power Stations" and gave a presentation at the August 7 PANE meeting. He discussed the possibility of using TMI as a coal fired facility. He felt with technology available today such as fluidized bed combustion much of the pollution could be contained. He also pointed out that tall stacks are necessary when modern pollution devices are not used.

Nationwide utilities have a reserve margin ABOVE PEAK DEMAND of 37%. All nuclear power plants make up 9.7% U.S. Generation capacity. Without nukes the U.S. would still be able to produce 27% more than we need, nationally. The Federal Government says a cushion ABOVE PEAK DEMAND of 15-20% is a good cushion source. (Village Voice, May 7, 1979)

Stephen Reed, a member of the Pa. House of Representatives, feels the state should do more to develop alternative forms of energy. In an editorial in the Patriot News on August 15, 1979, he advocated the promotion of hydro-electric power and solid waste-fuel generated plants. He states "both of which are cost effective, take much less time to establish and are technologically proven." Write him a letter (House of Representatives, Harrisburg, PA 17120) and call the Governors Hotline at 1-800-932-0784.

Legislators to write to:

Representative Rudy Dininni  
House of Representatives

- House Bill 915 - prevents storing of radioactive waste.
- House Bill 1243 - Removes from the rate base any plant out more than 90 days.
- House Bill 1080 - to permanently shutdown TMI as a nuclear facility.

Congressman Allen Ertel

U.S. House of Representatives

- House Bill 2603 (Weaver Amendment) - bans operating license unless there is an evacuation plan. (Markey Amendment) - six month moratorium on construction licenses until TMI investigations are completed.

U.S. Senator Richard Schweiker

U.S. Senator John Heinz, III

Tell them to vote against Bumpers' Amendment that would delete Clinch River funds but reappropriate them to a new larger breeder reactor being planned for Idaho. The breeder reactor will be used to produce fuel for the "on line" fast breeders at the turn of the century when uranium supplies run out. The breeders are expensive, dangerous and would require the production and shipping of large amounts of plutonium. (24,000 yr. half-life) A half-life is the time it takes for half of any radioactive substance to disintegrate. Source - No Nukes - Everyone's Guide to Nuclear Power - Georgey.

Tell all of these men about your concerns during clean-up of TMI #2 and how you feel about a TMI #1 restart. Why should the utility spend money to restore #2? Wouldn't it be better to decommission it as safely as possible--NOW?

It has been proposed that the Pennsylvania Department of Health coordinate a 20-year study of the effects of TMI accident. The first \$200,000 and professional assistance is to come from Electric Power Research Institute, an arm of the Edison Electric Institute a pro-nuclear industry group. (ECNP Newsletter, May 1979).

The Bechtel Corporation estimates the walls of the containment are plated with 400 to 60,000 curies of cesium - 134 and 137 and strontium 89 and 90. (cesium 137 has a half-life of 30 years and strontium 90, 25 years.) About 60% of the fuel core is believed to be damaged. To clean the inside walls of the reactor building at least 1 to two million additional gallons of water will be contaminated. This beside the approximately 50,000 gallons of contaminated water already in the auxiliary and reactor buildings of Unit #2. (York Daily Record, August 14, 1979)

If you need to know about something on the island, call the NRC collect at 215-337-5000.

Lancaster County Commissioner Jack F. Tracy has started a fund to truck the waste water off the island to gov't and utility officials. He contributed the first \$25. Anyone interested should send their donations to the Lancaster Fulton Bank in the name of the 'Epicor II Fund,' Lancaster, PA. If the project fails all donations will be returned. He has already contacted a trucking co. and the Teamsters Union for a driver. (Lancaster Intell., Aug. 16, 1979)

If you are a Met-Ed customer, call Met-Ed customer services and ask for more information on an "RST time of day meter" installation to help cut your family's energy consumption.

PANE may be involved in legal intervention to keep nuclear energy shutdown on TMI. Costs for this intervention and costs associated with further mailings will be adding up.

Dear Treasurer:

Please accept my donation to PANE.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE NO. \_\_\_\_\_

Donation: \$ \_\_\_\_\_

I want to receive the newsletter -  
(Please check one) yes \_\_\_ no \_\_\_

Send to: PANE, c/o Treasurer  
P.O. Box 268, Middletown, PA 17057

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PANE  
P.O. Box 268  
Middletown, PA 17057

BULK RATE  
U.S. POSTAGE  
PAID  
MIDDLETOWN, PA 17057  
PERMIT NO. 43

YOU ARE INVITED  
A FILM ON T.M.I.  
**CAPITOL CAMPUS**  
**AUDITORIUM**  
**MAIN BUILDING**  
**MAY 21 7P.M.**



**we are the guinea pigs**

# TOWN MEETING FOR CITIZEN'S OF M-TOWN AREA

DATE JUNE 20 1979

WHERE MCSO BULDING

TIME 7:00 P.M.

**PLEASE COME & SHOW YOUR  
SUPPORT !!!!**

## FACT SHEET

TMI #1 and #2 supply about 30% of all electricity generated by Met Ed. Evening News, April 13, 1979.

18% excess in generation capacity is a basic requirement for utilities. Nationally we have a 33% excess. Time Magazine, April 16, 1979.

Prior to March 28, 1979, Met Ed had 44% more electric generating capacity than it needed. The Guide, April 18, 1979.

Estimates of the cost of decommissioning worn out nuclear power plants, which remain intensely radioactive for years after closed, range from \$50 to \$100 million per plant. Washington Post, May 7, 1979.

TMI #2 was scheduled to be decommissioned in the year 2009. Nuclear power plants have a useful life of approximately 30 years.

Georgia Power Company's Baxley Nuclear Plant was found to have 10% of the 6,000 bolts on pipes improperly installed. Newsweek, April 9, 1979.

The April 16, 1979 Philadelphia Inquirer details the possibility that TMI #2 was a construction rush job.

In March, 1979, problems were discovered in 63 welds of Unit #1. Evening News, April 17, 1979.

"In modern technology, no matter how carefully designed, reviewed, constructed, and operated, pumps can fail, valves can stick, electric components can burn out, bearings can freeze and meters can give faulty indications." Harold Denton, Evening News, May 21, 1979.

Since 1976, 13 states have voted against the burial of nuclear waste within their borders.

"Scientists have been pondering the problems of disposing of atomic wastes for the past 20 years." "Currently, nearly 5 thousand tons of spent fuel from the 72 nuclear reactors are temporarily stockpiled . . . awaiting a permanent graveyard where they can be safely stored for the 500 years or more that must pass before they are no longer toxic." Newsweek, April 9, 1979.

"Herman Dieckamp, GPU President, said no way has been found yet to take tritium out of the highly radioactive water in the containment building." "Tritium has a half-life of 12.3 years." Elizabethtown Chronicle, May 24, 1979.

On May 6, 1979, Representative Steve Reed asked Met Ed to provide data on radiation releases for March 28 and March 29. Met Ed stated the radiation release information was still in a preliminary form.

It is recommended that the maximum annual exposure not exceed 500 millirems for the general public. The average person is exposed to 200 millirems of radiation, from natural sources, per year. Newsweek, April 9, 1979.

Nobel prize winner George Wald says of radiation, "Every dose is an overdose. There is no threshold where radiation is concerned. A little radiation does a little harm; a lot does more harm." Time Magazine, April 9, 1979.

The liability limit of the Price-Anderson Act is \$560 million. You as a taxpayer will pay for \$60 - \$80 million of the \$560 million. Anything above \$560 million you will be responsible for also. Chicago Sun-Times, April 3, 1979.

Your homeowner's insurance does not cover your property against nuclear disaster. Read your policy and see.

The Price-Anderson Act has a 20 year limit on liability suits. Adverse health effects (cancer, leukemia) of exposure to radiation may not appear until after this 20 year liability limit has expired.

Nuclear energy is supported by a formidable lobby and many of these lobbyists have gone to the upper levels of the Federal Department of Energy. Jack Anderson, Sunday Patriot News, April 8, 1979.

The Carter Federal Budget for this year called for \$1.26 billion for nuclear energy and \$350 million for solar, wind, and ocean power. The Washington Spectator, May 1, 1979.

44% of the United States energy was generated by coal in 1978.

Charles Komanoff, an energy consultant says nuclear safety costs will exceed coal environmental costs in the near future. He also states the costs of building a nuclear plant increases about 16% a year, coal 9%. New York Times, April 8, 1979.

Harold Denton stated "But *society has to decide* if it prefers nuclear or coal or no power . . . I look at it as a question of alternatives. The first question is, does the country need more power? But that's a question for the local public utilities to decide. The second question is, if you need it, how do you generate it - coal vs. nuclear vs. solar vs. geothermal." Patriot News, April 16, 1979.

The President's TMI Commission will not tell Met Ed to shutdown the nuclear reactors -- you will have to.

# PANE

7-79

## People Against Nuclear Energy

A COMMUNITY COMMITTEE IN MIDDLETOWN, PA.  
(717) 944 4373 (717) 944 3909

~~ASSOCIATED WITH THE MIDDLETOWN TOWN COUNCIL (1977) 944 3909~~

### Political Action Works!

- 6-9-79 - Lower Swatara & Middletown PANE meet with Congressman Ertel.
- 6-11-79 - Congressman Ertel publicizes letters he has sent to Denton, Hendrie, and Dieckamp.
- 6-20-79 - M-town Town Meeting in Boro Hall with Borough Council
- 6-21-79 - Members of PANE meet with Boro Council--Press is harsh with Boro Council.
- 6-22-79 - Gov. Thornburgh sends letter to Hendrie (NRC).
- 6-29-79 - Congressman Ertel brings Gilinsky
- 7-1-79 - M-town Council votes on strong resolution.
- 7-3-79 - NRC orders formal shutdown of TMI #1.

### Coming Events

- July 29 - The Advocates "Should we stop construction of nuclear power plants" WITF - Channel 33 - 6 p.m.
- Hiroshima Remembrance - City Park - Reading 1:30 p.m., Aug. 4.
- Aug. 5 - Hiroshima Day Observance - Lakeside Lutheran Church - 7 p.m., Hbg.
- Sept. 17 to 21 - NBC film on radioactive waste presented by PANE - specific date, location, and time to be announced.

Take a home study Radiological Monitoring Course - Call 238-1693 and ask to have it sent to your home - no cost. 238-1693

### Coming Events

- Aug. 7 - 7 p.m. - P.S.U. Capitol Campus Auditorium. Film - "More Nuclear Power Stations" about the nuclear fuel cycle with a presentation preceding and following the film on nuclear energy economics and ethics by Dr. Ollie Larimi.
- Aug. 23 - Public Meeting of PANE - Everyone invited to this informational presentation.

YOUR EMPHASIS should be on sending letters to the NRC Commissioners.

New game available "Meltdown" - \$8.00 for single copy - Sekunon Industries 1823 Oxford St., Rockford, Ill. 61103

Join the Environmental Coalition on Nuclear Power (ECNP) \$5.00 per year. Make check payable to ECNP, 433 Orlando Ave., State College, PA 16801.

Do you really want it?

Do we really need it?

TMIA BENEFIT CONCERT in Halifax - tickets \$5.00, please car pool. For tickets see Jim Hurst. AUGUST 12 - ALL DAY

### MEET Congressman Ertel

Sat. July 28 - MCSO - 2:45 town meeting Thank him for his continuing support and efforts. Ask for his interpretation of the July 2 NRC order and a summary of upcoming nuclear energy related legislation.

### MORE TO COME WITH YOUR HELP.

Courses at HACC - Call 236-9533 for more info

- July 9 - free - Solar Water Heating Systems
- Aug. 20 - \$4.00 - Anatomy of Nuclear Plant
- Wed. July 25 & Aug. 3 - \$3.50 - Fund. of Wind Energy.

Send letters to NRC Commissioners with your reasons for shutting TMI down. Send one with copies to the others. List physical, mental, economic, and social reasons.

- Chairman Joseph Hendrie
- Commissioner Victor Gilinsky
- Commissioner Peter Bradford
- Commissioner Richard Kennedy
- Commissioner John Ahearne

### Concerned About Berwick's Susquehanna Plant?

Send letters to the editor:

The Berwick Enterprize  
Old Berwick Road  
Bloomsburg, PA 17315  
The Morning Press - same address

Become a member of Three Mile Island Alert - send \$15.00 to TMIA, 315 Peffer Street, Harrisburg, PA 17102.

Attend the next PANE meeting Aug. 7 at 7 p.m. Pennsylvania State University Capitol Campus Auditorium.

Environmental Coalition on Nuclear Power (ECNP) Meeting at HACC. Sunday, July 29 10 a.m. to 4 p.m. Bring a lunch--very informative.

