

# STOP THE LICENSE EXTENSION OF POINT BEACH NUCLEAR REACTORS



## ABOUT

Point Beach Nuclear Power Plant (PBNP) has two reactors, Unit 1 and Unit 2. The plant is located in Manitowoc County near Two Rivers, WI on the shores of Lake Michigan. The operating company that owns Point Beach is NextEra Energy.

Unit 1 was granted an operational license in 1970 and the current license expires in 2030. Unit 2 was granted an operational license in 1973 and the current license expires in 2033. NextEra Energy has applied for a subsequent license of extension of 20 years for both reactor units. This would bring the reactors allowed life to 2050 and 2053, meaning the reactors would be in operation for 80 years.

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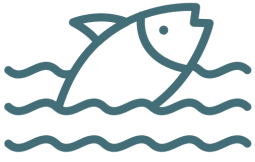
## TAKE ACTION

1. Submit comments on Draft Environmental Impact Statement (DEIS) comment process by **January 3, 2022**: Email comments to [PointBeach-SLRSEIS@nrc.gov](mailto:PointBeach-SLRSEIS@nrc.gov) {OR} visit <https://www.regulations.gov> and search for Docket ID NRC-2020-0277
2. Call or message your Federal Senators and Representatives  
Senator Tammy Baldwin (202-224-5653) [www.baldwin.senate.gov/feedback](http://www.baldwin.senate.gov/feedback)
3. Call or message Attorney General Josh Kaul - <https://www.doj.state.wi.us/ag/contact>
4. Be prepared to participate in the Wisconsin Pollutant Discharge Elimination System (WPDES) permit comment period
5. Contact PSR Wisconsin to speak with your group, organization or community

## Contact PSR Wisconsin

# CONCERNS

## Lake Michigan



Built just before the National Environmental Policy Act (NEPA) mandated cooling towers for new power plants, Point Beach Nuclear Plant (PBNP) Units 1 and 2 requires 85-95% more water than would be necessary for nuclear plants with cooling towers. This once through cooling system has high volume flow rates for intake and discharge systems that damage or destroy fish larvae and phytoplankton and delivers excess thermal heat to the natural aquatic ecosystem of Lake Michigan. PBNP units intake and then discharge an average of 915 MILLION gallons of Lake Michigan water each day. The water is returned to the lake up to 24.3 degrees Fahrenheit hotter than the seasonal lake temperature.

## Energy Costs



Based on a report from Mark Cooper, PhD, energy economist, the 2007 Purchased Power Agreement (PPA) between NextEra (owners of PBNP) and We Energies, ratepayers are paying 1.8 times the market price of electricity today and will see rates more than double over the next decade. For We Energies customers this will total excess energy costs of about five billion dollars by the end of this current licensing in 2030-2033. We understand that energy burden is a real environmental justice issue facing financially struggling Wisconsin families.

## Toxic Waste



If NextEra's request to operate Point Beach for an additional 20 years (to 2050/53) is granted, this nuclear plant will generate an additional 504 metric tons of high-level nuclear wastes in that timespan. The operation of the reactors from 1970-2017 has created an estimated 965 metric tons of waste and by the end of the current licenses in 2030/2033 there will be a total of 1,342 metric tons of waste that will remain in dry cask storage on the shore of Lake Michigan—an environmental risk to local communities for generations to come. Nuclear waste storage will continue as an excess cost to ratepayers long after Point Beach no longer produces electricity. Conversion to renewable energy along with energy conservation stops the accumulation of nuclear waste and reduces the nuclear waste storage burden for the next generation of ratepayers.

## Age & Weakness



Embrittlement is the loss of strength, ductility and resistance to cracking. In nuclear reactors, there are steel containers called reactor pressure vessels (RPV) that hold nuclear fuel when the reactor is operating. Point Beach Nuclear Plant Unit 2 was cited by the NRC in 2013 as one of the most embrittled RPVs in the United States. Embrittlement markedly increases the risk that the reactor pressure vessel could crack open if the reactor would need to be suddenly flooded with cold water during an emergency shutdown. This would release radioactivity into the air, water and soil surrounding Point Beach, contaminating the drinking water source for 10 million people.

## Climate Change



The increased concentration of bacteria and nitrates (from the last 15-year expansion of Concentrated Animal Feeding Operations in Kewanee County) and the added burden of climate change effects have further imperiled the aquatic ecosystem of Lake Michigan. Climate change increases the risk of stronger, more frequent and damaging storms and increasing fluctuation of water levels in the Great Lakes. We are especially concerned with the increased ferocity of Midwest storms demonstrated by the Iowa Derecho on August 10, 2020 that severely damaged NextEra's Duane Arnold Nuclear Plant, resulting in early closure. This has prompted NextEra to pivot their electricity production plan in Iowa to embrace renewable energy with solar panels and battery backup.