

TMI Alert 315 Peffer Street | Harrisburg, PA 17102

Find us online: www.tmia.com

#### **Inside This Issue**

- TMI Updates
- **Government Action & Inaction**
- Thank you to Bill Cologie
- Other Nuclear News

### **Late Breaking Bad News**

#### TMI-2 License Transfer

TMIA just received notice that the TMI-2 license transfer could proceed from FirstEnergy to TMI-2 Solutions without a hearing!

This is a new low for how the NRC fast-tracks and processes license transfer applications without due processor even giving the public the benefit of a hearing. This tactic is illegal but has recently been used at Pilgrim and Indian Point.

What just happened involves the transfer of billions of rate payer dollars to unregulated, limited liability companies and let's legacy nuclear power plant ownership companies off the hook for cleanup.

You many ask how the NRC can transfer TMI's license when there is a hearing request pending before them? Here is their answer:

"The hearing, if granted would not be completed prior to the approval of the license transfer application."

Does this make any sense to anyone out there? The public voice in this critical matter holds no weight whatsoever.

It is also perplexing that the Department of Environmental Protection would sign off on this approach knowing the Department still has concerns about the

availability of financial resources to adequately complete radiological decommissioning of TMI-2.

In addition, after decades of legal engagement concerning TMI, TMIA was not consulted.

"Bypassing due process and manipulating the vote, the NRC Commissioners voted to approve this transfer to a private company prior to a hearing. This is like declaring victory before counting votes and we know where that gets us," states Eric Epstein, Chairman TMIA. \*

#### **TMIA Activist Visits Fukushima**

In July 2019, Tom Bailey traveled to Japan to learn more about the Exclusion Zone with surrounds the Fukushima Daiichi Nuclear Power Station in Japan. He wanted to personally see the long-term impacts of a severe nuclear accident. In 2011, an earthquake and resulting tsunami crashed ashore on March 11 damaging the plant's cooling system. Days after the initial disaster, three of the plant's reactors suffered hydrogen explosions, spraying radioactive fallout onto the land and water.

Tom had on going correspondence with Hiroko Aihara, a safe energy journalist from Fu-kushima City, in Fukushima Prefecture. Some of you may remember Hiroko visited and spoke at our TMIA 40th Anniversary dinner in Middletown in March 2019. Hiroko was an excellent guide as we drove east from Fukushima City through the Exclusion Zone. A video of our trip is hosted on the Green Working Groups page of the Allegheny County Greens website.

Should you wish to see real time radiation levels in the Exclusion Zone, visit Safecast.org. You will see a real time monitoring map.

The yellow color represents the highest radiation readings that still remain northwest of the plant. Many Japanese refer to Safecast monitor readings in addition to those of the Japanese Government.

In addition, Greenpeace Japan provided evidence to the United Nations' Human Rights Council in its investigations of human rights violations by the Japanese Government on behalf of the residents forced to flee their homes and businesses in the Exclusion Zone. Greenpeace International March 2019.

#### Real Time Radiation Levels: safecast.org

#### **Fukushima Trip Video:**

alleghenygreens.org (Click on the Green Working Groups page)

## **Disappointment for TMIA** in Nuclear Regulatory Commission's Recent Action on TMI Decommissioning

TMI-Alert (TMIA) advocated before the NRC for a truly independent advisory panel modeled on the community-based program created after the TMI-2 accident. TMI-Alert does not support a settlement pending before the Nuclear Regulatory Commission (NRC) regarding decommissioning and clean up for the shuttered TMI-2 nuclear plant because it does not go far enough to protect the public and may expose ratepayers to additional financial risk. TMI-Alert had intervened before the Nuclear Regulatory Commission on this issue.

TMIA will continue to litigate the following issues raised before

the NRC with or without further Department of Environmental Protection's (DEP) involvement. There is a complete lack of trust that the NRC will "do the right thing" without the heft of our state environmental agency taking the lead.

- 1) TMIA strongly opposes leaving high-level radioactive waste at the TMI site. This has the serious potential to turn the Susquehanna River into a flowing high-level waste dump from Middletown to Baltimore.
- 2) Funding for decommissioning is woefully inadequate even at the \$900 million price tag and yet again places financial risks on consumers.

3) TMIA strongly opposes the transfer of \$900 million already paid by consumers for decommissioning to a private company with little to no oversight.

TMIA and DEP supported the creation of a citizen's advisory panel to be closely involved in the decommissioning. After thoughtful discussion, TMI-Alert has decided not to serve on the advisory board as currently designed due to its unbalanced proposed structure, lack of enforcement teeth and the general perceived inability of the advisory board to have any real advisory capacity.

#### **License Transfer** for TMI-2

TMI-2's spent and damaged fuel would remain on site indefinitely under a petition approved by the Nuclear Regulatory Commission (NRC). GPU Nuclear asked the NRC for permission to sell the damaged Three Mile Island Unit 2 reactor (TMI-2) to Energy Solutions. Energy Solutions' subsidiary, TMI2 Solutions, will take over responsibility for decommissioning TMI-2.