BE

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# PANE

## People Against Nuclear Energy

A COMMUNITY COMMITTEE IN MIDDLETOWN, PA.  
(717) 944 4373 (717) 944 3909

1. Please **RESPECT** the thoughts of others — you will receive **RESPECT** in return.
2. Listen to views that are not in agreement with yours.
3. Ask questions and Listen to ALL answers.
4. Public Meeting of PANE - Tuesday, July 10, 7 pm.  
MCSO, Emaus St. If you want to help plan to attend.

We are pleased that Congressman Ertel has asked Mr. Gilinsky, one of the 5 Nuclear Regulatory Commissioners, to this Congressional town meeting.

Commissioner Gilinsky will convey our concerns to the remainder of the NRC. He will not make any decisions tonight on Three Mile Island. He may not be able to answer all of our questions this evening. However, his presence at the request of our congressman is greatly appreciated.

The meeting has been structured to make maximum use of the time available. Please follow all of the rules for this town meeting, so that our concerns will be aired.

Thank you

P.A.N.E. Committee

# THE P.A.N.E. PILL

PEOPLE AGAINST NUCLEAR ENERGY  
OF THE MIDDLETOWN  
AREA

P.O. BOX 268  
MIDDLETOWN, PA 17057

P.O. BOX 268  
MIDDLETOWN, PA 17057

Editor - Don Housler

September 1979

Asst. Editor - John Garver

TMI #2 is not used and useful because of the March 28 accident. TMI #1 is out of service due to a July 3, 1979 ruling by the Nuclear Regulatory Commission (NRC). Hearings will be held early in 1980, in the Middletown area, to determine if #1 should be allowed to restart. The hearings are legal proceedings and individuals or groups who oppose the re-opening and participate are called intervenors.

PANE (People Against Nuclear Energy) of the Middletown area has filed a petition with the NRC to be intervenors. The law firm of Sheldon, Harmon, Roisman and Weiss will be representing your interests and concerns in the hearings.

It is PANE's contention that the restart will further aggravate the psychological health, safety, and well-being of area residents. Costs to intervene may escalate as high as \$50,000 to \$100,000.

All petitions to intervene were filed on September 14. A 3 member hearing board will review the petitions and determine who will be able to participate in the hearings. Tentatively in late November the board will determine which contentions (issues) will be heard in early 1980. The hearing board will conduct all hearings. At the conclusion of the hearings, the board will make a recommendation to shut-down or restart TMI Unit #1. Finally the NRC commissioners will either approve or reject the recommendation.

Hearing board members are as follows: Ivan W. Smith, Chief Administrative Law Judge at the NRC; Walter Jordan, a retired professor of nuclear engineering; Linda W. Little, a biologist and water pollution control specialist.

Following is a tentative timetable of hearing events:

Sept. 14, 1979 - last day to file petitions

Mid November, 1979 - hearing board determines which contentions will be heard

February, 1980 - hearings begin in Middletown area

April, 1980 - hearings expected to be completed

August, 1980 - NRC commissioner approval or rejection of hearing board decision

Next scheduled PANE meeting -

When: October 16, 1979 - 7:30 p.m.

Where: NCEO, W. Evans Street (beside the Elks Theater)

Representatives from the law firm will discuss activities to date and answer questions regarding our intervention.

All interested citizens are invited.

Be

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PANE!!

The Nuclear Regulatory Commission ruled on August 8, 1979 that the mental health of people living near TMI should be considered before allowing TMI #1 to restart. Reporter Thomas O'Toole in the August 9, 1979 Washington Post quotes the NRC General Counsel as follows "What the commission is saying is that psychological, sociological and economic distress should all be considered in hearing the licensee's application to restart the plant." The General Counsel continues, "In fact, the commission may consider funding any intervenors who present arguments about such distress when the time comes to argue it." O'Toole states that it is possible, after the hearings are completed, that the hearing board may not make any decision on whether to license the undamaged reactor. In that case the 5 commissioners of the NRC will make the decision.

Pennsylvania State Senator George Gekas of Harrisburg has called for the permanent closing of Three Mile Island as a nuclear generating facility. This was part of a statement filed with the Kemeny Commission in Washington, DC on September 13, 1979. The Senator has petitioned the NRC so that he can be an intervenor in the up-coming hearings. He feels to reactivate TMI "would be a trespass on the very right (of people) to exist in a normal manner." He does not mean to censure nuclear energy, but he does not feel TMI should be reactivated. He continues, "Our people have been used as guinea pigs, as unwilling subjects of an experiment in terror." He also stated, "The cost, past and future, must be a priority item for the government and utility structure only after the real issue, the cost in human misery should TMI reopen, is addressed." Harrisburg Evening News, September 14, 1979.

Senator George W. Gekas' address is Senate Post Office, State Capitol Building, Harrisburg, PA 17120. Phone No. 717-787-6801.

TMI News - 8/15/79 - The Epicor II purification system which may be used to extract radioactive materials from 280,000 gallons of water has no track record. The system separates iodine 131 and cesium 137 from water by filtering thru demineralizers and ion exchangers. The solid wastes collected will be transported out. Epicor I was used to treat the 4,000 gallons dumped on 7/26. 110,000 people get water from the Susquehanna (Lebanon Daily News). 8/16/79 - The state P.U.C. opened an investigation today into the past and present management practices of the owners of TMI. Unit #2 was built at a cost of 700 million and total for #1 and #2 is 1 billion dollars. Other related news - an employee of a Massachusetts firm received "minor radiation contamination" of his fingertips while unloading contaminated breathing apparatus. The water level on the floor of #2 containment building is 7 ft. The NRC revealed the 4,000 gallons dumped on 7/26/79 was "well below acceptable limits." (Harrisburg Evening News). 8/17/79 - The state PUC management audit will be completed in 4 - 6 months. The audit will look at management decisions not nuclear technology. (Lancaster Intell.) An editorial in the Harrisburg Evening News indicates the Pa. State Consumer Advocates petition to appear in TMI NRC hearings and the reasoning behind it are unclear. "In a roundabout way, Cohen (advocate) appears to be pushing for the reopening of TMI #1 as quickly as possible." (Harrisburg Evening News) 8/19/79 - A now decommissioned nuclear facility operated by subsidiaries of G.P.U., used for training personnel, has been under the scrutiny of Jim Elder of Saxton, Pa. The plant operated from 1962 - 1972. Elder after 2 years, got information that in 1970 - 1971 there were 4 accidental radiation releases of which one pegged a stack monitor full scale for 3 - 4 hour duration. Elder lost a son to Leukemia in 1976 and he makes a contention that the plant and the cancer-leukemia rate for Saxton is 5 times the statistical average (Harrisburg Patriot). 8/20/79 - Pa. has shelved its efforts to find a site for a low level radioactive burial ground because of the uproar over the Three Mile Island nuclear accident. Pa. ships its nuclear garbage to Washington, Nevada, and South Carolina (Harrisburg Evening News). 8/21/79 - 1/3 of the Pa. state police would be needed to implement an evacuation of residents in a 20-mile radius of TMI. The state police commissioner said troop headquarters in Harrisburg were first advised of the accident at 7:41 a.m., more than 3 hours after the initial trouble. He said no money there is in the current budget for protective clothing and equipment. Meanwhile, State Representative Stephen Reed has asked the Governor to have the State Justice Department to file legal action to prevent the release of any radioactive gases or contaminated water. Governor Thornburgh appeared before the Presidents Commission. He felt technical capabilities of plant operators should be strengthened and the NRC develop a quicker response to emergencies. He also felt a broader constituency should be consulted for siting purposes. The state still has shortcomings to respond to a nuclear accident. It was learned Lt. Governor William Scranton received 85 M.R. during a visit to an auxiliary building on site, for a few minutes, on 3/29/79. (Harrisburg Evening News) 8/21/79 - 150 - 55 gallon steel barrels of work clothes, plastic bags and paper left TMI on Monday for Hanford, Washington disposal site. Shipments go thru Ohio, Indiana, Illinois, Wisconsin, Minnesota, North Dakota, Montana, and Idaho. It takes 3 - 4 days. Tom Gerrishy said selection of a Pa. nuclear waste disposal site has been delayed. Also on TMI a malfunction in an electronic warning device caused a radiation alarm to be triggered on 3 occasions Sunday and Monday. NRC said no radiation was detected (Lebanon Daily News). 8/22/79 - The State Secretary of Banking said it will take one year to determine the economic effect of TMI. The State Secretary of Agriculture said there is no provision in evacuation plans for farm animals in the predominately agricultural area around TMI (Harrisburg Evening News). 8/22/79 - Governor Thornburgh was questioned by Kemeny Commission and not real prepared to answer questions regarding National Guard preparedness. The National Guard ranks were thin because of their own evacuation (Harrisburg Evening News). 8/23/79 - The Assistant Director of the Commerce Departments Bureau of Travel Development told the State House Select Committee on TMI that the 3/28 accident, severely hurt tourism in South Central Pa (York Daily Record). The Manchester Borough Council (York County) plans to have a community meeting for borough residents with Met-Ed officials. Mt. Wolf (York County) recently had such a meeting. In other TMI news - a worker was checked by a monitoring device and left the plant wearing a pair of contaminated trousers. The radiation was not detected until the worker checked back into the plant the following day. Tests failed to indicate that any of the radiation contacted the skin of the worker, his vehicle or his home (York Dispatch). The Kemeny Commission was told on 6/22 that safety concerns within NRC at times were clouded by such economic questions as the cost of shutting down a nuclear power plant (Lancaster Intell.). Members of PANE questioned Middletown Borough Council when the monitoring devices, promised by Met-Ed, would be installed (Middletown Press and Journal). 8/24/79 - Governor Thornburgh has asked the NRC to permit commonwealth participation in the hearings on TMI #1. He would like the NRC to grant Pa. "interested state" status. This status allows the state to submit evidence and cross examine witnesses. The Governor has stated that no question relating to health, safety, and economics be ignored (Harrisburg Patriot News). The NRC staff, after being blasted by the Kemeny Commission, has retained a freeze on A-licensing. However, the length of the freeze is unclear. The Kemeny Commission came down hard on the NRC for appearing to say that the Commissions's recommendations could be ignored. Middletown resident and Commission member Anne Trunk demanded of Harold Denton, "Give me one good reason to trust you." She was referring to Denton's decision to have the NRC proceed with license approvals (Washington Post and Harrisburg Patriot). 8/26/79 - About 1 pint of radioactive

