



# THREE MILE ISLAND ALERT

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## Zombie Nukes on Our Horizon?

# Constellation Seeks Restart of Unit 1

Hungry for energy to facilitate their transition to Artificial Intelligence (AI), companies like Google, Amazon, and Microsoft are looking to bring mothballed nuclear power plants back online. AI data centers, which require far more energy than traditional processing, have spurred these technology giants to also look to a new generation of small “modular” nuclear reactors, though that technology has not been successfully commercialized.

Microsoft has reportedly entered into an agreement that they would buy all the electricity the 835-megawatt TMI Unit 1 would generate over 20 years. Plant owner Constellation Energy says they are prepared to invest \$1.6 billion to revive the reactor. Initially ensuring no public funds would be needed, the utility subsequently requested the federal government provide a \$1.6 billion loan guarantee to finance the restart. The guarantee would allow the company to save Constellation up to \$122 million in borrowing costs, according to John Parsons, an energy economist at the Massachusetts Institute of Technology. It would come on top of the federal tax credits on the sale of the power passed in the Inflation Reduction Act of 2022, which could be worth nearly \$200 million annually for Constellation.

Before the project can move ahead, permission is needed from the Nuclear Regulatory Commission (NRC), state agencies, and the PJM Interconnection, which manages the energy grid in 13 mid-Atlantic and midwestern states.

Arguing against the \$1.6 billion resurrection of TMI Unit 1, safe

energy proponents have advocated the phasing out of nuclear and fossil fuel power generation and point to the 250 gigawatts of renewable energy and storage projects under consideration by the PJM Interconnection that make the zombie nuke unnecessary.

Three Mile Island Alert’s Eric Epstein also points out that if TMI operates for another 20 years, Pennsylvanians will be asked “to babysit more tons of radioactive trash with no forwarding address.” This waste remains radioactive for thousands of years. Instead of

requiring Constellation to clean up the existing mess, it kicks the clean-up of TMI further down the road. As Epstein notes, the proposal delivers “electricity for the moment and radioactive wastes forever.”

As those of us who live in the shadow of TMI learned in 1979, perhaps the greatest subsidy the nuclear industry enjoys is the Price-Anderson Act, which absolves nuclear power companies from legal liability for the vast majority of costs resulting from an accident. Should TMI have another accident, guess who pays? We do.

## An Accident Remembered

Bill Cologie

In early March 1979, many of us attended a recently released movie called *The China Syndrome* about a nuclear plant accident in California. Jane Fonda played a TV reporter covering the accident and Jack Lemmon played a nuclear engineer. He explained to Fonda’s character that the “China Syndrome” was a meltdown of a nuclear plant where the molten core would sink into the earth and perhaps go all the way to China. The molten core would turn any water in the soil into radioactive steam released into the atmosphere. When asked what that meant for area residents, he explained it would “**render an area the size of Pennsylvania uninhabitable.**”

On March 28 we woke to news of a problem at Three Mile Island. Later that morning, on an errand to the west shore, I experienced a metallic taste in my mouth as I crossed the Harvey Taylor bridge, something I

later learned was experienced by hundreds of my neighbors.

For days we anxiously awaited the latest news. From the plant owners came inaccurate, misleading, and sometimes conflicting reports on the plant’s status. Governor Richard Thornburgh, in office less than two months with no knowledge of the nuclear power industry, initially resisted calls for a general evacuation, but on March 30 ordered pregnant women and preschool children within five miles of the plant to evacuate. He issued a state of emergency that stayed in place from March 28 to May 9.

March 30 was also the day TMI operators reported the existence of a hydrogen bubble that was rapidly growing inside the reactor and could potentially explode. From March 30 through April 1, plant operators vented radioactive gas from the reactor until the bubble dissipated. (Continued on Page 2)

# An Urgent Message From TMIA's Eric Epstein

No doubt you have seen or heard news media accounts about the proposed prospective restart of TMI Unit 1. The announcement was no surprise to those of you who have been following this closely. For months it was rumored. Now it's here.

As you may have heard, powerful political leaders, the state legislature's nuclear caucus, local officials, construction labor unions, and others would like nothing better than to see Unit 1 up and running for the sole purpose of providing electricity to Microsoft for some twenty years.