That gives Energy Solutions control over the plant's assets including hundreds of millions of dollars of customer payments to the Nuclear Decommissioning Trust Fund (NDT) for TMI2.

TMI2 Solutions will keep fuel on site until, and if, the US Department of Energy decides to take possession of the fuel and remove it from the Island. This places a high-level waste dump at TMI for the foreseeable future.

Three Mile Island Alert's (TMIA) intervened in this proceeding (Docket 50-320 LT) but the NRC denied TMIA's standing to continue its intervention. TMIA raised three issues regarding the license transfer:

- 1) That the companies overestimate the return on funds in the decommissioning fund. This means that funds set aside to clean-up at Unit 2 will become increasingly inadequate.
- 2) That the companies underestimate the costs for "license termination, site restoration and spent fuel management." This means cleanup costs will exceed the available funds. Inevitably, the shortfall will be made up by consumers.
- 3) The "...application and supporting materials fail to show TMI2 Solutions is financially qualified..." pursuant to NRC regulations.

None of these concerns were addressed by the NRC.

The NRC's rejection of TMIA's standing makes it even more vital that the NRC's momentum to approve nuclear industry actions never goes unchallenged. The NRC set a dangerous precedent in denying participation by the organization that has served as a public watchdog on TMI for over 45 years.



# Congrats to Middletown Press & Journal!

#### "Best Weekly Newspaper"

TMI-Alert congratulates the Middletown Press & Journal named "best weekly newspaper" for the second year in a row. In addition, the newspaper won first place awards for its ongoing coverage of TMI along with its reporting on the 40th anniversary of the TMI nuclear accident. Kudos to publisher Joe Sukle along with reporters Dan Miller and Laura Hayes. Middletown Press & Journal is no longer in business as of fall 2020.

#### **Final Update: Oyster Creek**

It has been over a year since the oldest operating commercial nuclear plant, Oyster Creek has permanently shut down. Its reactor vessel is being dismantled and decommissioning is underway. GE Hitachi is the decommissioning contractor while

Nuclear Consultants International has safety oversight authority.
Holtec, the parent company of Holtec Decommissioning International, the licensed operator said the company used DECON, a decontamination method that removes radioactive

contaminants in order to permit termination of the license after the plant is no longer operational. Spent fuel is expected to be removed to an on-site spent fuel storage pad in early 2021.

#### Time to Get Off the Fence on Nuclear

October 15, 2020 | Reprinted from Nuclear Information Resource Service & Beyond Nuclear



Last week, we published a blog about a new study by researchers at the University of Sussex that shows nuclear power is no solution to the climate crisis, and that it is actually keeping countries from making the steep reductions in greenhouse gas (GHG) emissions we need to keep the world livable.

This study has major implications for climate and energy policy in the US and around the world. In June 2020, the US Climate Action Network made a big splash by publishing the Vision for Equitable Climate Action. VECA is not only the most comprehensive and detailed policy agenda put out by the climate movement, it is rooted in principles of racial and economic equity and justice, developed by over 170 people from over 100 organizations.

It is also the first major climate movement agenda to explicitly call for a phaseout of nuclear power.

Along with other recent climate justice agendas, from the Equitable and Just National Climate Platform and the People's Orientation to a Regenerative Economy to the THRIVE

Agenda and the Feminist Green New Deal, VECA is part of a broad shift toward transformative solutions to the climate crisis, calling for a rapid, just and equitable transition to 100% renewable energy.

Still, moderate climate organizations and political leaders have reacted with hesitation and resistance, skeptical that transformative change is too risky, or not supported by the science. And nuclear power has been one of the central sticking points, with some insisting that it plays too big a role in our energy supply.

The University of Sussex study proves those assumptions to be wrong. The study covered 123 countries over a 25-year period. It confirms that renewable energy is many times more effective than nuclear in reducing GHG emissions, across the board.

Even more than that, in all but a few countries where it has led to small emissions reductions, investing in nuclear power has either not had any impact at all, or actually resulted in increased emissions. The study also shows that investments in nuclear and renewables tend to crowd each other out. In other words, every dollar we waste on nuclear energy is a dollar not invested in truly clean, renewable energy.

Despite this evidence, supporters of nuclear and their moderate allies would have us spend billions of dollars on bailouts for a technology that not only is increasingly uncompetitive against renewables,

but also leaves a trail of destruction in its wake, particularly in minority and low-income communities.

What we need is an approach that will cut emissions while doing justice to those communities. Bailing out nuclear is not that approach. VECA is, and other major climate policies should follow its lead – including and especially the Green New Deal. While opponents of the Green New Deal complain about its potential \$2 trillion cost, what is that compared to the benefit of not only literally saving the world, but of building a sustainable new economy with healthy communities, good, union jobs and a real economic security?

The \$2.5 trillion COVID-19 relief bill Congress passed in April shows that, when the country knows we are facing a true crisis, we can find the political will and the money to address it.