water was drawn from the containment building of #2. The sample will be analyzed this week at 2 different labs in Oak Ridge, Tennessee and Babcock and Wilcox Research Center, Lynchburg, Virginia. The analysis will help assist in the determination of which process to use in decontaminating the water. The 170 ft. high containment building has about 550,000 gallons accumulated to slightly more than 7 ft. in depth. About 1/2 of the 550,000 gallons was produced from condensed steam during the first minutes of the accident. The remainder had seeped into the containment from leaks in the system (Sunday Patriot News). 8/28/79 - The Derry Township (Hershey Area) supervisors have become the first governmental body in the area to call for the reopening of Unit #1 at Three Mile Island, despite the protests of nearly 100 members of the anti-nuclear Hershey Alliance (Lebanon Daily News). 8/29/79 - The Hershey Foods Corp. is awaiting response to a claim filed with American Nuclear Insurers (ANI) in connection with the March 28 accident. However any action by ANI is being deferred because of several class action suits now on file regarding the accident. Hershey Foods is still sending some of its products for testing. Hershey Foods declines to discuss the exact monetary damage and is still investigating the possibility of filing a lawsuit against the operators of the nuclear facility (Lebanon Daily News). 8/30/79 - The Hershey Alliance claims the details of a pro-TMI resolution passed by Derry Township supervisors were hammered out in a private meeting, possibly violating Pa.'s open meeting law (Sunshine Law). Also during an Alliance meeting it was decided to join with the Environmental Coalition on Nuclear Power as an intervenor in the NRC-TMI hearings (Lebanon Daily News). Pickets from the Susquehanna Valley Alliance of Lancaster demonstrated outside of the Lancaster Lions Club meeting. Robert Arnold a Met-Ed official was the speaker during the luncheon meeting. SVA has about 1,000 members (Lancaster Intell.). Walter Creitz is no longer President of Met-Ed because that position, "has changed significantly" since March 28, 1979. A successor has not been named to the \$90,000 a year position. Creitz will be on special assignment to GPU the holding company of Met-Ed (York Dispatch). In a related article observers felt the resignation was designed to take some political pressure off Met-Ed. "Many groups were annoyed with a Creitz statement on March 29 that if Henry Ford had worried about risks there never would have been an automobile." (Washington Post). 8/31/79 - A twin engine cargo plane crashed about 1/2 mile from Three Mile Island early on the morning of August 30, 1979. The plane was trying to land at Harrisburg International Airport which borders the Three Mile Island nuclear generating facility. The crash is under investigation (Harrisburg Evening News). There is a question whether the water lines with pumps for TMI reactors would be vulnerable if the York Haven Dam, which is 75 years old, were to give way. The pumps are not on the bottom of the river (Paxton Herald). Six workers at TMI have received a skin dose of radiation that may be "one of the worst exposures since the atomic energy program got started," said Thomas Gerasusky Director of Pa.'s Bureau of Radiological Health. The exposure was 50 rems of skin exposure and each received a whole body exposure of 1 rem of gamma radiation. Met-Ed also said the worker's feet were exposed to beta radiation ranging from 40 to 150 rems (Lancaster Intell.). 9/1/79 - Three more workers have been exposed to amounts of radiation while working a fuel handling building. The three had contaminated material on their knees (Harrisburg Patriot). 9/2/79 - Lancaster County officials will now know when radioactive material is being transported out of TMI. So far the material takes a northern route from TMI into Lebanon County and then N.W. toward Ohio (Lancaster Intell.). 9/5/79 - Four Federal agencies have been allotted a total of \$676,000 to study the effects of the March 28 accident. Areas to be examined are industrial production, farm production, commodity consumption, tourism, government tax revenue, budget effects, and construction (Harrisburg Evening News). The chairman of GPU urged state law-makers to help restore confidence that the clean-up from March 28 accident can be accomplished without danger to the public. The Chairman, W. G. Kuhns also stated "The accident has caused the public to be skeptical about the efficiency of government regulation and the competence of the company." He said the NRC has 20 full-time employees assigned to the plant. He also said the hearing process to open TMI #1 may take 1-2 years. Kuhns was testifying before the Pa. State House Select Committee (Harrisburg Evening News). The Paxton Herald published an article describing Met-Ed activities in the hydro-electric area of power. Met-Ed is applying for a 50-year license to continue to operate a dam. Before the dam was built many ocean fish spawned in the upper Susquehanna. The Pa. Fish Commission would like to see fish ladders constructed. Boat accidents have occurred because all coffer dams constructed by Met-Ed were not removed completely, finally after repeated complaints they were removed. Many people question why Met-Ed didn't update the dam's generation capacity instead of building TMI. The Susquehanna River Basin Commission has a choice to offer Met-Ed a 1 year or a 50 year contract (The Paxton Herald). 9/6/79 - The Board Chairman of the company that owns TMI says regarding Price-Anderson, "I think we, as an industry, are big enough and sure enough of the technology" to increase the industry's share of the fund. He did not comment if he thought the ceiling should be repealed. He was testifying before the Pa. House Select Committee on TMI. In a related development, Lancaster County Commissioners are considering using their own funds to place monitors around Peach Bottom and TMI nukes (Lancaster Intell.). The clean-up of Unit #2 may require 3,000 shipments of waste material to Hanford, Washington for burial. Sites in Nevada and South Carolina have refused TMI waste (Harrisburg Evening News). 9/7/79 - The State House Select Committee on TMI held hearings on 9/6 and they were, ". . . again lightly attended with less than a

dozen of the 29 members present at any one point and only 8 on hand when the hearings ended." A Senior Vice President for Met-Ed, R. C. Arnold, said, "The political climate is not suitable at this time for making a decision on disposal or storage of high level radioactive waste." He continued, "When the public gains an awareness of what considerations have to be made to turn to coal for needed energy, the costs for high usage of petroleum and gas, then we'll be in a better political climate." The Bishop of the Catholic Diocese of Harrisburg has called for a temporary halt in the development of nuclear plants. He stated ". . . not enough is known about the risks and benefits of nuclear energy to enable us to make a reasonable decision about continued development." (Harrisburg Patriot). Additional coverage of the R. C. Arnold testimony, 9/6, indicates since 3/28 there have been "three instances of exposure to workmen that I think are significant," Arnold said. The first was to health physics personnel shortly after the accident. The second was some 100 employees were exposed to higher than normal levels of radiation and the third when 6 workers received above-allowable limits of radiation. In addition, Arnold said there have been a number of minor incidents when contamination would not be "washed off immediately." He pointed out that only 5 employees have resigned of a 530 workforce since 3/28. (Hbg. Evening News). R. C. Arnold also stated during testimony that the maximum temperature across the top of the reactor core has been reduced to 250°. Pressure is being maintained at 275 pounds per sq. inch while average temperature is 165° (Lancaster Intell.). 9/8/79 - A contractor supervisor left work at TMI and returned the next day to find that a "small amount of radioactive material on his work clothing had not been detected the day before." Three other contract employees who worked with the supervisor the previous day had small amounts of radioactive material found on their finger tips and clothing but it was discovered before they left TMI (Harrisburg Patriot News). 9/11/79 - In a related matter the Director of Dauphin County's Office of Emergency Preparedness has criticized the Federal Government for expenditures, discussed in 9/5 of this issue, when he can't get \$15,000 in Federal funds to buy emergency radio equipment. (Harrisburg Evening News). 9/12/79 - The Academy of Natural Science of Phila. has placed fresh water mussels in the Susquehanna as part of a 6 month study to determine if there is any radioactive accumulation since the 3/28 accident. In related matters the 3/28 accident has been classified as a Class 9 nuclear plant accident by the NRC. Harold Denton reported that Met-Ed's license to operate TMI will be modified shortly to prohibit any release of radioactive gases or water from Unit #2 without a thorough study, approval by the NRC, and an amendment to the revised license (Harrisburg Evening News). 9/13/79 - In excess of \$1.29 million in insurance claims for TMI have been paid to civilians. 27 claims filed by governmental agencies and 113 by businesses have not been paid or rejected yet. In a related matter early analysis indicates perhaps 40% of the core of #2 is damaged, according to J. T. Collins of the NRC (Harrisburg Evening News). 9/14/79 - The Pa. Secretary of Health says the radiation sickness drug hastily prepared for TMI area residents and delivered on 4/1/79 were too late and of low quality (Lancaster Intell.). 9/16/79 - The Associated Press reports 25,000 people have visited the TMI Observation Center since it reopened 10 weeks ago. Before the accident the plant attracted an average of 16,000 a year (Lancaster Sunday News).

#### YOU'RE INVITED TO THE NEXT PANE MEETING

All PANE meetings are at the MCSO (beside the Elks Theater) on W. Emaus Street for October, November, and December.

October 16 - Tuesday - 7:30p.m. - Representatives from our law firm will discuss the issues, give you an update, and answer your questions.

November 8 - Thursday - 7:30p.m. - A panel discussion is being planned.

December 13 - Thursday - 7:30 p.m. - Agenda being planned.

The Mayor of Lancaster, Albert B. Wohlsen, Jr., is very critical of a recent assessment done by the NRC regarding water treatment plans at TMI. The Mayor feels the NRC and the utility are working in concert. The assessment deals with how to dispose of 280,000 gallons of radioactive water from TMI #2. The plan does not deal with an additional 600,000 gallons of more highly contaminated water in #2 containment building. In a formal city reply to the NRC regarding the assessment, to use a filtering and demineralizing system known as Epicor II, the following points, raised by Lancaster city attorneys, can be summarized:

1. No data available on environmental effects of alternatives.
2. Fails to compare the concentration of radioactive nuclides that remain in water after Epicor II use with the concentration remaining under alternate systems.
3. Contradicts earlier statements by Met-Ed and NRC that exposures to TMI workers are not a reason to rush to process the waste-water.
4. Epicor II was chosen and constructed prior to the assessment.
5. Does not discuss how Epicor II might limit the alternatives available for disposing of the water.

- 6. Fails to recognize the psychological impact of 3/28 accident such that old standards of what constitutes acceptable radiation levels are no longer good enough.
- 7. Fails to address numerous relevant safety questions and risks.

The mayor also stated that serious mistakes have occurred during TMI clean-up such as worker over-exposure and water dumping that was not properly analyzed. Also the fact that the assessment does not admit that radioactive tritium cannot be removed by Epicor II. (Lancaster Intell., 9/14/79)

Your Federal representative can get you the following publications:

- 1. "First Volume of Weaver Task Force Report on TMI Accident"
- 2. "Committee Print #1 Nuclear Regulation Legislation through the 95th. Congress First Session"
- 3. GAO Report - EMD-78-110 - "Areas around Nuclear Facilities should be better prepared for radiation emergencies."
- 4. GAO - Report - EMD-78-94 - "Major Unresolved Issues Preventing a Timely Resolution to Radioactive Waste Disposal"
- 5. U.S. House of Representatives, April 1978 "Report of Nuclear Power Costs" #95-1090.

Senator Richard Schweiker	Senator H. J. Heinz, III	Congressman Allen Ertel
U.S. Senate	U. S. Senate	House of Representatives
Washington, DC 20510	Washington, DC 20510	Washington, DC 20515

To get a current up-date of energy related legislation, call the League of Women Voters at 234-1576.

Interesting statistics: estimated total population of a 20-mile radius around TMI - 235,665 living people. The 5-mile radius estimate is about 40,000 living people. Lancaster, York, and Dauphin Counties total population is estimated at 816,130 living people. (Ed.t.)

"Activate the converted, convince the neutrals, work on the wavering." (Editor)

The 40,000 - 60,000 curies of Krypton-85 (half-life 10.7 yrs.) which Met-Ed proposes to vent, could be taken care of in the following manner: freeze the air in order to liquify the Krypton, or collect it by passing it over filters at several hundred degrees below zero. However, Met-Ed says it would have to be stored on-site, making it vulnerable to accidental release. [Why must it be stored on-site? Write to your legislators Dininni, Gekas, Ertel, Schweiker, and Heinz--We need help--economics should not come before individual well-being.] (York Daily Record, 8/14/79) [Editor]

The Nuclear Regulatory Commission was told Thursday (6/21/79) that it will never know how much radiation escaped from the plant at Three Mile Island because the levels exceeded the abilities of the plant instruments to measure them. Albert Gibson, of the NRC, told the 5 Commissioners that one set of readings were greater than 1,000 rems per hour. (Harrisburg Patriot News, 6/22/79)

Donations for the costs of this newsletter and PANE's legal intervention should be made out to PANE - Treasurer, P.O. Box 268, Middletown, PA 17057.

The May 24, 1979 Nucleonics Week magazine reports that 44 of the 72 operating U.S. reactors (61%) were out of service for one reason or another during April. 23 of the 72 (32%) were out of commission for the entire month. (Groundswell Newsletter, June 1979)

"The NRC is responsible for licensing and regulating nuclear facilities and materials for conducting research in support of the licensing and regulatory process, . . ." "These responsibilities include protecting public health and safety, protecting the environment, protecting and safe-guarding materials and plants in the interest of national security, . . ." (U.S. Nuclear Regulatory Commission Annual Report, 1978).

Herman Dieckamp of GPU Met-Ed testifying before Pa. Public Utility Commission rate hearings. In reference to problems that safety and environmental regulations cause "These changing requirements, when imposed on a project of immense magnitude, create a demand for attention to detail that is almost impossible to satisfy." (Phila. Inquirer, 4/16/79).

Met-Ed files monthly reports on the progress of returning #1 to service. These reports are available for public inspection in Room B-19, North Office Building, Harrisburg, PA at Docket No. I-79040308. Stop in and take a look.

PANE MEETING - October 16, 7:30 p.m. at the MCSO, West Emaus Street

Call 238-1693 and ask to be sent the Home Study Radiological Monitoring Course. The course is read and completed by you. Send your answer sheet back and if you pass, you qualify for further study.

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# THE P.A.N.E. PILL

PEOPLE AGAINST NUCLEAR ENERGY  
OF THE MIDDLETOWN  
AREA

P.O. BOX 268  
MIDDLETOWN, PA 17057

P.O. BOX 268  
MIDDLETOWN, PA 17057

Editor - Don Hossler

October 1979

Asst. Editor - John Garver

PANE currently mails 1,400 newsletters throughout the Middletown area (Middletown, Royalton, Highspire, Londonderry Township and Lower Swatara Township). The mailing list was compiled from 2,500 signatures gathered on petitions circulated by PANE members in this area. You can see that you are far from being alone in your concern about the dangers of the Three Mile Island nuclear facility. All of these people want TMI closed permanently.

PANE was organized by and for area residents who realized that we must combine our efforts to oppose, in every legal way, the reopening of TMI. After numerous meetings, phone calls, letters and visits to our elected governmental officials at the local, state and national levels, it became obvious that these officials would not and could not close TMI. The power to make that decision lies with the Nuclear Regulatory Commission.