Nobody took the time to ask us, the people who live in the counties and communities surrounding the plant, how we feel about it. The last time they asked, in May of 1982, voters in three counties voted 2 to 1 against restart.

You may recall, that TMI's owners voluntarily shut the plant down in 2019 due to economic reasons. There was no market for the electricity they were generating. Many of us thought that our



Eric Epstein

struggles of more than four decades—since before the 1979 accident began—were over. Those of us who remained active in TMI Alert, however, continued our advocacy:

- We seek safer storage for the nuclear wastes that have been piling up for decades and remain in place, essentially a nuclear waste dump in the middle of a river that is prone to flooding.
- We have maintained a website to

keep you abreast of issues with TMI.

- We have been involved with the Susquehanna River Basin Commission and know that, because of other developments and environmental matters in the basin, the water necessary for the operation of the plant is not available.

- We have continued our safe energy advocacy regarding the nuclear power plants in our neighborhood—Talen Energy's Berwick plant just upstream, Peach Bottom just downstream, and Limerick to our east.

- And we will soon initiate a legal proceeding regarding the steam tube issue (see page 4) with the Atomic Safety and Licensing Board.

It has been years since we asked you for a contribution or to volunteer. But in the months ahead, we would greatly appreciate any time and resources you can contribute to keep TMI closed. Please clip the donor form in this newsletter and return it to TMIA. Thank you. Your support is essential and appreciated.

## An Accident Remembered (continued)

With the news of the potential explosion, my family, like thousands of our neighbors, grabbed our pets and evacuated to stay with family or friends in areas distant from the plant, not knowing if we could ever return to our homes, our jobs, our friends, our lives.

After an anxious month, the plant entered a stable cold shutdown state on April 27, but the confusion, fears, and consequences continued. Though the government officially claimed "no one died" at TMI, local activists conducted health studies that showed adverse impacts on plants, animals, and the people of central Pennsylvania. There was a report of a State Police helicopter flying over the plant during the accident

*“ . . . not knowing if we could ever return to our homes, our jobs, our friends, our lives.”*

with a radiation monitor that went off the scale. Researchers subsequently correlated areas where the wind carried the radioactive plumes released from TMI with a higher incidence of cancer. To date, there has been no comprehensive government sponsored survey of the health effects of the accident.

Since before the accident, TMI Alert has advocated for safe energy. Our efforts and pressure brought forth the following:

- Training for nuclear plant operators has been improved;
- Emergency training for first

responders has been improved;

- Communication between plant operators and all levels of government has been improved;
- Security around the plants has been strengthened;
- Plant neighbors have been given Potassium Iodide tablets;
- Evacuation plans have been improved;
- The lessons learned from TMI have been shared and implemented world-wide; and,
- We have championed the development of alternative and renewable energy sources.

## Mothers Still United Against Restart



In the days following the beginning of the TMI accident, a group of women, all of whom still live in the shadow of the plant, began their advocacy for the health and safety of their children. On September 3<sup>rd</sup>, following the announcement of Constellation’s plans to restart Unit I, they regrouped for a news conference at the Capitol to object to the dangers posed to all of TMI’s neighbors by the proposed restart. Originally formed as “Concerned Mothers and Women,” they are now grandmothers and great-grandmothers and were recently featured in a documentary film “Radioactivity – The Women of TMI.”

Joyce Coraddi, the first to speak, deemed the proposed restart “totally unacceptable.” Speaking on behalf of Paula Kinney, Beth Drazba, and Linda Brassch, she noted their stance “is not a pro or anti issue for us. For us it is about health issues.”

## Will Data Centers Prolong the Use of Coal?

In 2012, coal provided 39 percent of Pennsylvania’s electricity net generation and natural gas accounted for 24 percent. By 2022, coal declined to 10 percent of the state’s net generation while natural gas more than doubled to 54 percent. Now, some energy industry experts are saying the demand from data centers may prolong the life of the state’s coal plants.

Again, if PJM moves quickly to get some or all of the hundreds of gigawatts of renewable energy sitting on its back burner authorized, the impetus for keeping coal plants active or resurrecting zombie nuclear plants would disappear.

## TMIA Mourns the Passing of Two Activists

In February, we lost Mary Stamos, 80, who was a long-time member of TMIA’s Planning Council. Many may recognize Mary from the years she worked as the morning clerk at Transit News in the Harrisburg Amtrak Station.