But like with COVID, we don't have time to waste on things that aren't going to work, and we shouldn't waste money on them either. When it comes to the Green New Deal, we have to be bold, visionary, and ambitious, and we have to put equity and justice first. That alone is reason enough to make sure the Green New Deal prioritizes a phaseout of nuclear power, with a just transition for workers and communities.

But now the science is in, and it shows nuclear is out. And the Vision for Equitable Climate Action and the climate justice movement have it right.

NIRS and other Safe Energy Groups file comments on

# Why "Advanced Nuclear Reactors" Are a Bad Idea

The NRC received comments over the summer regarding proposed regulatory shortcuts for approval of small-scale "advanced nuclear reactors" (ANRs). Included are provisions for a generic environmental impact statement. This follows on the NRCs recent approval of the Oklo mini-reactor, a new nuclear technology that does not use water and is smaller than the standard nuclear reactors built in the past.

There are several reasons why this is a dangerous strategy by the NRC:

1) The NRC has no experience regulating these reactors. No non-light-water reactors have operated in the U.S. since the 1980s. The rigorous study and experience needed for effective NRC oversight of this technology simply does not

exist. Shortcutting the regulatory process is a recipe for nuclear safety problems.

2) Small-scale ANRs will have significant environmental justice impacts. At every stage of the nuclear fuel cycle, polluting facilities and activities have been located disproportionately on indigenous peoples' lands and in African American, Latinx, and other communities of color. There is no reason to expect that to change with ANRs.

3) Nuclear power is not clean energy. The nuclear industry and their allies have misrepresented nuclear power as an emissions-free energy source. Taking into consideration construction and the entire fuel cycle, nuclear energy is a net producer of greenhouse gasses.

As a "low-carbon" energy source, nuclear is far behind other resources, including renewables. In short, nuclear energy, whether it's produced with old-fashioned lightwater reactors or with newer ANRs, is no solution to our climate crisis.

The money wasted propping up this unsustainable and polluting industry should be invested in measures that effectively address climate change including renewable energy and efficiency.

TMIA has joined a coalition of several dozen organizations throughout the country which is involved in litigating the Oklo mini-reactor. The coalition is in court seeking a stay of the NRC's approval. The coalition may appeal if the stay is not granted.

## **License Extension Just Peachy**

An extension of the operating license for Exelon Nuclear's Peach Bottom 2 and 3 has been approved by the Nuclear Regulatory Commission (NRC). This action makes it possible for the plant to operate until 2053 (Unit 2) and 2054 (Unit 3), eighty years after their original construction. Coming amidst a general decrease in the number of nuclear generating plants in the

United States, these extensions allow the plants to operate far beyond the designed life of the facilities.

Overlooked in this action are concerns that prolonged operations may lead to engineering failures in several key systems. Hundreds of millions of dollars have already been spent over the past decades to keep these units on line. As the

plants age, even more costs can be expected. Study after study show that renewable energy options are less expensive than keeping this antiquated technology clanking along.

Safe Energy Organizations appeal to NRC to

# Do More to Protect Nuclear Plant Workers From COVID

Excerpted from NIRS/Beyond Nuclear Press Release October 20, 2020

"The Nuclear Regulatory Commission (NRC) has utterly failed to do its job during this pandemic. The Agency has refused to undertake any measures to protect workers from the coronavirus, and has not even required the industry to report COVID infection rates. All we know is what concerned workers are reporting, and it is alarming. Congress must act now to prevent more COVID-19 outbreaks in nuclear power **plants."** - Tim Judson, Director of the Nuclear Information and Resource Service (NIRS) in Takoma

The Nuclear Regulatory Commission (NRC) is ignoring COVID-19 superspreader events at nuclear power plants. A coalition of safe-energy advocates has been tracking the situation and provided details of this crisis.

Park, MD

The group obtained copies of social media reports by workers at one plant, describing unsafe working conditions, over 200 COVID infection

cases, multiple hospitalizations, at least one death, fears for their safety, and a lack of concern by corporate management.

Several other nuclear sites have had similar reports of high COVID infection rates: over 800 workers at the Vogtle reactor construction site in Georgia; 89 workers at the Grand Gulf Nuclear Station in Mississippi; and dozens of quarantined workers at the Limerick Nuclear Generating Station in Pennsylvania.

In stark and unexplained contrast, the Salem Nuclear Power Plant, operated by PSEG Nuclear in New Jersey, reportedly conducted outage work in the spring with no positives for COVID. The true extent of coronavirus spread within the industry is unknown because NRC has not required any reporting or protective measures.

The urgency for action on these recommendations was highlighted as reports of COVID-positive nuclear plant workers from reactor sites around the country came in. At one reactor site earlier this year – Fermi unit-2 outside of Detroit, operated by Detroit Edison – over 240 workers reportedly tested positive.

Private Facebook posts from workers at the site spoke of "worse conditions I've ever experienced,"

and questioned "just how hell can you maintain social distancing, constantly cleaning hands, and keep mask on all the time during an outage at a nuke plant."