We, the people living closest to TMI, must make our voices heard by the NRC. We must show that we have witnessed firsthand the nuclear "experts" in action. We have been through the accident that the "experts" said could never happen, and because no one can assure us that another accident will not occur, we want TMI closed. We have been through an experience that no one else ever has. We want our area to return to normal. We do not want to cringe anymore when the sirens sound. We do not want our children walking to school or waiting for the school bus while TMI spews radioactive gases into the atmosphere. We are tired of thinking about what we should take with us if we have to evacuate again. We do not want anything to cast any more doubts on our families' future health and safety. We have paid our nuclear dues!

To get this message to the NRC, the people of the Middletown area are being represented in the NRC hearings by Karin Sheldon, an attorney with the firm of Sheldon, Harmon & Weiss in Washington, D.C. PANE contacted numerous law firms, attorneys and other individuals, involved in the nuclear issue, both locally and throughout the country, to obtain every bit of information available to help in choosing our course of action. We feel confident that Karin, who has ten years of experience in the nuclear field, will provide us with the best possible legal counsel. It is our responsibility to provide her with the physical and financial support required in developing and presenting our case.

It is of utmost importance that the residents of our area make it clear to the NRC that we will not accept any further risks of nuclear power. If we sit by quietly while the NRC hearings are held, the nuclear industry (GPU-MetEd) and the NRC will seize the opportunity to claim that the local people were not adversely affected by the accident. We all know this is certainly not true. That is why PANE (the local residents) have filed to be an intervenor in the hearings.

The biggest problem facing us at this time is one of raising sufficient funds to enable the legal battle to continue. If we cannot raise these funds, our battle is over before it begins. Your help is needed now. The contributions received from our previous newsletters are encouraging, but we must all be willing to share in this effort. The only purpose we have in this endeavor is to make our area safe once again for ourselves and our families and to assure that never again will we have to experience a nuclear horror.

A complete accounting of all receipts and expenditures is available at all PANE meetings. Send your contributions to PANE, c/o Treasurer, P.O. Box 268, Middletown, PA 17057.

Sincerely,

*James B. Hurst*  
James B. Hurst  
Chairman

This time of year our thoughts turn to the fun of Halloween and "trick or treat" time. There has been some discussion that perhaps TMI could get the spirit also by wearing a costume. I've done some thinking and one outfit which might consist of the following: a conversion kit, thousands of rails and ties, various types of railroad equipment, the latest scrubber technology and hundreds of additional local jobs. Another possible costume -- upgrading the hydro-electric facility at York Haven in conjunction with the realization that the "Big Machine" will never be allowed to operate again. (Editor)

TMI Restart Meeting - 10/17/79 - This meeting involved a 9 A.M. to 5 P.M. working session at Liberty Fire Hall in Middletown between NRC and Met-Ed to discuss technical issues relating to the very slim possibility of a TMI #1 start-up. The day meeting was attended by about 40 local residents. A public comment evening session was held from 7 to 9 P.M. in which about 400 residents of neighboring cities and town attended. Comment by the public was very interesting. But also of interest was the behavior of the Met-Ed.

I personally spoke to the individuals who were operating a video-tape machine, tape recorder and cameras. They all admitted they were Met-Ed employees. Approximately the first hour of public comment was video-taped and an audio-tape was made, by the utility, of approximately the first 1 1/2 hours. One local resident voiced displeasure at this activity and as a result the tape was turned off and 35 mm. film was exposed. What was Met-Ed planning to do with the audio-tape, video-tape and 35 mm. pictures? Why was it necessary to do this? I suppose the share-

holders of Met-Ed were paying for this activity as they have been paying for those advertisements in the newspaper. One final comment -- Met-Ed placed a nifty public service ad in the local papers on 10/17/79 ..... announcing the evening meeting. What a public service, 7 hours notice to rearrange work schedules, get babysitters and change other prior commitments. Once again, I feel Met-Ed has demonstrated extreme callousness to our feelings. One woman commented at the meeting that the integrity and trust of Met-Ed, by local residents, can never be regained. She is right -- they are certainly NOT a PUBLIC utility. (Editor)

PANE MEETING - November 8 - Thursday - 7:30 P.M. at the MCSO, West Emaus St., - GUEST SPEAKER!

Plan to make a "Limited Appearance" What is it? . . . It is a statement of how you feel about what happened, is happening and will happen if #1 is allowed to restart. If you have some actual evidence or information about TMI you should also present it. You will give the statement before the hearing board. The hearing board will act as the judge and jury in the legal hearings to be heard February, 1980. Everyone is entitled to present their feelings in November. If you don't want to give a statement, plan to attend and listen on one of the following dates: NOVEMBER 15 - Hershey Little Theater, starting at 1:30 P.M. and 7 P.M. -- NOVEMBER 16 - Hershey Little Theater, 9 A.M. and 1 P.M. -- NOVEMBER 17 - The Forum, Education Bldg., Harrisburg, 9 A.M. If you want more information or have questions attend the November 8 PANE meeting at the MCSO at 7:30 P.M.

Karin Sheldon, our attorney for the upcoming NRC hearings in February, traveled from Washington, D.C. on October 16 to attend that evening's PANE meeting. She gave an excellent presentation on the proceedings, what to expect, availability of experts for our cause and aspects of funding to pay for legal expenses. PANE has been doing as much "leg-work" as possible to keep the legal expenses down. Karin left no doubt in our minds that we have an excellent opportunity to present a solid case. She has been involved in environmental and nuclear related issues with a public interest law firm for approximately 10 years. Her presentation, at the meeting, was straight-forward and elicited many questions from local residents. One of the Sheldon family's two children, 6 month old Timothy, accompanied Karin to Middletown. Anne, Andy, Leigh and Jim Hurst served as hosts during Karin's overnight visit. Anne, Andy and Leigh filled in as babysitters during the meeting.

ANNE TRUNK INTERVIEW - Our Kemeny Commission Person

Tom Infield, of the Lancaster Intelligencer Journal, interviewed Anne Trunk with the article appearing in the September 21, 1979 edition -- excerpts follow:

1. "I've had to give up motherhood to a certain extent."
2. "I've had to take a lot of time away from my family . . . Even when I'm home, I have to lock myself up to read."
3. "Listening to the president of Babcock & Wilcox, I just felt he didn't care about the people . . . listening to Met-Ed and the NRC and Babcock & Wilcox, I felt nobody cared about us."
4. "Just by being on the commission, I have learned that nuclear power can be safe . . . but we don't have enough safety-oriented people. We're going to have to change a few things for us to stay here around a nuclear plant."

\*\*\*Donations to keep TMI #1 legally shutdown should be sent to PANE Treasurer, P. O. Box 268, Middletown, PA 17057.

INTERESTING READING

- Public Power -- May-June, 1979 -- "Take a New Look at Small Hydro" by Norman M. Clapp.  
Environment - July-August, 1979 -- "A Strategy for a Non-Nuclear Future" by Richard Carlson, David Friedman, Robert Scott.  
The Bulletin of the Atomic Scientist -- September, 1979 -- "The Case for One Nuclear Waste Facility" by Stirling.

PLAN TO ATTEND THE FOLLOWING PANE MEETINGS

- November 8 - Thursday - 7:30 P.M. MCSO
- December 13 - Thursday - 7:30 P.M. MCSO

PANE NEEDS YOUR SUPPORT!!!

The July 26, 1979, Nucleonics Week shows 46 of the 72 U.S. reactors were out of service for a period of time for one reason or another during the month of June. 25 of the 72 were out of commission for the entire month. (Nucleonics Week, July 26, 1979)

Everyone should make a LIMITED APPEARANCE, for more information attend the PANE Meeting November 8, 7:30 P.M. at the MCSO, or call Jim Hurst 944-3909 or Don Hossler 944-2250.

If you have comments on how to improve the Newsletter, send them to PANE Editor, P. O. Box 268, Middletown, PA 17057.

TMI Facts

- #1 and 2 are worth 1.1 billion dollars
- #1 and 2 combined supply 32% of the utility's total capacity. (Editor's note - that's capacity--not actual need.)
- #1 started operation in 1974; #2 - 1978.

Noteworthy Incidents - TMI #1

October 28, 1977 - a break in a water line caused a release of radioactive gas which, when averaged over a 24-hour period would have exceeded 500 times federal limits, however immediate action was taken to plug the line.

Uncontrolled radioactive gas releases, within NRC plant standards, occurred September 4 and 7; October 6, 8-10, 28; November 19-20, 22, 29 and December 2, in 1974. In 1975, a more serious 3 1/2 hour release occurred January 23-24 and a smaller release February 25. Inadvertent releases also occurred on 4 separate occasions in late 1975 and early 1976.

February 1976, the NRC slapped an \$8,000 fine on Met-Ed for a lapse in security around the plant. (York Daily Record, 9/25/79)

TMI Related Studies

There may be more people knocking on your door or calling you for information relating to your TMI experiences. The following is excerpted from the Sept. 23, 1979 Lebanon Sunday News, The Pennsylvanian.

The Pennsylvania State Health Department is coordinating seven different studies to examine the effects of the TMI accident. Funds from Federal, State, and private sources have been accumulated to undertake the projects.

The first study a population registry of every person living within 5 miles has been completed. The second is a pregnancy outcome study on all women who had babies or terminated a pregnancy of 16 weeks or more between 3/28/79 and 3/27/80 (an estimated 8,000 women, 11 hospitals within 10 miles of TMI). This study will look for abnormalities such as emotional stress, premature births, birth defects, stillbirths or miscarriages. A control group will be established of births from 3/28/80 to 3/27/81. Approximately 4,000 babies are born a year in the 10 mile radius. Another study will concentrate on psychosomatic symptoms (the mind appears to have an especially great or direct bearing on the origin of an illness or its continuation) within the 5-mile area. In particular physical complaints such as stomach cramps, headaches, sleeplessness will be reviewed. This study will be done through a random telephone survey. A health economic study will be done on additional costs both direct and indirect in relation to health and institutional costs of those within the 5-mile area. Another study, physical psycho-genetic, will document chromosome (genes which control heredity are located in or on the chromosomes) abnormalities. The results will be contrasted with a study done in the Pittsburgh area and with a randomly selected segment of the population.

Individual radiation doses received will be the priority of another study with people within either the 5 or 10-mile area. The doses will depend on whether they evacuated and where they live and work (They will probably use the Al Hoc Report figures--so it appears this study is waste of time and money).

The final study will be a long-term surveillance of those in a 5-mile radius of the plant. The people will be followed for 20-25 years.

The Electric Industry's Contribution to TMI Studies

The Nuclear Safety Analysis Center (NSAC) operated for the electric utility industry by the Electric Power Research Institute (EPRI) will participate in funding of 9 studies on the health effects of the TMI #2 accident. The July issue of the NSAC Newsletter says ". . . EPRI professional personnel will assist in guiding them. The studies will be coordinated--and in part executed--by the Pennsylvania Department of Health . . ." This article continues that the population registry, just completed, was the first of the 9 studies. This first study will have a number of purposes which includes establishing for each person an estimated radiation dose. "NSAC has contributed an initial \$200,000 toward the studies . . ." (since we all know that no one knows how much went up the stacks, maybe NSAC should forget about making an estimated radiation dose. Then they could divert some of the money to PANE for legal expenses to assure the cessation of nuclear generation on TMI) (Editor).

PANE MEETING NOVEMBER 8, 7:30 P.M., MCSO--YOUR INVITED.

TMI Socio-Economic Study

The results of a detailed socio-economic survey undertaken on the TMI incident by the Nuclear Regulatory Commission was recently released. The results were gathered by a telephone survey from July 23 to August 6 and involved 1500 households (4,585 persons). Each telephone survey took about 32 minutes and contained 110 questions. Following are some of the results. 1. 20% of the respondents may move out of the area if #1 restarts. 2. 41% consider the plant to be at least a serious threat in terms of new emissions. 3. Estimates are that 43,000 persons in the 5-mile area evacuated, 70,000 in 5-10 mile (36%), and 31,000 persons in the 10-15 mile area. The total estimated from 0-15 miles is 144,000. 4. 36% of those who evacuated lost income due to the incident. 5. Estimated lost wages and evacuation expenses are set at \$18.2 million. 6. 22% of the respondents said some member of their family suffered extreme emotional upset during the emergency period. (Source: September 23, 1979 Sunday Patriot News)

LOCAL POLITICAL ACTION

Middletown Borough Council is being credited with inspiring State Representative Stephen Reed to put together a legislative package concerning Three Mile Island. On July 2, the borough adopted a resolution on TMI. A copy was sent to Reed. Two of Reed's proposals were lifted from the local resolution. One is to invalidate Nuclear hazard exclusions in insurance policies for homeowners and commercial properties. The other is to establish an independent state level emergency operation that will make advance plans and direct emergency efforts. In related news, several boroughs or townships near TMI have taken action in the form of resolutions. Newberry Township and the Borough of Highspire have called for the permanent shutdown of TMI. The 9/20/79 edition of the Elizabethtown Chronicle says Marietta, Columbia and Elizabethtown have taken similar actions. Lower Swatara Township supports reopening only as a non-nuclear facility. The city of Harrisburg, and Londonderry and Susquehanna Townships have resolutions which set various goals before reactivation can be done. Middletown has the most unique item regarding the invalidating of nuclear hazards for insurance purposes -- if the plant is to be reopened. Other related items are two citizen polls. Lower Swatara Township (about 3 to 5 miles from TMI) residents (64%) said either close TMI or reopen it non-nuclear. Senator George Gekas' poll had similar results with about 64% of the respondents saying either shut it down or reopen as a non-nuclear facility.

