

CRAFT has signed on to this letter prepared by Kevin Kamps of Beyond Nuclear, and others. We are condensing the letter here to use it as an insert. For the full letter with footnotes, click here: https://docs.google.com/document/d/10dxImQR5SiGANbaYsdf-LhCdpiQtjijq7Ub_W471RQko/edit

June 8, 2022

Dear Governor Whitmer,

On behalf of our members and supporters across the Great Lakes State and beyond, we urge you in the strongest terms to cease and desist from your efforts to bail out the Palisades atomic reactor, to return it to ever more high-risk operations till 2031. As a coalition of 34 organizations and 64 individuals wrote to you on June 19, 2020, Palisades is already infamous for its long list of safety and security problems. (1) One example is its badly embrittled reactor pressure vessel, the worst at any reactor in the U.S., and among the worst worldwide. (2) It is at risk of a pressurized thermal shock through-wall breach, which would cause a reactor core meltdown. Another example is its degraded steam generators, which were supposed to have been replaced many long years ago, but never were. Yet another example is its deteriorated reactor lid, also overdue for replacement by more than fifteen years. A steam generator tube cascading failure, or a lid breach, are also pathways to reactor core meltdown.

Entergy had previously announced permanent shutdown by October 2018 but reneged. As of May 20, 2022, Palisades has, thankfully, now shut down for good. When Consumers Energy sold Palisades to Entergy in 2007, it listed those needed repairs/replacements above as the reasons why. (3) The argument — as presented to the concerned public — went that Consumers Energy was a small company, with just a single operating atomic reactor. (Palisades' sibling reactor, Big Rock Point near Charlevoix, fortunately closed for good in 1997.) Entergy, on the other hand, was a much bigger company, with a large number of atomic reactors in its fleet. Entergy would be better positioned to make those, and other, needed safety significant repairs/replacements at Palisades, the argument went. But remarkably, in 15 long years of ever increasingly risky age-degraded operations at Palisades, Entergy never did make any of those promised repairs/replacements.

In a May 20, 2022, *Michigan Bridge* article, a Consumers Energy spokesperson admitted that the gouge on ratepayers was a whopping 57% more per megawatt-hour than the market price: *For now, Consumers Energy, which purchased power from Palisades to fuel about 10 percent of its peak demand, plans to use a mix of renewables, natural gas, coal, and power purchased from outside providers to continue delivering power despite Palisades' closure.*

"Nuclear power plants are not the best value in the current market, which is why many operators like Entergy have made the decision to leave the nuclear business," Consumers spokesperson Josh Paciorek said. "At times, electricity generated by Palisades cost roughly 57 percent more per megawatt hour than the market price." (Emphasis added) (4)

Keeping Palisades open and continuing that high price for Palisades' nuclear-generated electricity across the Consumers Energy service area translates into business going elsewhere, and in turn having a deleterious impact on job creation. It is long past time for a just transition for the Palisades workforce, and host community.

We urge Consumers Energy to pursue a more enlightened 21st Century energy policy to replace Palisades' electricity supply. Consumers should phase out fossil fuel combustion, given the worsening climate crisis. It should maximize energy efficiency, and invest in ever more affordable, genuinely clean, and safe renewable sources, such as solar and wind power, with which Michigan is amply blessed. That way, Consumers need not seek "power purchased from outside providers," but could rely instead on electricity generated by renewables, made dependable by energy storage, right here in Michigan.

Entergy has made none of the promised major repairs and replacements on safety significant systems, structures, and components at Palisades in the past 15 years. Even if many hundreds of millions of dollars of federal taxpayer money were to be wasted at Palisades, under the Civil Nuclear Credit Program, to yank it back out of its long overdue retirement, there is no requirement those funds, or any others, would be used to address the dangerously embrittled reactor pressure vessel, the degraded reactor lid, nor the worn out steam generators. This massive bailout is skewed to boost the reactor

owner's profits, to line executives' pockets, and to increase shareholder returns, all to entice whichever company owns Palisades to keep operating it till 2031, the current expiration date for its 64-year U.S. Nuclear Regulatory Commission extended operating license.