As the nation begins to experience the expected second surge in the COVID-19 pandemic, the coalition is calling for federal action to address coronavirus risks on nuclear sites, and the pandemic's impacts on the safety and security of the nation's 94 operating nuclear reactors.

They have addressed these concerns in a list of recommendations which they provided members of Congress and state officials, urging immediate action.



### Mary Stamos' Botany Collection Headed to Smithsonian

Mary Stamos, long-time member of TMI Alert's Planning Council, has been collecting samples of mutated plants since the TMI meltdown in 1979.

Now the world's foremost museum and research complex, the Smithsonian Institution, has expressed interest in acquiring her collection. Scott Portzline lead a small group of TMI Alert volunteers who spent hundreds of hours cataloging Mary's collection.

More than a thousand specimens
have been grouped into 320
separate exhibits. Each exhibit was
photographed and documented with
information about where found,
when found, a brief description,
and recorded comments from Mary
about unique aspects of specific
pieces.

The collection is headed to the Natural History Museum's

Department of Botany to provide a historical archive. The individual pieces will be analyzed to ascertain if radiation from TMI caused the cellular structure of the plants to be altered. TMI Alert will post the entire database on its website.

Please thank Mary for decades of disciplined effort in building this collection.

**Update: Ohio Advocates Appeal Nuclear Decommissioning Plan** 

As reported in the Wall Street Journal, November 5, 2020, the US Sixth Circuit Court of Appeals in Cincinnati affirmed the reopening of the Chapter 11 bankruptcy filing of Energy Harbor, owner of two nuclear plants in Ohio.

Energy Harbor, previously FirstEnergy Solutions, is a former First Energy Corporations subsidiary that changed its name when it emerged from Chapter 11 earlier this year.

The Environmental Law and Policy Center led the appeal to reopen the bankruptcy plan on behalf of environmental organizations and the Ohio Consumers' Counsel. They raised the question of whether Energy Harbor had adequate decommissioning funds. This concern is underscored by the focus of an ongoing federal investigation. Concerns centered on whether local communities would be left with both financial and environmental liabilities for costs not covered by the company's plan.

The advocates argued that the ongoing federal corruption probe into Energy Harbor and its former parent, First Energy Corporation requires that the previously approved bankruptcy be reexamined.

The federal investigation revealed that Energy Harbor and First Energy gave bribes of \$60 million to Ohio



House Speaker Larry Householder and four others to successfully secure passage of Ohio legislation that provided subsidies of up to \$1.5 billion to keep the uneconomic nuclear plant operating.

Prosecution of these bribes may upset the finances that were assumed in the bankruptcy's approval.

# TMI-Alert: New Citizen's Advisory Plan on Decommissioning Lacks Teeth

In November 2019, GPU Nuclear petitioned the Nuclear Regulatory Commission (NRC) for permission to amend its license in order to clear the way for the sale of the damaged TMI-2 reactor to Energy Solutions. (see article on Decommissioning TMI). This is to include a Citizen's Advisory Panel for the decommissioning process.

On April 13, 2020, GPU Nuclear told the Department of Environmental Protections that the panel will keep the public informed and provide feedback to the plant owners on the progress of decontamination and cleanup at the site. The
Department and TMI-Alert pointed
out that the panel, as currently
organized, does nothing to bring the
public into the decision-making on
decommissioning. In addition, the
planned budget is insufficient to
make independent experts available
to help Panel members understand
the likely impacts of the company's
decommissioning plan.

In view of this ineffective process, TMIA, along with Citizen's for Pennsylvania's Future, Clean Air Council, National Resources Defense Council, and the Sierra Club of Pennsylvania Clean Energy Program sent a letter to the Pennsylvania Department of Environmental Protection. This requests an advisory board be established that is similar to the process in New York. That panel plays a genuine citizens' advisory role and does not include the financially vested interests including the companies responsible for plant cleaning up.

TMI-Alert's concludes that the advisory board as envisioned by the industry will not be empowered in the way that DEP, TMIA and many others had hoped.

## **Bill Cologie Announces Retirement**



On August 13, 2020, Bill Cologie announced he was stepping down as Vice-Chairman of Three Mile Island Alert. We will miss Bill's invaluable talents, wry humor and collegial presence. Bill has been a steady and invaluable member of TMIA's Planning Council for decades. He has been TMIA's editor and publisher for almost forty years. He established the tone and voice of Three Mile Island Alert.

It is hard for us to imagine anyone other than Bill crafting, editing and managing TMIA's publications. His contributions are the foundation of the newsletters and press packets. He was particularly important in the yeoman's work he devoted to TMIA's 40th Anniversary Health Surveys.

(By the way, please complete and return the enclosed Health Survey to make Bill particularly happy.)

Bill was the driving force behind TMIA's successful collaborations. These include the Dauphin County Historical Society, Dickinson College's Three Mile Island Collection, and our partnership with the City of Harrisburg.