PANE MEETING - NOVEMBER 8 - 7:30 P.M. - MCSO - YOU'RE INVITED!!

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Middletown, PA 17057

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## PANE

## People Against Nuclear Energy

P.O. BOX 268  
MIDDLETOWN, PA 17057OF THE MIDDLETOWN  
AREAP.O. BOX 268  
MIDDLETOWN, PA 17057

NEXT PANE MEETING - NOV. 8, 7:30 pm - MCSO - Guest speaker.

Plan to make a limited appearance. MAKE it personal, explain how this accident in progress affects you, your family + community. Explain how a restart of #1 will affect you. Keep it to about 5 minutes. Everyone should make one and attend as many of the sessions as possible, NOV. 15 + 16 at Hershey Little Theater 14 E. Chocolate Ave. (11-15 at 1:30 pm + 7:00pm, 11-16 9am + 1pm) November 17 at the Forum, Education Bld. Harrisburg - 9am. Plan to take part.

Letters to:

Chairman Joseph Hendrie, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, ask him to circulate a copy to each commissioner.

Regarding Epicor II: wouldn't it be better to construct a treatment plant that would solidify resins for easier shipment? What is planned with the radioactive resins + the diked up but still tritium filled water? Wouldn't an environmental assessment and impact statement be better, if done on the entire clean-up (projected) so the public could be better informed? Is epicor really a proven product with this type of clean-up?

W. Wilson Goode, Chairman, Pa. Public Utility Commission, North office Building Harrisburg, Pa 17120

Met-Ed is seeking a 10-12% rate increase. Although most of us are not affected, directly, this represents pressure to get #1 on line, and open the way for Federal intervention. Met-Ed has asked for the increase effective Jan 1, 1980. A 4 to 6% increase the average utility bill about \$3.50 per month. It appears Met-Ed needs the increase to pay for replacement power, "improve its credit and permit it to take on long term debt."

The utility industry of the U.S. should help MET-Ed with reasonable electric replacement rates. IF there are Federal or State barriers preventing the electric industry from rescuing its incompetent brethren then these barriers should be relaxed, temporarily. REMEMBER - MET-Ed broke it - They can fix it. Urge Goode to advocate removing #1 from the rate base, we've sacrificed enough.

NEXT PANE MEETING - NOV. 8, 7:30 pm - MCSO - Donations accepted by check to PANE Treasurer - P.O. Box 268 Middletown, PA 17057

## CLUE TO VOLUME: WHAT A REACTOR MAKES IN A YEAR

The volume of various radioactive wastes produced by commercial nuclear reactors is considerable.

More than 550 nuclear reactors are either operating, under construction, or on order throughout the world, and each is expected to operate for 30 years. A sense of the magnitude of the total waste problem can be gained by examining the amount produced by an average reactor in a single year.

According to the Nuclear Regulatory Commission, a pile of slightly radioactive tailings equal to about 4.6 million cubic feet is produced during the mining of the uranium the average reactor uses in a year. The pile, roughly equivalent in volume to four White Houses, now must be buried under nine feet of earth. This is a new requirement, however, and millions of tons of tailings lie exposed to the environment all over the western United States.

After mining, the ore goes through several complex steps before emerging as uranium fuel pellets encased in fuel rods. For a single reactor for a single year, the transformation creates another 3,300 cubic feet of low-level waste stored in containers above ground or buried in shallow trenches.

During each year in the life of the average reactor, the energy in one-fourth to one-third of its fuel rods becomes depleted. The spent fuel rods - they equal 1,236 cubic feet - must be removed and replaced by new ones.

And unlike most of the other waste produced by the conventional United States reactor, the fuel rods are highly radioactive and must be kept totally isolated from man for hundreds of years. These are known as high-level wastes.

The government plans for the spent fuel rods to be placed in large metal containers and permanently buried deep in the earth. Because geologists and other scientists have not agreed exactly how such long-term isolation can be achieved, however, the rods are now being stored in large pools of water next to each of the nation's operating reactors.

Another source of low-level radioactive material is the wiping cloths, protective uniforms, filters and other items used in operating a reactor. (New York Times, July 9, 1979)

The total of the above mentioned radioactive wastes produced in a single year from a single reactor is equal to 4,604,536 cubic feet. If there are 550 nuclear reactors in operation by the year 2,000, there will be produced each year 2,532,500,000 cubic feet of radioactive waste. This is equal to a mass whose base area is the size of a football field and whose height is 52,760 feet (approximately ten miles high)! EACH YEAR!

HALF-LIFE OF RADIOACTIVE WASTE (partial list)

<u>ISOTOPE</u>	<u>RADIATION TYPE</u>	<u>HALF-LIFE</u>
Cesium-137	Beta, Gamma	30.2 years
Cobalt-60	Beta, Gamma	5.2 years
Iodine-131	Beta, Gamma	8.1 days
Iron-59	Beta, Gamma	45 days
Krypton-85	Beta, Gamma	10 years
Strontium-90	Beta	28 years
Zinc-65	Beta, Gamma	145 days
Plutonium-239	Alpha	24,300 years
Iodine-129	Beta	17,000,000 years
Technitium-99	Beta	210,000 years

In order for the radioactive isotope to have halved itself enough times to be considered safe, it must be stored for 20 times the half-life. The extremely toxic isotope Plutonium-239 must be guarded against contact with the environment for 486,000 years. The first known Egyptian pyramid is only 4,629 years old. If instead of building a pyramid, the Egyptians would have built a nuclear reactor, the Egyptian NRC would be guarding the Plutonium waste until the year A.D. 483,350!

Just one leak at the Hanford Nuclear Waste Reservation in the state of Washington spilled 115,000 gallons of high-level waste. An estimated 14,000 curies of Strontium, 40,000 curies of Cesium-137, and 4 curies of Plutonium were contained in the spill. The leakage went unnoticed for two months.

Ralph Nader has estimated that 500,000 gallons of liquid waste have thus far leaked from government storage sites, and the commercial nuclear industry in this country has yet to celebrate its 26th birthday!

# THE P.A.N.E. PILL

PEOPLE AGAINST NUCLEAR ENERGY  
OF THE MIDDLETOWN  
AREA

P.O. BOX 268  
MIDDLETOWN, PA 17057

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MIDDLETOWN, PA 17057

Editor - Don Hossler

November 1979

Asst. Editors - John Garver  
Joan Moore

DECEMBER PANE MEETING - Thursday, December 13, 1979 from 7:30 p.m. to 9:00 p.m. at the MCSO (W. Emaus St.) beside Boro Hall. Judith Johnsrud of the Environmental Coalition on Nuclear Power (ECNP) will be the guest speaker. She has over a decade of experience in working for alternative energies such as solar. She is a Co-Director of ECNP and has participated in legal interventions in PA to promote safe energy. The sound filmstrip "Nuclear Energy - Too Hot to Handle" will be shown prior to her presentation with a discussion to follow. Plan to attend this informative and interesting evening. EVERYONE WELCOME.

THE NEXT ISSUE OF THE PANE PILL WILL BE PUBLISHED IN LATE JANUARY.

JANUARY PANE MEETING - JANUARY 23 - 7:30 p.m. - MCSO

EXPOSURE TO KRYPTON IS LIKE THE EXPOSURE TO WATCHING TV FOR 3 MONTHS!?!?!?

Met-Ed wants the NRC to give them permission to vent the Krypton 85 gas (half-life 10.4 yrs) They would like to vent it in January, February and March, 1980. Bechtel Power Corp. estimated the maximum dose we'd get would be .14 millirems gamma and 14.8 millirems beta. NRC annual limits for us are 20 millirems beta and 10 millirems gamma. Of course what we've already received doesn't count, because this proposed venting is not "accidental". WHY VENT? According to Met-Ed this would be safer than storing it. In order to get in the #2 containment building on more than an "experimental basis" for cleanup, the gas must be removed. The reactor building is being kept at negative pressure to prevent leaks at various seals around access doors and hatches. However the durability of the seals may not last more than 2 years or less. Also the apparatus that maintains the negative pressure could malfunction. The major obstacles to storing it are that Met-Ed says it would take 2 to 3 years to construct the processing plant and the chance for accidental releases would be greater. THERE IS NO IMMEDIATE DANGER OF THE SEALS LEAKING. EVEN IF THEY DID, BUILDING PRESSURES COULD BE ADJUSTED. EPICOR WAS BUILT PDQ, WHY NOT BUILD A KRYPTON GAS PROCESSOR! With the technology available today, safety back-up systems could minimize and prevent releases for storing and processing. The gas does not have to be stored on site. It can be transported safely and then disposed of in Reading, headquarters of Met-Ed; Washington, DC, headquarters of NRC; and, Parsippany N.J., headquarters of GPU; in short bursts with appropriate meteorological conditions to minimize exposures. R. C. Arnold of Met-Ed said the doses would be equivalent to watching television for 1½ to 3 months. It seems very apparent that once again Met-Ed has chosen the route of economics over human considerations. The best thing you can do is write to the NRC (below) and at least one of these politicians who represent you. DO IT NOW!!

NRC Commissioner John Ahearne  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555  
(Ask him to make a copy of your  
letter and circulate it to the  
other Commissioners.)

Senator John Heinz  
Senator Richard Schweiker  
U. S. Senate  
Washington, D. C. 20510  
Congressman Allen Ertel  
House of Representatives  
Washington, D. C. 20515

## A TIP OF THE HAT TO:

SUSQUEHANNA VALLEY ALLIANCE - For having the Krypton issue in its lawsuit on water dumping and their quality efforts to promote alternative energy.

CONGRESSMAN ALLEN ERTEL - For his continued interest and "limited appearance" on Nov. 17 before the NRC to voice his displeasure with the premature NRC hearings.

THE CHAVEY, KINNEY & HURST FAMILIES - For lodging and board for our attorneys during the recent pre-hearing conferences.

GOVERNOR THORNBURGH - For telling Met-Ed to work as hard on developing alternatives to meet energy needs as they do at making it appear the nuclear option is available.

SENATOR RICHARD SCHWEIKER - For his prompt response to a variety of needs of the local people.

JUDY JOHNSRUD & CHAUNCEY KEPFORD - For starting a second decade of persistent efforts to make energy safe for all of us.

YORK HAVEN POWER PLANT - 75 years of safe hydro (19,600 kw).

DR. FRANK POLANOWSKI - For his informative presentation at the November PANE meeting on low-level radiation and societal effects.



EIS MAY SLOW KRYPTON DECISION AND ASPECTS OF CLEAN-UP - The 11/20/79 Lancaster Intell. carried an article that the venting of Krypton may be delayed until May 1980 or later, because the NRC plans to do an Environmental Impact Statement (EIS). This action, by the NRC, can be directly attributed to concern by all local groups and politicians but a significant part of the "push to shove" was and continues to be dealt by Susquehanna Valley Alliance (SVA) of Lancaster County. SVA has been in and out of court on the water dumping and Epicor at TMI. They have advocated one entire study of the whole clean-up process rather than the piece-meal approach up to this point. Bruce Smith of the Newberry Twp. Supervisors has said this "piece-meal" approach is driving local citizens "batty." An EIS simply states in an extensive way how you and I and the rest of the environment will be affected by the entire clean-up. Richard Vollmer says the EIS may take 9 months to a year to complete. He said it could be ready as early as May with release in June and then a 60-day public comment period. However, Vollmer cautioned that some parts of the clean-up may begin while the EIS is being developed. The Mayor of Lancaster has stated many times that an independent agency should do the EIS. We all know how conservative the nuclear industry and Nuclear Regulatory Commission can be in terms of humans. They are at their best in the technical arena, although whether they get a passing grade is up for debate. If you're concerned about the EIS and the points mentioned in this article write to Mr. Richard Vollmer, NRC Staff Director of TMI Operations, U.S. Nuclear Regulatory Commission, Washington, D. C. 20555. A key point to remember, Vollmer suggested that one "problem" the NRC would have in deciding to halt the gas release, at least pending the impact statement, is that "many of these things can be performed under our existing regulations." (Why don't you write him a letter and tell him we deserve special regulations-editor).

