Safe energy groups call for an "autopsy" of Oyster Creek as part of decommissioning the country's oldest nuclear reactor

TAKOMA PARK, MD --The Oyster Creek nuclear power station in Lacey Township, New Jersey should undergo an “autopsy” after it closes permanently in October 2018 and begins the decommissioning process, say three groups that closely watchdog the country’s oldest nuclear power plant.

Beyond Nuclear, based in Takoma Park, MD, New Jersey Clean Water Action and GRAMMES, a New Jersey nuclear watchdog group, are calling upon the U.S. Nuclear Regulatory Commission (NRC) to oversee a strategic harvesting of aged reactor materials from safety-related components and structures to be used as samples for laboratory analyses or an “autopsy.”

Oyster Creek is presently the nation’s oldest operating power reactor and the world’s first Fukushima-style nuclear reactor, a GE Mark I boiling water design. In Japan, that design saw reactor safety systems and structures fail to prevent three reactor meltdowns nor contain massive releases of radioactivity following the March 11, 2011 earthquake and tsunami.

The groups are asking the NRC, and Chicago-based Exelon Generation which owns Oyster Creek, to harvest a variety of material samples during decommissioning, including irradiated steel and concrete from safety structures and components from the 47-year old reactor for the scientific analysis of residual safety margins.

The groups say that an Oyster Creek autopsy can provide valuable information on safety margins and potential hazards for the 21 similarly designed and aging GE Mark I reactor units still operating in the country.

“The upcoming decommissioning of Oyster Creek presents the NRC and industry with a scientifically measurable watermark for the effect of aging on reactor safety and vulnerability,” said Paul Gunter, Director of the Reactor Oversight Project at Beyond Nuclear, a national anti-nuclear and environmental advocacy group. “Oyster Creek can provide valuable information for nuclear reactors of similar design still running, such as
Pennsylvania’s Peach Bottom reactor which is making application to extend its operating license to 80 years,” he said.

“This is a tremendous opportunity to obtain real-world data on exactly what happens to metal components in nuclear reactors after being blasted with massive amounts of radiation for just shy of 50 years,” said Janet Tauro, NJ Board Chair for Clean Water Action, the state’s largest environmental organization. “What happens to those metal components is a life or death question for those living in neighborhoods near aging, rusting, nukes,” Tauro said.

“Sharing information will be integral to safety as the country moves forward with retiring aging nuclear plants,” said Jeffrey Brown, founding member of GRAMMES (Grandmothers, Mothers, and More for Energy Safety.) “Metal fatigue has routinely been cited when unplanned shutdowns have occurred. It’s time we gathered hard facts and this is our chance to do it. Citizens have spoken up, now it’s up to our elected officials to speak up for public safety,” Brown concluded.

Surprisingly few material samples have been taken from decommissioning nuclear power stations in the US. As recently as 2015, one NRC presentation claimed the dearth of scientific information on the impacts of aging was because “harvesting opportunities have been limited due to few decommissioning plants.” Currently, 10 U.S. commercial power reactors have completed decommissioning and 20 units are in progress.

The NRC presentation names Oyster Creek as a candidate for harvesting material samples to assess reactor safety component aging. However, the nuclear industry has been reluctant to cooperate with harvesting per NRC staff request for decades, such as the example of Yankee Rowe’s refusal to provide NRC-requested samples excavated from a severely embrittled reactor pressure vessel. Instead, Yankee Atomic filled the aged pressure vessel with radioactive waste and concrete and transported the component for burial without taking any archival material.

“The nuclear industry is inclined to bury its bodies without an autopsy, just based on the price tag,” said Gunter. “However, ignorance is not bliss when it comes to nuclear safety,” Gunter continued.

With scheduled closure set for October 2018, the NRC is hosting its last annual public meeting on Oyster Creek’s operational safety performance assessment on April 10th from 6:00 pm to 8:00 pm at the Holiday Inn, 152 Route 72 West, Manahawkin, NJ. The groups are calling upon the NRC to publicly provide its strategic approach to obtain component aging information from Oyster Creek.

“An autopsy of Oyster Creek has to be viewed as more than an option,” Gunter continued. “It’s a public safety requirement.”