### We wish Bill and his wife, Martha, all the best.

If you have a moment, stop by Transit News at the Harrisburg Transportation Center to personally thank Bill and Martha.



Nuclear Information & Resource Services Explains

# Crazy: NRC Push to Allow Nuclear Waste in Landfills

A while back, we told you about the Nuclear Regulatory Commission's (NRC) push to relabel very dangerous and long-lasting nuclear waste as "Very Low-Level Waste," or VLLW, is a Very Large Lie. We still have a chance to beat back this dangerous proposal – if you take action today.

To sum up: As more nuclear facilities shut down, their operators are trying to cut corners by disposing of their radioactive waste cheaply. But cheap doesn't equal safe. By labeling dangerous nuclear waste as "very low-level," the NRC is making it easy for operators to get rid of their waste on the cheap, bypassing state regulations that protect the health and safety of our communities.

The NRC's proposal would pave the way for dangerous nuclear waste to end up in our local landfills, or even to be recycled into consumer products, such as zippers and baby bottles.

If you already sent comments to the NRC about this, thank you! But the more they hear from you, the better. If you haven't sent comments yet, tell the NRC: Don't dump nuclear waste in my local landfill or anywhere else without a nuclear license.

Regular landfills are not monitored or regulated to manage nuclear materials. If this radioactive waste ends up in our landfills, it's almost inevitable that it will leak into our air, water, soil, and communities.

The NRC is also pushing this change under the cover of the Covid-19 pandemic, without significant input from the communities that might be affected by this major change in regulations.

Whether you already sent comments to the NRC about this or not, it's time for them to hear from you. Tell the NRC: Don't dump nuclear waste in my local landfill.

Expect to hear more from us soon about how we're pushing back against the NRC's dangerous kowtowing to the nuclear industry. In the meantime, stay healthy and safe.

# Exelon Spinning off Nuclear Plant Generators?

Rumors have been circulating that Exelon Corporation, who operates utilities in Delaware, Illinois, Maryland, New Jersey, Pennsylvania and Washington D.C. is considering selling off their power generation which would include substantial nuclear plant assets.

The Baltimore Sun newspaper reported on the status on November 13, 2020. The thought is nuclear power plants continue to be uneconomical and the math is not improving thereby threatening the overall health of the company.

This news appears to be connected to their latest attempt to seek additional bail out money in Illinois, New Jersey, New York and possibly Maryland.

Over time, Exelon has acquired uneconomic nuclear plants in northeast states from other utilities who had already concluded they could not run nuclear plants economically.

Spinning off the nuclear assets into a new corporation will not solve the declining value of nuclear power hence the need to go back to the states for more money.

#### Department of Environmental Protection Holds Hearings Set to Limit Carbon Dioxide at Power Plants

By the time you read this newsletter, the Department of Environmental Protection will have held 10 public hearings via Webex from December 8-14, 2020 on DEP's draft Regional Greenhouse Gas Initiative's (RGGI) rule.

The Environmental Quality Board (EQB) and the PA Attorney General have approved the DEP's regulations

for RGGI and this was the time for the public to weigh-in. To view the regulations, go to the PA Bulletin for November 7,2020 and search for "Environmental Quality Board." Written comments are also accepted by January 14, 2021. Comments should be submitted to http://www. ahs.dep.pa.gov/eComment.

The Environmental Quality Board proposes to establish a program to

limit the emissions of carbon dioxide (CO2) from fossil fuel-fired electric generating stations located in the state. If Pennsylvania joins RGGI, it will be joining a cooperative effort among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont to cap and reduce CO 2 emissions and invest in clean energy resources and energy efficiency.

#### Why should safe energy groups care?

Nuclear energy is considered by some advocates, and certainly the holders of nuclear assets, as clean energy. They argue that nuclear energy is beneficial to the environment due to its lack of carbon emissions although others would claim it is not completely carbon free.

Nuclear power owners have been making their case for several years with little push back from environmental advocates and others and are expected to be well represented at the hearings. Nuclear claims to be clean energy simply based on the fact that it emits little carbon dioxide into the atmosphere, the main culprit impacting climate change.

Nuclear power owners seek to participate in the regional trading platform designed to limit carbon by securing financially valuable credits designed to boost non polluting resources and energy efficiency. (See related newsletter article debunking the value of nuclear

power as a clean energy resource.) In short, allowing nuclear power to participate in RGGI auctions will devalue other resources like wind, solar and energy efficiency and legitimize nuclear as a clean energy resource subject to special treatment. Many safe energy advocates including TMIA view nuclear's potential inclusion as trading one form of dirty energy for another, albeit one with a smaller carbon footprint.

# **Suit Challenges High-level Waste Disposal Plan**

In June, advocacy organization
Beyond Nuclear requested that
the U.S. Court of Appeals for the
District of Columbia Circuit review of
NRC actions that open the door for
construction of huge interim storage
location for high level nuclear waste
near Carlsbad New Mexico and in
West Texas.