PANE MEETINGS - 1980 (mark on your calendar)

- January 23 - Wednesday - 7:30 P.M. - MCSO
- February 20 - Wednesday - 7:30 P.M. - MCSO
- March 12 - Wednesday - 7:30 P.M. - MCSO

CLEAR THE ABOVE DATES ON YOUR CALENDAR, SO YOU CAN ATTEND!

NRC PUBLIC HEARINGS -

The NRC listened to many area residents express concerns about #1 reopening, recently. Citizens were allowed to express themselves on November 15, 16 & 17 before the Atomic Safety & Licensing Board. This board will conduct formal hearings on the possible restart of #1 in February, March & April, 1980. Their evidence and recommendation will be sent to the NRC Commissioners next summer. The 5 Commissioners will then decide in approximately August/September if #1 should restart. PANE has retained legal counsel to represent your concerns in the hearings to begin in 1980. Several well-known experts have expressed an interest in assisting in the development and presentation of our case. Following are several excerpts of citizen testimony given on November 15, 16 & 17:

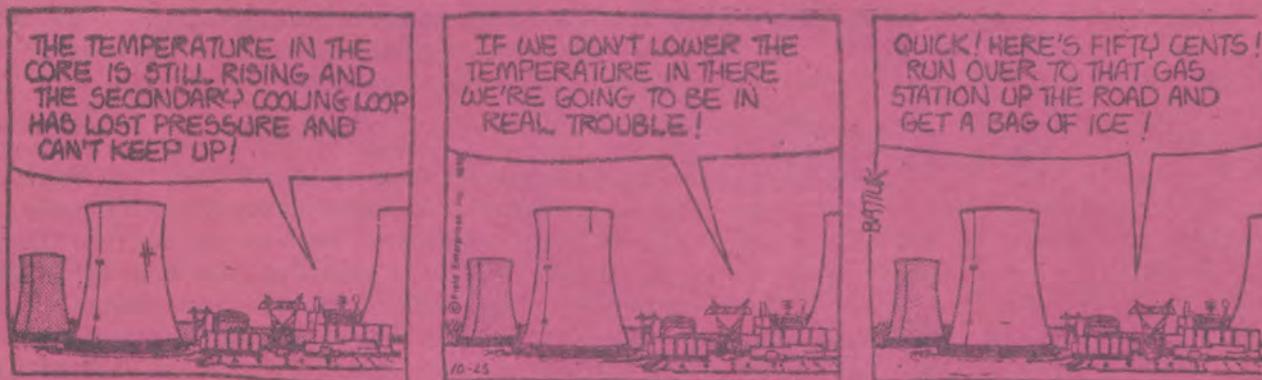
- Pat Carter - Hummelstown - "If there should be an accident, what about the storage of spent fuel rods? Who would be on duty? How long could those workers that remained handle the situation?"
- Mrs. John McHenry - Etters - "I'll be out there if you try to open that place."
- Donald Lookingbill - Hershey - "It's no less immoral to expose small numbers of people to the radiation than it is to endanger the millions in New York City where the federal government banned construction of nuclear power plants."
- Betty Tompkins - Lancaster - "The credibility of this utility is zero."
- Kathy Livingston - Newberry Twp. - "I want my child to grow up in a world that is safe."
- Loretta Moore - Middletown - "The problem of how to dispose of nuclear waste appears unsolvable."
- Mary Tritch - Londonderry Twp. - "Can you afford to terrorize us further by reopening Unit 1?"
- Tom Smithgall - Marietta - "Abandoning TMI is the only way this area can regain its valuable reputation as a place to live and work."
- Joyce Corradi - Lower Swatara Twp. - "I think you should close TMI and give me back the life I had before."
- Lawrence Phillips - Newberry Twp. - "Area residents have lost faith in Met-Ed's credibility, management and ability."
- Cheryl Brown - Mechanicsburg - "Met-Ed has violated my constitutional right to live without fear."
- William Johnson - Lower Swatara Twp. - "Allowing #1 to restart is akin to reopening half of a dynamite factory while the other half is ablaze. We are in greater danger now due to the decontamination work that is going on."

Nancy Marter - former Middletown resident - she has been unable to sell her home, "No one in Middletown can feel safe in their homes, if you can't feel safe in your home, then what do you have?" Paula Kinney - Lower Swatara Twp. - "The nuclear accident made me feel as though I was raped, robbed and beaten -- and nobody cares." Kari Light - Middletown - "The fate of the reactor is a personal one rather than a technical or academic matter. People are sensitized to things that I don't think you can comprehend." David Handley - Susquehanna Twp. - I doubt the electricity produced at TMI is needed." Andy Burger - newly elected Middletown third ward Councilman - "The people in this area and the employees of Met-Ed have suffered enough. My vote is to shut down nuclear generation on TMI . . . and allow Met-Ed to operate a coal generating facility at TMI." The comments during the hearings were emotional and factual. There is one thing for certain, the decision to reopen TMI #1 is not a technical or economic issue. At stake is the moral ethical consideration that all people should have a right to live in peace without fear of being driven from their homes or being emotionally abused by high technology.

MET-ED GETS FINED

The federal government has charged that there were serious weaknesses in the management and technical ability of Met-Ed to operate TMI. As a result, a fine of \$155,000 has been levied. Victor Stello of the NRC said he did not recommend revoking the company's license, in part because the two reactors at TMI are not expected to be operating in the near future. (Lancaster Intell. - 10/27/79) (Truly amazing logic - editor) MEANWHILE Consumers Power Co. in Michigan was fine \$450,000 for allowing a vent to stay open for 18 months that could have allowed radioactive gas to escape if there were an accident.

Funky Winkerbean



DATES TO REMEMBER - December 13 - 7:30 P.M. - PANE MEETING - MCSO \*\* December 15 - Jim Hurst will appear in an interview at 7:30 P.M. on Channel 8. \*\* January 23 - 7:30 P.M. - PANE MEETING - MCSO - guest speaker Judy Johnsrud.

THE U.S. SENATE INVESTIGATES TMI

The Nuclear Regulation subcommittee has been conducting hearings on TMI. Chairman Gary Hart of Colorado continues to do an excellent job of trying to get the truth, although previous sessions conducted by his subcommittee may have created a panic in terms of the alleged urgency to get Epicor II operating. However, here are interesting excerpts of recent sessions:

The Chairman of the NRC said it may take up to 5 years to clean up #2. It appears he is against supplying any federal help to TMI in the clean-up.

The Director of corporate regulation for the Securities and Exchange Commission said TMI's owner (GPU) can afford to pay the estimated 800 million dollars in clean-up costs. The Chairman of GPU asked for a Department of Energy research grant, calling the clean-up operation, "an important opportunity to add to the nation's nuclear expertise." The utility is worth \$4.6 billion and short-term loans should be available for clean-up. Harold Denton was wondering outloud to what extent the clean-up should be better than current standards in terms of safety to us. Herman Dieckamp (Pres. of GPU) suggested that Met-Ed should be allowed to release Unit 2 wastewater now being treated by Epicor II into the Susquehanna. The utility is using cooling water to control 450,000 kilowatts of decay heat being emitted by the reactor. Bruce Smith, Newberry Twp. Board Chairman, stated "lost confidence is like lost virginity; it is impossible to regain." Senator Hart has suggested in the future that the NRC should make holding companies, like GPU, guarantee that accident expenses can be met. Chairman Hendrie said that if GPU would fail to remain viable in terms of a clean-up that the NRC would probably have to take over control of the clean-up.

LEGAL FUNDS

PANE has retained legal counsel to represent the Middletown area in the February, 1980 NRC hearings. Please send a contribution to PANE Treasurer, P. O. Box 268, Middletown, PA 17057.

DID HE REALLY SAY THAT?

Quotable quotes of Herman Dieckamp, Chief Operating Officer of GPU and Acting President of Met-Ed:

"The accident also displayed great ignorance on the part of the public about nuclear power. There was too much uncertainty. If we are to enjoy the benefits of nuclear power we are going to have to have a better informed public on the problems and hazards." Lancaster Intell. - 10/26/79.

"If a group of citizens wants to vote that, in their mind they don't want nuclear plants, I would assume they would readily accept the costs of alternative energy and the costs of confiscating the property involved." Lancaster Intell. - 10/10/79.

"If a given individual finds (reopening TMI #1) unacceptable, then he has the freedom to move to change something." York Daily Record - 6/19/79.

LIKE TO READ? - Write for the following to:

Interior & Insular Affairs Committee  
1329 Longworth House Office Building  
Washington, D. C. 20515, or call 202-225-4544

1. Accident at the TMI Nuclear Plant - Pt. 1
2. Reactor Safety Study Review - February 26, 1979.
3. Are the Electric Utilities Gold Plated - April, 1979.
4. Effect of Radiation on Human Health - Vol. 1 & 2 - January 24, 1979.
5. Federal Government Incentives to Coal & Nuclear Energy - May, 1979.

Art Buchwald says we must make nuclear waste a precious commodity like gold or silver and have people start speculating on it. He says the government could then hold an auction. He said if we could get everyone to buy it, we could wind up with a shortage.

P.U.C. HEARINGS

The State P.U.C. will be holding hearings in December to determine whether (1) Met-Ed's operating privileges should be revoked; (2) TMI #1 should be removed from the rate base; and (3) to consider how much, if any, to grant a \$55 million increase request in the utility's energy cost surcharge. A firm has been hired by the P.U.C. to study options available to insure service to the public if Met-Ed were to declare bankruptcy or lose its utility certificate. The options could include reorganization, divestiture or creation of a public authority. There are many conflicting and varied parties that the P.U.C. will look at (1) the investor whose stock has declined from \$18 to \$7; (2) angry consumers who must pay for an accident they had nothing to do with; (3) nervous bankers with \$400 million in outstanding loans; and, (4) utility officials who may lose their operating license.

TMI TIDBITS

1. GPU had spent \$80 million on TMI decontamination as of early November. They have a \$300 million insurance program for accident expenses.
2. GPU has \$4.6 billion in assets and \$2 billion in funded debts.
3. GPU has filed with the P.U.C. to increase rates by \$55 million annually in order to recover \$10 million in monthly losses that stockholders are now absorbing for replacement fuel costs.
4. NRC Commissioner Victor Gilinsky has stated on the \$155,000 fine on Met-Ed, that the accident was far, far more serious than the fine.
5. Two State mental health associations (mental Health Assoc. of PA and Tri-County Mental Health Assoc.) have urged the NRC to consider the psychological issues in the February, 1980 hearings.
6. Judy Johnsrud and Chauncey Kepford feel the NRC is using deceptive means to avoid considering what now has been shown possible in terms of the fact that a class 9 accident possibility should be considered in the upcoming hearings.
7. The recent photographic survey taken inside the containment reveals "no structural damage" but that it is "raining" because of the warm moist air and cooler temperatures mixing.
8. On June 18 Herman Dieckamp said he'd drink a glass of decontaminated water if it was necessary to convince the public of its safety. (We all wish it would be that simple to convince us - editor.)
9. "In addition to radioactive materials released into the atmosphere, radiation was beamed through the four foot thick . . . walls . . . to a distance of more than a mile." NRC Deputy Director of Reactor Regulation - Patriot - 3/29/79.
10. Federal investigators have obtained testimony indicating that some supervisors at TMI fully comprehended on the first day of the accident that the possible consequences were more serious than they were reporting. It is apparent that many indications were received in the first few hours that the core had lost significant amounts of water. Harrisburg Patriot-10/21/79.
11. Final decision on #1 will be made by the NRC Commissioners about August, 1980, following the hearings.

12. Met-Ed expects to have technical modifications to the reactor and necessary training of personnel completed by March 31, 1980.

13. There's a good chance Middletown will lose its favorable electric rates if Met-Ed decides to go to court as they have in the past, however, it certainly isn't PANE's fault - let's place the blame where it belongs.

14. GPU is the nation's 17th largest utility with 1.5 million customers in N.J. and PA

15. The utility industries in general appear to be moving to a low growth-conservation era.

16. 63 of the nation's 80 largest private utilities have some investment in a nuclear power plant.

TEACH-IN

Three Mile Island Alert and National Public Interest Research Groups held a teach-in at Harrisburg Area Community College on November 11. Interesting and informative workshops were held throughout the day as well as guest speakers, Dr. Robert J. Lifton, a psychiatrist, and Michael Harrington author of "The Other America". Regarding the accident, Dr. Lifton said we could deny it happened or confront it and understand it. Dr. Lifton has considerable expertise on psychological reactions to disasters by individuals and groups. A third guest speaker, Richard Pollock of Critical Mass Energy Project emphasized the need for us to help politicians understand our views and feelings. The teach-in was valuable in helping local citizens learn more about the nuclear energy related issues.

