

Nuclear Energy Information Service

Illinois' Nuclear Power Watchdog since 1981

Office and Mail: 3411 W. Diversey Avenue, #13, Chicago, IL 60647-1245 (773)342-7650 www.neis.org neis@neis.org

NEIS PRESENTATION TO CHICAGO CITY COUNCIL ON CLIMATE EMERGENCY Presented by Jan Boudart, Board Member Feb. 10. 2020

I'm Jan Boudart of Nuclear Energy Information Service. We have been updating and briefing the people of Chicago since 1981 on the risks connected with the nuclear power plants that now surround Lake Michigan and other Great Lakes. These Nuclear Power Plants are also found near the rivers and lakes of central and Northern Illinois. Illinois is the most nuclear state in the Union and also harbors more High-Level Radioactive Waste than any other state. Chicago is surrounded by 8 of these risky projects within 70 miles and 3 others that we are downwind of. Please refer to the map NEIS has created illustrating this danger.

Climate disruption can have a profound effect on the safety of our nuclear power plants in significant ways with heat, flooding and drought being the most significant. Climate Disruption can affect Lake Michigan as has been identified by Mayor Lightfoot and Governor Pritzker having just this past week declared a State of Emergency regarding the Lake Michigan Shoreline in Chicago. There are 6 Nuclear Power plants (both working and dismantled) on the shores of Lake Michigan. Recent high water is a threat to the already precarious safety of these installations. Harrowing videos this winter from a police helicopter show water lapping very near the Palisades and Cook plants on the other side of the Lake from Chicago in Western Michigan.

In Zion Illinois there are many tons of High Level Radioactive Waste stored on the shoreline of Lake Michigan, 40 miles from the center of Chicago. Each of the 64 casks that holds spent fuel contains as much Cesium 137 as was released during the Chernobyl nuclear accident. Cesium 137 insinuates into organs in the body; it has a half life of 30 years and as it goes through radioactive decay it disrupts organ system in humans, animals and even plants.

Union of Concerned Scientists' David Lochbaum said in a July 1st USAToday article, "For every 10 degrees that the temperature goes up, the lifetime of the electrical equipment is reduced quite a bit. Some of your safety equipment may then just fry". Our Director, David Kraft, in an article from Inside Climate News cited a litany of examples where low water, or warm water caused millions of dollars' damage to nuclear plants forced to shut down or upgrade their safety equipment due to higher than normal temperatures. In 1988 and 2006 excessive heat or drought caused multiple nuclear power plants in Illinois to cut back production because the water was to hot or in low supply to use to cool the nuclear fuel during operation.

The HIGH LEVEL RISKs from aging Nuclear Power Plants and the thousands of tons of high-level radioactive waste that surround this city show that it is right and it is needed for the Chicago City Council to declare a climate emergency.

Thank you very much.