The Nuclear Regulatory Commission's (NRC's) April 23, 2020 Order and another Order from October 29, 2018 rejecting challenges to Holtec International/Eddy-Lea Energy Alliance's application to establish the massive "consolidated interim storage facility" (CISF).

Holtec plans to store up to 173,000 metric tons of spent fuel from

nuclear power plants. This is over twice the quantity of spent fuel currently stored at U.S. nuclear power reactors. The waste would be stored in shallowly buried containers at the site. Beyond Nuclear argues that the NRC's orders "violated the Nuclear Waste Policy Act and the Administrative Procedure Act by refusing to dismiss an administrative proceeding that contemplated issuance of a license permitting federal ownership of used reactor fuel at a commercial fuel storage facility."

The 1982 Nuclear Waste Policy Act (NWPA) prohibits federal government ownership of spent fuel unless and until a permanent underground repository is up and running. No



such repository has been licensed in the U.S. and the U.S. Department of Energy's (DOE) most recent estimate for the opening of a permanent geologic repository is no earlier than 2048.

Under this law, since Holtec assumes that the federal government will become the owner of the spent fuel during transportation to and storage at its CISF, Holtec's license application should have been immediately dismissed by the NRC.

"This NRC decision flagrantly violates the federal Administrative Procedure Act (APA), which prohibits an agency from acting contrary to the law as issued by Congress and signed by the President," said Mindy Goldstein, an attorney for Beyond Nuclear.

Meanwhile, the NRC moves ahead with the process for approving one or both of the projects. Public comments, including extensive comments from Beyond Nuclear, show strong opposition to approval of the Environmental Impact Statement (EIS) that has been drafted by the NRC.

The EIS must be approved by the NRC before siting can move forward. In addition, the Governors of New Mexico and Texas and New Mexico's U.S. Senators are opposed to the process leading to siting.

Many opponents point to the lack

of consideration of transportation impacts in the draft EIS. Transportation impacts include:

- The potential for accidents during transportation,
- Risks of leakage from transportation casks that are under-designed and produced in a manufacturing environment with historical quality control failures.
- The known risks of irradiating people along the thousands of miles of transportation corridors roads and railroads which the NRC characterizes as "less than an x-ray," and
- The NRC's omission of monitoring for actual impacts on the populations through which the high-level waste will be transported.

These concerns are not supposed but are based on actual experience.

The draft EIS finds that the benefits of storage exceed the costs (risks). Extensive comments point to the underestimation of the risks of onsite storage.

These include:

- Objections to the low importance that the NRC gives in the draft EIS to harm to people,
- Concerns that thousands of small earthquakes in West Texas are leading to subsidence in the area of the proposed CIFS.
- Additional risks to people and the environment from accidents related to the planned, shallow burial of the waste

If the Court grants Beyond Nuclear's petition, the entire process will grind to a halt. Until then, the NRC moves ahead toward siting the CIFS projects.

#### **TMI Emergency Planning Cut**

Ignoring a TMIA petition asking the Nuclear Regulatory Commission (NRC) for a continued high level of vigilance at the plant, the NRC approved a sharp reduction in required levels of emergency planning at TMI. TMIA's petition underlined the risks of the planned long-term storage of 1,500 metric tons of high-level waste on the island.

The Federal Emergency Management Agency (FEMA) agrees with TMIA that the NRC's approval of reduced protections glossed over significant credible risks of catastrophic impacts of a terrorist attack on TMI's spent fuel storage.

Following the 9/11 attacks, terrorists planned an attack on TMI's spent fuel. While the attack did not occur, this history shows that a full analysis of catastrophic accident risks is necessary before emergency planning requirements are reduced.

The NRC Order eliminates almost all protections previously required at TMI including monitoring and warning systems:

- The 10-mile evacuation zone will be eliminated. If there is a catastrophic accident at the spent fuel facility, there will be no plan for evacuating those most at risk.
- Emergency sirens will no longer be regularly tested so the community can no longer be certain that it knows of an accident. The community will no longer know of problems until they are informed by the media if and when the owners provides that information.
- The distribution of potassium iodide, needed to protect people from cancers caused by an accident to the stored fuel, will also cease.
- Perhaps most serious, the community radiation monitoring

system will be eliminated, leaving only on-site monitoring at the plant. This means that levels of radiation exposure will no longer be available across the community.

Taken together, these increase risks to the community. TMIA's greatest concern, shared by FEMA, is that an airplane attack on the stored fuel will create a fire so hot that it exceeds the protective design of spent fuel casks.

Until storage is redesigned and fuel is moved to dry cask storage, the risk will continue. Moving high level fuel to dry cask storage is considered to be particularly risky.

Redesign of the storage system will provide a higher level of protection from the worst sort of attack. TMIA is deeply concerned that these critical upgrades will not occur until sometime in the future.

## **Back-to-Back Bribery Scandals**

#### involving Exelon in Illinois and FirstEnergy in Ohio

#### **Ohio**

FirstEnergy bought and elected pro-bailout legislators in the Ohio legislature. The lynch pin of the scam is Ohio Speaker Larry Householder (R). Householder was arrested by the FBI - as were four of his colleagues - for funneling \$61 million to a social welfare agency they controlled. That entity then peddled influence to secure support for the bailout.