STRESS AND CANCER

It is impossible to blame a particular cancer on a particular stress. This is according to doctors at Memorial Sloan-Kettering Cancer Center. A breakdown in a social network can be a key to the cause of stress. There is considerable evidence that grief and stress retard the ability of one to fight disease. As a result, classic studies have shown that stress can lead to leukemia and lymphoma. (Lancaster Intell. 10/28/79).

The following books have been placed in the Middletown Borough Public Library by Jeane Crumley, for your convenience.

- Robert Jung - The New Tyranny
  - John Gufman - An Irreverent Illustrated View of Nuclear Power
  - Richard Webb - The Accident Hazards of Nuclear Power Plants
  - FBS Debate on Nuclear Power Plants.
- Stop in and check one out.

COAL OR NUCLEAR

The National Academy of Sciences has just completed 3 years of haggling by 61 energy experts the final analysis: "The public will have to choose between energy sources based on individual values and beliefs about social ethics - not on advice from the technical experts." (Lebanon Daily News - November 12, 1979)

Albert Schweitzer asked "Who permitted them to permit?", when he heard that experts had determined permissible doses (of radiation exposure). (NO NUKES Anna Gyovgy & Friends).

\* \* PANE MEETING - DECEMBER 13 - 7:30 P.M. - MCSO (W. Emaus St.) PLAN TO ATTEND \* \*

Costs for printing and mailing this newsletter are over \$100.00 each month. Your contribution to cover these costs would be greatly appreciated. Please complete the coupon and send to PANE Treasurer, P. O. Box 268, Middletown, PA 17057 - If you have sent a contribution -- thank you very much.

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IF YOU DO NOT WANT TO RECEIVE THIS NEWSLETTER - PLEASE CLIP AND SEND, SO WE CAN REMOVE YOUR NAME FROM OUR MAILING LIST. THANK YOU:

PRO NUKE INDUSTRY MEETING

The Atomic and Industrial Forum held a 3-day annual meeting November 12, 13 and 14. Edward Teller, a nuclear energy proponent, called for a religious fervor in battling anti-nuclear forces in America (does that include anti-Met-Ed folks? - Editor). He said anti-nukes are ultimately anti-technology. He called for the Commissioners of the NRC to resign and take tests to determine their competency in nuclear physics. Senator James McClure of Idaho called the anti-nuclear faction a "me generation" composed of persons who see themselves as better than the rest of society. (Source: Lebanon Daily News - 11/13/79) (These guys need outpatient psychological help - Editor)

ENERGY READING LIST - (MAGAZINES)

1. "Protecting Nuclear Facilities" by Gordon Friedlander - Electrical World, May 1, 1979, Pg.84.
2. "Environmental Aspects of Tritium" by Dan Quesenberry - Environmental Pollution, Sept., 1979, Pg. 33.
3. "Gas & Solar: The End of the Affair" by Don Wiener - Environment, July-August, 1979, Pg. 16.
4. "Nuclear Power Plant Performance: An Update" by Christopher Hohenemser & Robert Goble, Environment, October, 1979, Pg. 32.
5. "Most High Voltage Field Exposure Concerns Dispelled" by Robert Wolff, Electrical World, October 15, 1979, Pg. 104.

Raising present auto mileages by just  $3\frac{1}{2}$  miles per gallon will contribute as much useful energy to the economy as total current nuclear output. (Source: Groundswell, Aug-Sept., 1979).

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PEOPLE AGAINST NUCLEAR ENERGY  
OF THE MIDDLETOWN  
AREA

P.O. BOX 268  
MIDDLETOWN, PA 17057

December 1979

This information was compiled to assist you in receiving additional views of the information presented in the sound filmstrip "Nuclear Energy! Too Hot To Handle?", produced by Current Affairs Films and distributed to area schools by The Patriot News Co. Middletown Area Schools has a copy available for use in the school and community.

The sound filmstrip covers nuclear power and safety and includes an analysis of the Three Mile Island accident.

Several points in the presentation require further discussion and/or exposure to an alternative view of the situation. As a result, PANE is providing the following information, covering parts of the narrative.

This information was gathered from various sources with further documentation available on request to PANE, P.O. Box 268, Middletown, PA 17057.

9. "SOME OF THE RADIOACTIVE GASES RELEASED DURING THE COURSE OF THE ACCIDENT GOT OUT INTO THE ATMOSPHERE. IN ADDITION, A LARGE BUBBLE OF HYDROGEN FORMED INSIDE THE REACTOR -- ALTHOUGH THERE WASN'T ENOUGH OXYGEN FOR IT TO EXPLODE."

The Harrisburg Patriot on June 22, 1979 published a news story indicating that the NRC was told by one of its staff members that it will never be known how much radiation escaped, because the levels exceeded the abilities of the plant instruments to measure them. Roger Mattson of the NRC said on May 1, 1979 that NRC technicians didn't realize for 36 hours after the hydrogen bubble issue was raised on March 31 that it was not dangerous. The NRC's advisory committee on reactor safeguards assured Congress in January, 1978 that hydrogen control was a problem that had been resolved.

11. "A LOT OF OTHER PEOPLE LEFT AS WELL. RIVERSIDE VILLAGES CLOSE TO THE PLANT BECAME TEMPORARILY DESERTED. SO DID PARTS OF MIDDLETOWN.... FINALLY, BY APRIL 2ND, TO EVERYBODY'S RELIEF, THE CRISIS WAS BROUGHT UNDER CONTROL, WITH THE REACTOR STARTED ON ITS WAY TO A COLD SHUTDOWN."

The NRC has estimated that 144,000 people left their homes within 15 miles of TMI. About 130,000 live within 10 miles of TMI. Most families with pre-school or pregnant mothers did not return until April 10. The average return, according to the NRC, was April 4. About 1 in 5 have considered moving if TMI reopens. Robert Benera, of the NRC, has said the reactor was out of control for 16 hours (4 AM to 10PM 3/28/79). Radioactive Iodine emissions only began to lessen near the end of April, remaining hazardous to thyroid glands and the food chain. As of November 1979 the plant is still not in a cold shutdown.

12. "AFTERWARD, MANY MIDDLETOWN RESIDENTS TOOK ADVANTAGE OF MOBILE UNITS TO GET FREE CHECKS FOR RADIATION. NONE WAS DETECTED. AND, AS THE LOCAL SUPERINTENDENT OF SCHOOLS NOTES, MOST RESIDENTS DID NOT CHANGE THEIR ATTITUDE TOWARD NUCLEAR POWER."

The scan was limited to 1 person per family and was on location on the East Shore forcing West Shore resident to drive 30 - 50 miles roundtrip. Only 721 area residents were measured. Since Rosalie Bertell, a cancer research specialist, believes the body counts reveal nothing. The body counts would not detect iodine 131 since alpha radiation emitters would only be picked up through urine analysis which was not done. Nor would the body counts detect the heavy beta radiation to the lungs which was received by inhaling Xenon and Krypton. Those individuals who had positive counts were told it was from natural background sources. The tests were done over a 10-day period. The 4/21/79 Patriot News reported nine of the 721 tested were found to have trace amounts of Cesium 137, Potassium 40, Lead 214, and Bismuth 214. The government says these radioactive materials are not related to the accident because all of the people lived in similarly constructed homes and had individual wells. It has been inferred that certain trace elements such as Potassium 40 and Cesium 137 come from weapons testing (Evening News 4/10/79).

13. "SUPERINTENDENT: 'I THINK ON THE ISSUE OF NUCLEAR ENERGY, THE MIDDLETOWN AREA WOULD RESPOND VERY POSITIVELY TOWARD A CONTINUATION OF IT. MANY OF OUR PEOPLE WORK IN THE AREA. THEY UNDERSTAND IT.'"

What methods did he use to come to this conclusion? Lower Swatara Twp. Supervisors (Middletown School District) mailed questionnaires to all township taxpayers. 64% of all respondents either wanted the plant to reopen as non-nuclear or to be closed forever. PA State Senator George Gekas did a newspaper poll of Dauphin County. Almost 64% of those responding wanted it closed forever or reopened as a non-nuclear facility. The Middletown weekly paper (Press & Journal) did a newspaper poll of its readers in late April, 1979. A coupon with various questions was to be clipped and sent in. 73% (85) of the ballots received indicated TMI should never go on line again. Newberry Township Supervisors (2 miles from TMI) have passed a resolution that TMI never reopen as a nuclear facility. Highspire Boro Council (6 miles from TMI) voted similarly. Middletown Boro Council passed a resolution with several points that included the only way the plant should reopen is if nuclear exclusions are removed from homeowners' insurance policies. (READ YOUR POLICY).

17. "THREE MILE ISLAND TRANSFORMED THE QUESTION OF NUCLEAR SAFETY POLITICALLY--FROM A RELATIVELY MINOR ISSUE, WITH SCATTERED LOCAL OPPOSITION GROUPS--INTO A MAJOR TOPIC OF GENERAL PUBLIC DEBATE. THE FUTURE OF NUCLEAR POWER MAY DEPEND ON THE OUTCOME OF THAT DEBATE...."

The facts about nuclear energy have never been conveyed to the public properly. Electric utilities talk about recreational advantages, the qualification of personnel and the fact that "... there has been no instance of radiation injury to any worker in commercial nuclear generating stations." When we talk of coal the subject of coal miners dying comes up - the electric industry should discuss the entire nuclear fuel cycle.

19. "THE ACCIDENT WAS ACTUALLY PRETTY WELL CONTAINED, WITH ONLY A MINIMAL ESCAPE OF RADIATION. WHAT THE FEDERAL NUCLEAR REGULATORY COMMISSION WOULD CALL A CLASS NINE, OR MAXIMUM CREDIBLE ACCIDENT, DIDN'T HAPPEN."

Dr. Chauncey Kepford, a staunch safe energy advocate, feels the reported radiation is a face-saving, even imaginary value. Monitoring during the first days of the accident was almost non-existent. Also a stagnant air mass over the eastern U.S. prevented radioactive materials from being dispersed, contributing to a cumulative dose which received no consideration by the NRC. Dr. Kepford's statement is based on his calculation and review of the Federal information. In September 1979, the accident was termed a Class 9 by the NRC. A Class 9 involves a series of successive plant failures "more severe" than those for which plant safeguards are designed. Evidence about the possibility of a Class 9 accident happening were always excluded from the NRC licensing proceedings for nuclear reactors because the chances of such an accident were considered remote.

26. "MILLS: 'THAT DOME AT THREE MILE ISLAND WOULD TAKE AN AIRPLANE CRASHING INTO IT. IT CAN'T BE BLOWN UP WITH CONVENTIONAL EXPLOSIVES, IN FACT. THEY'VE TRIED ON SOME TEST DOMES. THEY CAN'T BLOW THEM UP. ...THE CONTAINMENT DOMES ARE DESIGNED TO TAKE EARTHQUAKES... THE WORST THAT HAVE OCCURRED IN THE GEOLOGICAL HISTORY OF THAT AREA.'"

The Environmental Coalition on Nuclear Power (a statewide organization) has argued in previous NRC hearings that calculations used were antiquated. With larger and heavier planes (747 - C5A) using the airport, the safety is brought into question. Additionally, the area has alot of natural occurring fog and cooling towers only exacerbate the problem. A cargo plane crashed 1 mile from TMI in the Fall of 1979. The airport is an international facility that will be expanding in size in the coming years and with the state capitol 10 miles away, opening a nuclear plant with accident and melt-down probabilities seems amazing.

34. "NARRATOR: WHAT, EXACTLY, WOULD HAVE HAPPENED AT THREE MILE ISLAND DURING AN ACTUAL MELT-DOWN REMAINS A QUESTION. IT DIDN'T HAPPEN. BUT DURING THE ACCIDENT THAT DID TAKE PLACE, SMALL AMOUNTS OF RADIOACTIVE POLLUTANTS WERE RELEASED--AS THEY HAVE BEEN ELSEWHERE, NEAR OTHER NUCLEAR PLANTS."

Dr. Karl Z. Morgan, former head of Health Physics at Oak Ridge, "The thermo-luminescent dosimeters, if they are used properly, are encased in a capsule such that no beta radiation would enter into the meter itself." Statements from utility and governmental officials "... have indicated the dose would be due primarily to noble gases which pass over the area, but noble gases give off only beta radiation and the meters don't register beta radiation." (ECNP newsletter, May, 1979) "these estimates assume that the accumulated exposure recorded by the dosimeters was from gamma radiation . . ." ". . . a single precise value for the collective dose cannot be assigned because of the limited number of fixed ground level dosimeters deployed during the accident." (Population Dose & Health Impact of the Accident, U.S. NRC, NUREG-0558). The dose rate for the accident was spread over 50 miles and 2 million people. The principal dose estimate is based on TLO's (measuring devices) within 15 miles of TMI. NRC had TLO's in place at noon on March 31 and Department of Energy had aerial monitoring started at 4PM on March 20. The August 3, 1979 Washington Post reported a puff of radiation, twice as strong as anything previously revealed, came on March 29, but the report was lost within the NRC. It was recorded at 3,000 millirems per hour at 2:10 p.m.