She was most recently recognized for her collection of hundreds of biologic specimens of plants she believed were mutated due to their exposure to radiation generated by TMI. Her collection is now curated by the Smithsonian Institute’s Natural History Museum.

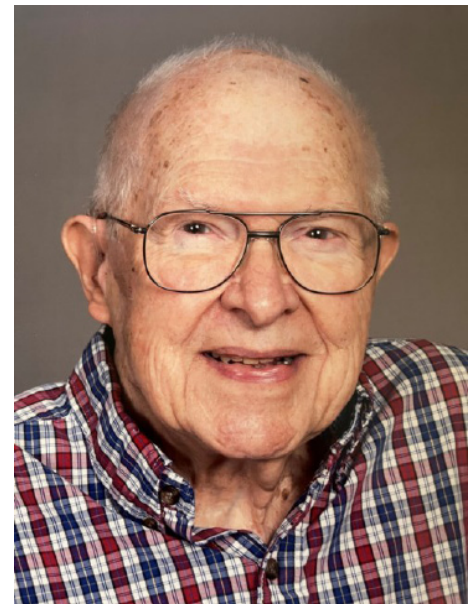
Mary became a lay expert on the effects of ionizing radiation and made dozens of presentations on the health and environmental effects of the TMI accident in Europe, Asia and throughout America.

In July, we lost Frank Davis, 99, who also spent years on TMIA’s Planning Council. In addition, he and his late wife, Beverly, oversaw the operations of the TMI Legal Fund, as well as being heavily



Mary Stamos

involved in the TMI Public Interest Resource Center which served as a liaison for all of the region’s safe-energy groups. He was also active in the NAACP, the Friendship Force, and other civic organizations.



Frank Davis

Former TMIA vice chair Bill Cologie said, “Mary and Frank were widely admired for their tireless dedication to the cause of safe energy and were widely treasured as friends by many.”

# There's a Serious Problem With Unit 1 Steam Tubes

In 2019, Three Mile Island Alert asked federal regulators to analyze a "potentially dangerous and risky condition" with steam generator tubes at TMI Unit 1. The tubes, which replaced the originals in 2010, were found to have defects 22 months after they were installed and the utility sealed off the individual tubes they identified as malfunctioning.

Steam generators are, essentially, heat exchangers. Super-heated water from the reactor travels through tubes adjacent to other tubes that contain fresh water. The fresh water boils and the high-pressure steam resulting is piped into the plant's turbines to generate electricity.

At TMI, the steam generators contain 15,000 tubes about ¾" in diameter. TMIA has learned of design and manufacturing defects which can cause the tubes to vibrate and rub against each other leading to wear. Should these worn tubes



Scott Portzline

rupture, radioactive steam would be released into the environment in what is known as a "containment bypass accident." According to the scientific literature, a steam generator tube rupture (SGTR) can release radioactive material into the environment even if the containment building is not breached.

Given this, in addition to TMIA's formal filing with the NRC, TMIA's Scott Portzline has repeatedly

been in contact with NRC officials in hopes of the problem being addressed. Getting no adequate response, he is now preparing to petition the Atomic Safety and Licensing Board (ASLB) to look into this matter. Portzline reports that a similar problem existed with the San Onofre nuclear plant in California. An environmental group, Friends of the Earth, raised the matter with the ASLB which found the steam generators needed to be replaced. The utility found the cost of replacing the steam generators prohibitive and instead decided to close the plant which is now decommissioned.

Those who would like to better understand the issue, are encouraged to view a video Portzline generated which can be found on YouTube at:

[https://www.youtube.com/watch?v=AiUq39\\_VFAE](https://www.youtube.com/watch?v=AiUq39_VFAE)

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## TMI Alert Membership Renewal, Contribution, and Volunteer Form

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

Membership Level:  \$20 Regular  \$25 Non-Profit Organization

\$50 Sustaining  \$100 Patron

\$250 Former Hippie Who Made It  \$10 Low Income

\_\_\_\_\_ I'd like to contribute to support the efforts to keep Unit 1 closed \$ \_\_\_\_\_

\_\_\_\_\_ I'd like to volunteer to help keep Unit 1 closed.

Return with a check payable to TMI Alert to: TMIA, 315 Peffer Street, Harrisburg, PA 17102