

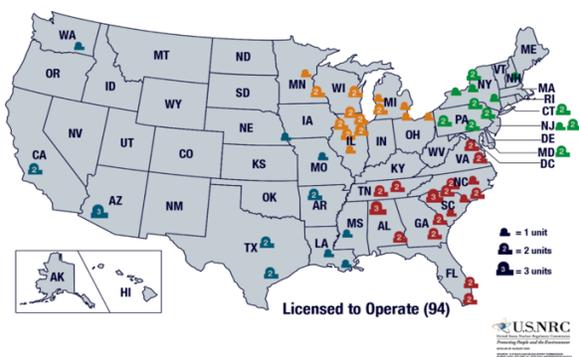
NUCLEAR PLANT DECOMMISSIONING

A New Crisis and New Opportunity for States

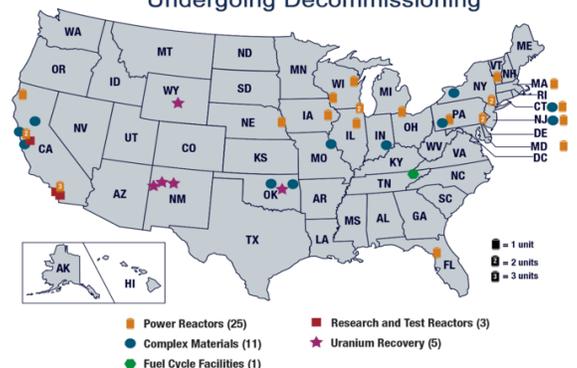
A Beyond Nuclear Fact Sheet

Nuclear plants are closing at an accelerating rate as they age and can't compete economically with natural gas and renewables, prompting nuclear owners to demand large subsidies. 20 reactors at 15 commercial nuclear power plants are either undergoing decommissioning now or will be decommissioned soon. Many more will follow in the years ahead.

U.S. Operating Commercial Nuclear Power Reactors



Locations of NRC-Regulated Sites Undergoing Decommissioning



Note: The NRC is in the final stages of the licensing process with the review of the final status survey reports of 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, and 2022. The NRC is currently reviewing the final status survey reports of 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, and 2022. For the most current information, go to the website: <https://www.nrc.gov>.



In theory, decommissioning is supposed to “restore” reactor sites to greenfield status, so they can be redeveloped. In practice, reactor sites’ land and water will remain radiologically contaminated long after decommissioning is “completed.” If reactor communities are counting on an economic boost from site redevelopment, they are likely to be disappointed. Condos or shopping malls or playgrounds will not materialize on reactor sites. In fact, they are much more likely to become *de facto* long-term storage sites for the highly radioactive nuclear waste that was generated there.

A SYSTEM OF PERVERSE INCENTIVES

Decommissioning companies have virtually no accountability to states or local governments for remediating sites to a high standard. The Nuclear Regulatory Commission, which is funded by nuclear plant owners, has jurisdiction over radiological safety issues, but NRC decommissioning requirements and oversight are already very lax, and becoming laxer. The reason decommissioning companies want to acquire closed nuclear plants, with all their problems, is because along with them, they also acquire hundreds of millions to billions of ratepayer dollars in the decommissioning trust funds (DTFs). The companies’ incentive is to remediate the sites as quickly, cheaply, and perfunctorily as possible, so they can claim DTF money left over as profit.

New actors in the market, positioning themselves as decommissioning “specialists” despite having little experience, operate on this business model, forming limited liability corporations to hold the licenses so they can insulate themselves from risk, and so parent companies won’t be responsible for bad outcomes and don’t have to put in any of their own money.

Some, such as Holtec International, have track records of failure and extensive malfeasance, as well as sidelines that encourage self-dealing and further incentivize them to make selfish, profit-driven decisions as opposed to protecting public health and safety. For example, Holtec is trying to license its own “consolidated interim storage facility” (CISF) in New Mexico where it proposes to ship high-level nuclear waste across the U.S., transferring title and liability to the Department of Energy, and profiting from federal funding for waste storage. It also has designed and is seeking licenses to build “small modular reactors” which might one day be fueled by reprocessing the nuclear waste it wants to acquire and consolidate. Given the lack of a permanent geologic repository for nuclear waste, such DOE-enabled CISFs aren’t legal under current law. But Congress is considering pending bills and allocating funds which would authorize and enable them.

WHAT STATES CAN DO TO PROTECT THEMSELVES

Suffice to say that trusting such leveraged, undercapitalized, compartmentalized companies with bad records to take responsibility for decommissioning and nuclear waste in a lax federal regulatory environment is fraught with risks and dangers. They could walk away with the job half done, leaving reactor communities and states with the costs and impacts of contaminated sites and de facto nuclear waste dumps. And their incentive to cut costs and corners could result in severe radiological accidents such as radioactive dust plumes, fuel pool fires, dry cask storage transfer accidents and leaks, or mishaps from transporting waste by barge, road or rail.

But states are far from powerless to protect themselves, and need not be at the mercy of the decommissioning companies and lax federal oversight. While the NRC has sole jurisdiction over radiological and safety issues, states have jurisdiction over how decommissioning impacts surface water, future land use, energy policy, local economies, recreation, and tourism. States also have some authority over hazardous material and toxic chemical contamination which applies to nuclear sites. Governors, comptrollers, attorneys general, public utility commissions, and other relevant state agencies can and should use their jurisdiction to assert authority over key decommissioning decisions, demand meaningful state and local input into the process, and maintain fiduciary oversight of the DTFs. States can also work with their Congressional delegations to improve oversight of the NRC, and pass laws to protect states and reactor communities.

For more details on states’ fiduciary risks from decommissioning and how they can manage them, see Beyond Nuclear’s “Backgrounder on Decommissioning Trust Funds.”