40. "THERE IS ALSO THE FACT THAT A PERSON IN SOUTHERN PENNSYLVANIA NORMALLY RECEIVED EVERY YEAR MORE NATURAL RADIATION, THAN WHAT HE OR SHE WOULD HAVE RECEIVED OUT IN THE OPEN, RIGHT ACROSS THE RIVER FROM THE PLANT, DURING THE ENTIRE PERIOD OF THE ACCIDENT."

Natural background for Harrisburg is about 80 millirems per year. The dose from the accident cannot be accurately calculated. The NRC says the average citizen should not receive more than 170 millirems from the nuclear industry annually. The EPA, as of December 1, 1979, will allow 25 millirems per year (whole body) and thyroid maximum dose 75 millirems.

44. "BUT NUCLEAR ADVOCATES ARGUE THAT, WHEN COMPARED TO THE LEVELS OF RADIATION FROM OTHER SOURCES, THE RELATIVELY SMALL AMOUNT FROM NUCLEAR POWER PLANTS DOESN'T CONSTITUTE A MAJOR PROBLEM. NUCLEAR CRITICS ARGUE THAT IT ADDS ANOTHER SOURCE OF ENVIRONMENTALLY INDUCED CANCER AND BIRTH DEFECTS...."

The entire nuclear fuel cycle must be considered - mining to disposal of waste, safely. Dental x-rays can be turned off, nuclear accident radiation can't always be turned off.

55. "WHAT NUCLEAR PROTESTORS WOULD LIKE TO DO--COSTLY REGULATORY REQUIREMENTS, HELP BY INFLATION, COULD DO. FOR THE MAIN NUCLEAR ADVANTAGE OVER OIL AND COAL HAS ALWAYS BEEN ITS LOWER COST. TAKE THAT AWAY, AND UTILITIES WILL SAY NO TO NUCLEAR POWER."

Nuclear energy is a product of government design, promotion and subsidy. The May 1, 1979 edition of The Washington Spectator says "Nuclear plant construction costs have risen more than twice as fast as equivalent coal fired plants and 10 times faster than oil-fired plants." "This year, the Carter budget calls for \$1.26 billion for nuclear energy, as compared to \$350 million for solar power, wind and ocean thermal power." "Still to be faced is the towering cost of disposing of nuclear waste and decommissioning plants. . ." The nuclear power plants last about 30 years, then must be decommissioned. TMI #2 was slated for decommissioning in the year 2009. According to Edison Electric Institute as quoted in Time magazine April 9, the cost per kilowatt hour for nuclear power is 1.71 cents, 1.74 - 2.08 cents for coal and 3.96 - 4.54 cents for oil.

56. "AT PRESENT, DESPITE HIGH INITIAL COSTS, NUCLEAR ENERGY SO FAR IS STILL CHEAPER OVER-ALL -- MUCH CHEAPER THAN OIL, BUT ALSO CHEAPER THAN COAL, SINCE 87,000 TONS OF COAL ARE NEEDED TO PRODUCE THE ENERGY DELIVERED BY JUST ONE POUND OF URANIUM FUEL."

Again, the May 1, 1979 Washington Spectator - "Add to this the cost of importing uranium when our own reserves are depleted, possibly by the mid 1980's as suggested by both the U.S. Geological survey and the National Academy of Science. A House energy subcommittee reported in September 1975 that the NRC has granted permits for more than known domestic uranium reserves will support, if all these nuclear plants are completed. Last year the subcommittee found that when costs of handling nuclear wastes are counted, electricity generated by coal and solar power is less costly than power from nuclear reactors."

59. "TAKE, FOR EXAMPLE, THE ELECTRICITY USED BY A SINGLE AVERAGE FAMILY DURING ONE YEAR. SUPPOSE ALL THE FAMILY'S ELECTRICITY CAME FROM NUCLEAR POWER:

MILLS: ". . . THEY WOULD ACCUMULATE A VOLUME OF WASTE EQUAL TO ABOUT TWELVE ASPIRIN TABLETS, OF RADIOACTIVE WASTE."

An average reactor produces about 500 pounds of plutonium a year. The half-life of plutonium is 24,300 years. "One pound of plutonium, if it could be deposited in the lungs of people throughout the world, would be enough to kill every man, woman and child on earth." (No Nukes - Anna Gyorgy.)

66. "'FOR EXAMPLE, THE THREE MILE ISLAND REACTOR WAS RUSHED ON SCHEDULE, WITH A LOT OF ACCIDENTS ALONG THE WAY, IN ORDER TO QUALIFY FOR CERTAIN TAX DEDUCTIONS BEFORE DECEMBER 30TH . . . THERE IS AN ENORMOUS PRESSURE TO PRODUCE SOME PROFIT OUT OF NUCLEAR POWER. AND THIS INEVITABLY MEANS CUTTING CORNERS. . . IT MEANS ACCIDENTS, PURE AND SIMPLE."

Ralph Nader's citizen watchdog group "PUBLIC CITIZEN" charged TMI #2 was rushed into commercial operation on December 30th, so its owners could save \$40 million in taxes in 1978. Prior to 12/30/78, the plant was shut down more than 2/3's of the time, for repairs, between when it achieved its first chain reaction and 12/30/78. There has also been speculation that #1 was to be ready for re-fueling in early 1979 and #2 was going to replace other coal or oil fired generation.

69. "BUT CRITICS COUNTER -- WHY TAKE A CHANCE ON NUCLEAR POWER WHEN WE DON'T NEED IT? . . . NUCLEAR ENERGY MEANS ELECTRICAL ENERGY -- AND CRITICS POINT OUT THAT, ALTHOUGH THERE IS A PETROLEUM SHORTAGE, THERE IS NO OVERALL SHORTAGE OF ELECTRICAL ENERGY. SOME UTILITIES ACTUALLY HAVE MORE GENERATING CAPACITY THAN THEY CAN USE."

TMI #1 and #2 supply about 30% of all electricity generated by Met-Ed (Evening News 4/13/79). 18% excess in generation capacity is a basic requirement for utilities. Nationally we have a 33% excess (Time Magazine 4/16/79). Prior to 3/28/79, Met-Ed had 44% more electric generating capacity than it needed (The Guide 4/13/79).

70. "ALSO, ELECTRIC MOTORS AND TRANSMISSION FACILITIES CAN BE MADE MUCH LESS WASTEFUL THAN THEY ARE NOW. TWO-THIRDS THE ELECTRICAL ENERGY PRODUCED TODAY IS LOST THROUGH WASTE. IF WE CAN CUT SOME OF THAT WASTE, OBVIOUSLY, WE WILL NEED EVEN LESS GENERATING CAPACITY. SO -- RUNS THE ARGUMENT -- WHY BUILD MORE NUCLEAR PLANTS?"

This past 1979 summer's peak demand, in Pennsylvania, was on August 2 and was 4.5% lower than the peak demand forecast and slightly lower than last year's peak. Peak demand forecasts form the basis in which construction of future power plants are planned (Patriot News 9/22/79).

#### TMI DATELINE

9/16 to 9/22/79 - The Chairman of the Pa. Public Utility Commission (P.U.C.) feels coal is the only practical new source of energy for Pennsylvania through the 1990's. The Pa. Secretary of Health said the threat to health of area residents from the accident has been virtually ignored by many in official positions. The SVA of Lancaster has charged that the environmental impact statement to clean-up water violates the National Environment Policy Act. The Editor of the Harrisburg Patriot News said, at a state hearing regarding the TMI accident, "We were prevented from reporting fully and accurately by Met-Ed, which did everything in its power to minimize the accident and the potentials of the accident. Met-Ed said it needs at least a 4 to 6% rate increase to cope with replacement costs. The state P.U.C. directed Met-Ed to show why customers shall pay costs associated with the operation of TMI #1 after January 1, 1980. TMI #2 was damaged in the accident, TMI #1 was down for refueling until the NRC, on 7/2/79, ruled it will consider if it should ever restart until after hearings. The Academy of Natural Sciences of Philadelphia is operating monitoring stations near TMI to detect presence and levels of radiation in fish and sediment. They are expected to be in place about 6 months.

9/23 to 9/29/79 - Jane Fonda and Tom Hayden appeared in Harrisburg and at TMI to launch a new national economic movement. Met-Ed revealed water will exceed storage by November, then it will be necessary to place it in #1 storage. The only other possibility is the use of Epicor II to remove some of the dangerous elements, but still allow tritium. Epicor II is experimental and violates NEPA. The state Secretary of Health has advised the state to stockpile potassium iodide. The Manufacturer Association of Berks County has filed a petition to be involved in the upcoming hearings because the unit 1 shutdown is costing each household in that county an average of \$75.00 more a year. (Met-Ed offices are in Berks County.)

9/30 to 10/6/79 - NRC Commissioners said if another TMI occurs they would consider taking control of the plant. They also said had they know then what they know now, they would have at least considered recommending a precautionary evacuation on the first day. Governor Thornburgh told the NRC they have a legal obligation to consider psychological stress that reactivation of TMI will cause. It is believed Met-Ed is reluctant to use #1 storage facilities for #2 water because they are needed for clean water for use with the Epicor II system. A Senate subcommittee was told by the NRC that they had operated on 3/28 and 3/29 without crucial information that Met-Ed could have supplied. Harold Denton is pushing for the use of Epicor II as is Met-Ed and the NRC staff but a majority of the NRC Commissioners are not saying yes or no. Lancaster County is considering the purchase of an \$87,000 outdoor monitoring system to keep tabs on TMI & Peach Bottom plants. The NRC has said it will not allow the discharge of radioactive wastes into the Susquehanna. What is interesting is that if Epicor II is used, Tritium will still be present. Met-Ed has announced in the next several weeks a TV camera will be inserted into #2. A "smear" will also be taken of the deposited radiation. Epicor II is designed to decontaminate only low level radioactive water. Storage capacity for #2 is 420,000 gallons with, as of 10/2/79, the total being stored at 390,000 gallons.

10/7 to 10/13/79 - The cause of the radiation leak on 10/2/79 at a nuclear plant near Minneapolis is still being investigated. A rupture in one of the 3,388 steam tubes may be the cause. Met-Ed has asked for a 12% rate increase effective January, 1980. It would boost an average residential customer's bill about \$3.50 per month if approved by the P.U.C. The Environmental Coalition on Nuclear Power (ECNP), the oldest statewide anti-nuclear group representing Central Pennsylvania is urging the NRC to proceed with hearings on the potential hazard posed by aircraft flying over TMI. Hearings on the matter were scheduled for early April, 1979, but the accident cause postponement. Princeton University scientists have calculated that a worst possible accident at TMI would have caused at least 200 deaths and as many as 23,000 living outside a 50 mile radius, caused by cancer. In addition a breaching of the containment would have caused 3500 to 450,000 thyroid nodule cases. An independent investigation of the NRC has preliminary determined that the NRC has shown little improvement in organizing to cope with future TMI's. The Kemeny Commission will probably recommend the NRC be reorganized, that siting of nuclear plants be done with more care, and that fines for utilities be stiffer. A Federal Judge in Harrisburg has dismissed SVA's suit to prevent dumping of radioactive water into the Susquehanna on procedural grounds. This decision has nothing to do with the facts of the case. As a result, SVA has appealed the decision to the Third Circuit Court of Appeals in Philadelphia. The group also opposes the use of Epicor II. SVA feels dumping the water violates the Clean Water Act, the NEPA, the Atomic Energy Act, and 5th Amendment of the U.S. Constitution. Coincidentally, the Council on Environmental Quality, a presidential commission, had voiced opposition to Epicor II in a letter to the NRC. The Council feels a full scale environmental impact statement on total cleanup operations rather than segmented environmental impact assessments on each step should be done.



# P.A.N.E.



P.O. BOX 268  
MIDDLETOWN, PA 17057

December 13, 1979

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Congressman Ertel's town meeting will pre-empt the scheduled public meeting by PANE which was to be held in the MCSO tonight.

PANE has rescheduled its meeting for January 23, 1980, at 7:30 p.m. in the MCSO. All PANE meetings are open to the public and of an informational value to all citizens.

The January 23 meeting will feature a presentation and film on Coal by a local professional engineer. The sound filmstrip "Nuclear Energy - Too Hot to Handle?" will also be shown with discussion to follow.

PANE public meetings will also be held on the following dates:

FEBRUARY 20, 1980 - 7:30 p.m. to 9:00 p.m. - MCSO  
MARCH 12, 1980 - 7:30 p.m. to 9:00 p.m. - MCSO