Chuck Jones, FirstEnergy's CEO, was fired in October after two company executives pleaded guilty to bribing Ohio legislators in the \$1.3 billion bailout.

The legislation, HB 6, which propped up the Davis-Besse and Perry nuclear power plants, is likely to be repealed. The Company's debt ratings and share prices have sharply declined. This is the biggest scandal in Ohio history, and it could bleed into Pennsylvania.

#### Pennsylvania

FirstEnergy owns the Beaver Valley Nuclear Power Station which was going to be shut down last year.

FirstEnergy also owns Three Mile Island-2, and is trying to transfer the license to TMI-2 Solutions, a LLC from Utah with no assets. TMI-2 Solutions would collect \$800 million in rate payer assets.

The Department of Environmental Protection dropped out of the case. The Pennsylvania Public Utility Commission refused to get involved. TMI-Alert is litigating the case before the Nuclear Regulatory Commission to make sure the decommissioning fund is not raided, and ensure that TMI-2 is actually cleaned-up.

#### Illinois

Exelon already owns Illinois, and is more sophisticated than FirstEnergy, when it comes to systemic corruption. Exelon's is the nuclear industry's escort service.

In Illinois, the key player is Speaker of the House, Michael Madigan (D). Mr. Madigan is considering bailing out two more Illinois nuclear power plants. Madigan is clinging to power, but the Speaker has lost the support of Illinois' Democratic Governor, J.B. Prtizker.

The U.S Attorney in Illinois did not prosecute Com Ed executives. Exelon was incentivized to shut down the investigation so it didn't expose its lobbying and political activities in other states. Exelon agreed to pay a \$200 million fine to keep its executives out of prison.

Bribery is a profitable business strategy for Exelon. Exelon's Return on Investment for a \$200 million fine: \$2.6 billion in a rate payer funded upgrade of the Company's power grid in Illinois in 2011, and a nuclear bailout in 2016 worth \$1.5 billion.

#### **Time to Support TMIA**



It's been an incredibly busy and a successful year at TMIA with the permanent shut down of TMI and the defeat of the bail out for the nuclear industry in Pennsylvania. That's not to say we had that level of success across the board.

#### There is much to be done.

TMIA hopes to continue its long history as the premier watch dog

organization as decommissioning begins its long, long slog until the plant is ultimately cleaned up. The nuclear industry across the country is trying to convince us that nuclear power is clean energy and should be included as a beneficial resource in any climate change actions.

TMIA does not think we should exchange one form of dirty energy or another and freeze out truly clean,

renewable sources of energy. Let's invest better this time.

Help us do that so we can continue into our four decades of tackling the multitude of safety, economic and environmental issues about nuclear power. It's been a year or more since we reached out and asked for your financial support. Please contribute generously either monthly or one time.

Mail Your Donation: TMIA | 315 Peffer Street | Harrisburg, PA 17102

Visit Our Website: tmia.com

#### Want to get even more involved?

Contact TMIA chairman, Eric Epstein, by emailing him at epstein@efmr.org.

### **Low Level Radioactive Waste Advisory**

#### Notes from the Committee Meeting

TMIA attended a zoom update from the Pennsylvania Department of Environmental Protection on October 2, 2020. Here is a summary of the highlights.

The Appalachian Compact Low Level Radioactive Waste (LLRW) Advisory Committee is made up of West Virginia, Delaware, Maryland and Pennsylvania. It compiles a data base of LLRW disposal but does not independently verify LLRW production or projections.

Government is the largest LLRW producer by volume measured in curies, followed by industry. Pennsylvania has the dubious distinction of generating the highest volume of any state in the Compact.

Nuclear generators in the Compact store LLRW on site. The Barnwell, SC facility, owned by Energy Solutions, closed to the Appalachian Compact in 2008. Energy Solutions purchased TMI Unit 2 under a subsidiary called TMI-2 Solutions, LLC. a private company are responsible for decommissioning TMI-2.

A Consolidated Interim Storage
Facility (CISF) for high-level waste
is proposed for Texas. The NRC
has issued a draft Environmental
Impact Statement (EIS), that can
lead to construction of that facility. n
addition, Holtec has an application to
build a LLRW facility in New Mexico.
If licensed, they facilities take a few
years to develop.

The Nuclear Regulatory Commission (NRC) has added a new definition to

include "very low radioactive waste."
TMIA, DEP and others oppose this
new definition and see it as a way
to include certain radioactive waste
in local landfills to save money.
NRC is now distinguishing low level
radioactive waste from what they
call "very low radioactive waste."

NRC Region I will oversee clean up at TMI. DEP has funding for three years for dedicated staff positions and well monitors. There is still damaged and radioactive material on site.

