March 9, 2012

Dear U.S. Senators Levin and Stabenow,

This week marks the sixth anniversary of a U.S. Nuclear Regulatory Commission (NRC) Atomic Safety and Licensing Board’s (ASLB) decision to steamroll our opposition, and rubberstamp a 20 year license extension (2011 to 2031) at the problem-plagued Palisades atomic reactor in Covert, Michigan. Our protest of the NRC’s finalization of its license extension approval on January 17, 2007 is attached.

Given the then-dilapidated status of Palisades, it was profoundly disturbing that there was a license extension granted. In light of recent developments, it is inexcusable that Palisades is allowed to continue operations. **Palisades has now been identified by the NRC as one of the four worst plants in the US and is now the very most embrittled plant in the country.**

Palisades, located on the Lake Michigan shoreline five miles south of South Haven, has a rich history of trouble. Our concerns are manifold, from radioactive waste risks to multiple reactor safety risks, but we focus now on the serious matter of reactor pressure vessel (RPV) embrittlement.

RPV embrittlement is caused by neutron radiation bombardment of the RPV’s metal walls over time, resulting in a significant loss of ductility. In pressurized water reactors like Palisades, embrittlement risks causing Pressurized Thermal Shock (PTS). For example, if overheating occurs in the operating reactor core, the Emergency Core Cooling System (ECCS) is designed to inject cooling water, in order to prevent a meltdown. But such sudden temperature change, combined with such high pressure, could fracture an embrittled RPV like a hot glass under cold water. A fractured RPV would lead to a Loss of Coolant Accident (LOCA) which in turn can lead directly to a reactor core meltdown. The pressurized primary core cooling water would instantly turn to steam and escape the RPV through the break in the vessel and fill the containment with radioactive steam and other escaping radioactive gases and particles, all at deadly levels. If the meltdown burned its way through the containment structures, or if the large, concentrated quantity of hazardous radioactivity found other escape pathways out of containment, a catastrophic radioactivity release to the environment could occur.

The ongoing Fukushima Daiichi Nuclear Catastrophe, which began one year ago on March 11th, demonstrates that catastrophic radioactivity releases are not confined to Soviet designed reactors as at Chernobyl but also can befall Western designed reactors. Fukushima shows that we can no longer abide such risks in our midst.

Palisades is an accident waiting to happen. It must be shut down, before it melts down.

What kind of risks are we talking about? A 1982 study by Sandia National Laboratory predicted that catastrophic radioactivity releases could cause casualties and property damage downwind and downstream. For Palisades, the predictions are shocking: 1,000 “peak early fatalities,” 7,000 “peak early injuries,” 10,000 “peak cancer deaths,” and $52.6 billion in property damage. Populations have grown significantly in the past several decades, so casualties would be much worse now. When adjusted for inflation alone (not accounting for the economic development in the ensuing decades), the property damage figure would top $117 billion in 2010 dollars.

The NRC admitted just February 29, 2012 at a public meeting in South Haven that “Palisades’
vessel is the most embrittled vessel at an operating nuclear power plant” in the U.S. (Jennifer Uhle, Ph.D., NRC Office of Regulatory Research). We had long suspected as much, as the main basis of our intervention against the Palisades license extension was RPV embrittlement risk. But six years ago, the NRC ASLB steamrolled us and rubberstamped the 20 year license extension. Perhaps no reactor in the U.S. is as old and degraded as Palisades.

The NRC also admitted that night that Palisades' ECCS actually activated in the chaotic, high-risk aftermath of the September 25, 2011 accident cutting power to half the control room. Fortunately, the ECCS did not actually inject coolant into the core. This would have tested NRC’s highly questionable assurances and regulatory rollbacks on PTS, in the real world.

The public is being forced to bear the risk of Entergy’s game of radioactive Russian roulette on the Lake Michigan shoreline. What are you going to do to help us? You and your staffs never even acknowledged receipt of, let alone acted upon, the letter we sent you six years ago this month, demanding a GAO investigation of the progressive weakening of embrittlement requirements at Palisades. It was signed by 16 of Michigan’s leading environmental groups, including the Sierra Club and the Michigan Environmental Council, a coalition of 70+ constituent groups. The combined memberships of these organizations represented the views of hundreds of thousands of Michiganders. Additionally, organizations from Indiana, Illinois, Wisconsin, and Ontario also signed the letters, as well as Great Lakes United, itself a coalition of 150 groups in the U.S. and Canada, from 8 states and 2 Canadian provinces. Certainly, the concern about Palisades’ RPV embrittlement risks is widespread – and the deafening silence from your offices has left us feeling that the public has no voice in the critical issue of whether Palisades should be allowed to continue operating in such dangerous circumstances.

It is now 2012, 45 years since Palisades got its operating license. NRC has rubberstamped a risky license extension for 20 more years. It is our moral duty to plead that you address the matter of the RPV embrittlement danger. We repeat our modest request that you launch a GAO investigation, albeit six years late. We also request meetings with you, personally, by mid-April, or even sooner. We want to know what you are going to do to protect us against the overt, out-of-control, worsening risks at Palisades, starting with its embrittled RPV, the worst in the country. Please work with us to meet at your Grand Rapids offices, either separately on the same day, or jointly. Please plan on booking a room big enough to accommodate a large number of concerned citizens who will want to come.

Entergy is making a killing, while getting away with murder. We must not let the figurative become literal.

Our point of contact is Kevin Kamps with Beyond Nuclear. Please contact him at (240) 462-3216. Thank you.

Sincerely,

/s/ Corinne Carey, Don’t Waste Michigan, Grand Rapids chapter
/s/ Alice Hirt, Don’t Waste Michigan, Holland chapter
/s/ Kevin Kamps, Don’t Waste Michigan, Kalamazoo chapter
/s/ Michael Keegan, Don’t Waste Michigan, Monroe chapter
/s/ Kathryn Barnes, Don’t Waste Michigan, Sherwood chapter
/s/ Terry Lodge, Legal Counsel for Environmental Intervenors