Alarming, there are yet more looming safety risks at Palisades. Entergy cited a control rod drive mechanism (CRDM) seal problem as the acute reason it shut down the reactor for good on May 20, 2022, 11 days earlier than planned.(5) As documented by David Lochbaum, nuclear engineer at Union of Concerned Scientists, in 2010, Palisades' chronic CRDM problems began just one-year into operations, in 1972, and have never been fixed since, not in a half-century. CRDMs are a very safety-significant system. (6)

Palisades has also long deferred other safety inspections and repairs, on the pretext that it was shutting down anyway. This includes current, long needed Reactor Vessel Closure Head (lid) penetration repairs. The U.S. Nuclear Regulatory Commission (NRC) has been completely captured by the industry it is supposed to regulate, permissively allowing this. Such waivers and exemptions were further exacerbated as a COVID-19 pandemic emergency contingency beginning more than two years ago. (7) It is not clear when, if ever, NRC would require these many long-deferred repairs and inspections to be done if Palisades were to continue operating till 2031.

Another glaring example is the 13 inches by 6 inches by 1 inch chunk of metal, from a fractured impeller blade, lodged in the bottom of the reactor pressure vessel. There is also documentation of other debris in the bottom of the reactor dating back to 1983. (8)

Advocacy of continued operations for nine more years is not prudent and would be tantamount to playing with fire. On October 5, 1966, at another Michigan reactor, loose metallic debris was the root cause of a partial core melt, chronicled in the book *We Almost Lost Detroit*. (9) The metal fragments blocked coolant flow to two nuclear fuel assemblies, causing their overheating and partial core-melt. Extending operation at Palisades with a chunk of impeller blade, and other metallic debris, lost within the reactor, constitutes criminal negligence.

This is not an exhaustive list of Palisades' problems. Lax security at Palisades is so infamous, it has served as a poster child: *Esquire's* May 2007 cover article, entitled "Mercenary," told the shocking story of how a fraudster lied his way into the job of chief of security at Palisades. (10)

But Palisades' insecurity had been revealed before and has been since. In September 2002, on the eve of the first anniversary of the 9/11 attacks, suspicious cars penetrated deep inside the Palisades nuclear power plant compound. Palisades' security guards phoned the wrong local law enforcement agency, resulting in a 45-minute off-site response delay, which allowed the intruding cars to escape. (11) And as revealed by whistleblowers, in the summer 2016 timeframe, overworked Palisades security guards falsified fire safety documentation, a problem that plagued multiple Entergy nuclear power plants.

Security vulnerabilities at Palisades include the highly radioactive irradiated nuclear fuel stored in the vulnerable indoor pool, and in dry cask storage outdoors. The storage of this highly radioactive waste carries the risk of catastrophic failure which could contaminate a multi-state area. (13) Whether due to safety or security failures (accident, attack, natural disaster, etc.), an operating reactor at Palisades could melt down and unleash radioactive catastrophe. So too could the highly radioactive waste stored on-site. The good news about the reactor's permanent shutdown is that once de-fueled, by definition, it can no longer melt down. Also, no more highly radioactive waste will be generated. It is now time to safeguard and secure the high-level radioactive waste stored on-site, and to clean up the widespread, hazardous radioactive contamination that extends across the entire property. To not do so would put Lake Michigan and adjacent groundwater aquifers at ongoing risk, as well as people and other living things downwind, downstream, up the food chain, and down the generations.

To restart the permanently shut down for good Palisades reactor, and at federal taxpayer expense, would fly in the face of the "sacred trust" of protecting the Great Lakes against radioactive risks, which U.S. Senator Debbie Stabenow and NRC Chairman Christopher Hanson (who hails from the South Haven area) agreed, at a recent congressional oversight hearing, is a top priority.(14)

The drinking water of 40 million persons is at stake. We request that you cease and desist from further pursuit of a massive financial bailout, at public expense and risk. Please do not return Palisades to ever more high-risk operations for another decade. Please keep the Palisades nuclear reactor shut down, support its decommissioning and the remediation of half a century of radioactive operations.

Sincerely, Kevin Kamps, Terry Lodge, Michael J. Keegan, Alice Hirt, et al