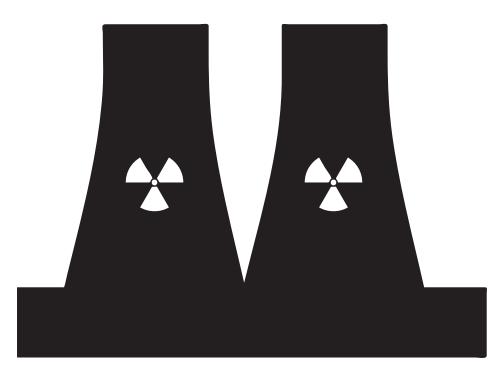
DEP raised 6 issues with the NRC regarding TMI:

- 1) Environmental, particularly regarding the fact that TMI is located on an island
- 2) Financial, particularly transferring ownership from GPU to TMI-2 Solutions

- 3) Unknown conditions of class A,B, and C waste
- 4) Radiation waste handling
- 5) Community engagement in the Decommissioning Advisory Committee
- 6) Flood potential during clean up

DEP walked through the upcoming schedule of events including the completion of decommissioning of TMI-2 and "release of site" by 2037 with the exception of a potential area set aside for waste storage.

TMI-1 will begin "Phase 3" in January 2021 which, among other things, will end emergency planning.



#### **TMI 40th Anniversary Health Survey**

For decades the official position of the U.S. government and the nuclear industry is that very little radiation was released during the March 1979 partial meltdown of Three Mile Island.

Unfortunately, that lie has been told so often it has become part of the "official science." We "human dosimeters," who live in the shadow of TMI, have long questioned "official science."

Following the accident, we learned the amount of radiation released was under-reported in official reports. Records of radiation gauges that went "off the scale" during the accident, the account of a local dentist who found all of his x-ray film fogged, and the accounts of thousands of local residents who reported a metallic taste in their mouths and other symptoms on the morning of the accident were "officially" discounted.

In the years since the accident, the evidence of ongoing health problems

has grown. Local citizens like Jane Lee and Marjorie Aamodt voluntarily surveyed their neighbors and found alarming results.

University of North Carolina epidemiologist Dr. Steven Wing conducted a study that correlated meteorological data from the time of the accident (which way the wind was blowing) with increased cancers and other adverse health effects compared to those in the area, but not under the plume.

A 2009 study in Germany found a 60 percent increase in cancers and a 120 percent increase in leukemia among children living within five kilometers of a nuclear power plant.

More recently, researchers at the Penn State Milton S. Hershey Medical Center have pointed to a possible correlation between TMI and an increase in thyroid cancers in the area surrounding the plant.

In 2011, the National Academy of Science launched a two-phase study

to look at cancer risks associated with nuclear power plants.
Unfortunately, the Nuclear Regulatory Commission managed to kill that study characterizing it too costly and taking too long.

We all know people who believe TMI has adversely affected their health. A TMI Survivors Facebook page was launched in April 2016. It has more than 3700 subscribers.

So, in the absence of an official inquiry, TMI Alert is seeking to gather information from accident victims. We are not scientists. This is not a survey designed by scientists. It is an effort to collect and document health-related data from those who survived TMI and from the next of kin and others related to TMI's victims.

Personal data collected about participants will not be made public and will only be shared with serious academic and medical researchers.

#### **Find the Health Survey Online!**



#### To fill out the survey:

- 1. Visit tmia.com.
- 2. Type "Survey" in the "Search out site" bar.
- 3. Click on the first result "TMI 40th Anniversary Health Survey."
- 4. Scroll down and click on the links to fill out either the "Survivor's Survey" or "Victim's Survey."
- 5. Fill out the "Privacy Notice/Authorization Form."

15

6. Thank you!



# Support Our Efforts to Monitor Three Mile Island

We are actively involved in advocating and litigating the following issues at Three Mile Island: cleanup funding, emergency planning, ensuring Exelon pays its fair share of taxes, financial oversight of decommissioning funds, and radioactive waste isolation.

TMIA is an active party before the Nuclear Regulatory Commission and the Susquehanna River Basin Commission.

We are working on legislation to help reactor communities transition and reinstate emergency planning at TMI.

Better Active Today Than Radioactive Tomorrow.



Take action: TMI may not be generating electricity, but the plant is been turned into a high-level radioactive waste site, and needs to be decontaminated and decommissioned. You can see from reading this newsletter, there is plenty to do.

- Please commit to annual regular donations to support our work.
- Complete the TMI Health Survey you will be receiving soon via email or go online to complete it through our website.
- Contact Kay Pickering at kaypick@comcast.net to join the Planning Council or to volunteer.
- File testimony with the PA DEP by January 14, 2021 on how to limit carbon dioxide at power plants in Pennsylvania by joining the Regional Greenhouse Gas Initiative (RGGI). Email maureenamulligan1@gmail.com for background materials.
- Follow along on NIRS website at www.nirs.org with what is happening nationally on high level waste disposal, advanced nuclear reactors, and all things nuclear power.
- Please check the TMI web site for weekly updates at: tmia.com.