

Limerick's safe outage during the pandemic:

A refueling success story



Before the spring outage at Limerick-1 began, Exelon Generation implemented rigorous procedures to keep its employees and contractors—and the public—safe.

By Bryan Hanson

Refueling a nuclear reactor under normal circumstances can be a challenging endeavor, with hundreds of maintenance activities and inspections to perform in a short window of time, and more than a thousand supplemental workers on-site to complete the work safely and effectively. But these are anything but normal circumstances.

In late March, while the number of confirmed COVID-19 cases continued to rise in Montgomery County, Pa., we were making final preparations to execute Exelon Generation's fifth spring refueling outage at Limerick Generating Station's Unit 1, in Pottstown, Pa. Limerick-1 is a 1,158-MWe (net) boiling water reactor.

While most of our local stakeholders were very supportive of the outage and our planned precautions, some understandably expressed concern over its potential impact on our workers and the community.

We explained why the refueling outage needed to proceed on time, primarily because Limerick's clean and reliable energy was critical to the region's response to COVID-19, powering hospitals,

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Every worker received a symptom and body temperature screening before entering the plant.

Those with 100.4° temp or symptoms consistent with CDC guidelines (cough, body aches, prolonged headache) were not allowed inside the plant.

Photos: Exelon Generation



Bryan Hanson is president and chief nuclear officer of Exelon Generation. This article first appeared in the April 26, 2020, issue of the *Times Herald*, of Montgomery County, Pa.



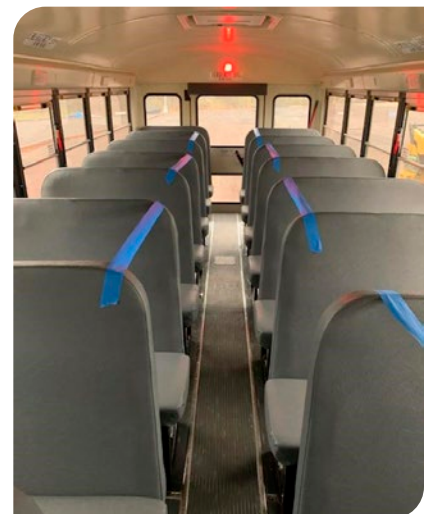


From the Limerick refuel floor, reactor engineers sat six feet apart and conducted virtual fuel rod inspections.

essential businesses, and more than two million area homes. A spring refueling outage was also vital to ensure that both units at Limerick could run at peak performance this summer as electricity demand increases. These factors were made clear by Pennsylvania Gov. Tom Wolf and the U.S. Departments of Energy and Homeland Security.

Before the outage began, the station implemented rigorous procedures to keep the public, our employees, and contractors safe. We postponed all non-essential work to limit the number of individuals on-site and followed CDC guidelines, including social distancing, use of personal protective equipment, and more frequent cleaning and disinfecting of work areas. Lastly, we required all outage workers to be aware of state and local travel, shelter, and gathering restrictions to minimize any potential spread in the community.

We also committed to execute the outage as transparently as possible, working closely to update local, county, and state officials, sharing daily information, and updating our website, social media, and the press with current cases and numbers of employees in quarantine. Operating safely, ethically, and transparently is part of our culture.



Buses that transported outage workers were required to social distance by taking every other seat in a checkerboard fashion. Workers were told at the end of each shift to obey all stay-at-home orders and to social distance off-shift.

Sixteen days later, a full two weeks faster than the U.S. average and a station record, Limerick-1 was back online, ready to generate carbon-free electricity for another two-year operating cycle. Our employees and highly skilled contractors performed all the required work safely and effectively. More importantly, we recorded only two confirmed cases of COVID-19 during the outage. I'm pleased to report that both workers are resting at home and are expected to make a full recovery.

In the end, we met our commitments to local elected officials, to our workers, and to the residents of Montgomery, Chester, and Berks Counties. We were open, honest, and transparent with our stakeholders and neighbors every step of the way, and we appreciate their support.

We could not have done it alone. We want to thank the hundreds of local businesses and contractors, as well

as national vendors and suppliers, that supported the outage. We appreciate the help from our local union halls too, and the hundreds of skilled craft workers that answered the call and performed the work safely.

COVID-19 brought some significant challenges to this year's spring outage at Limerick Generating Station, but I'm pleased to say that we met the challenge together. While our outage may be over, our commitment to health and safety never ends. Limerick employees are proud and active members of the community, and we will continue to work hard to prevent any further spread of COVID-19. That includes adhering to CDC guidelines, practicing social distancing, and doing everything possible to protect our employees and the community, every task, every shift, every day. ☒



Limerick's on-site dining services were open 24 hours a day so workers could be fed on-site to limit community interaction. Tables and chairs were removed from the cafeteria as only grab-and-go meals were offered.



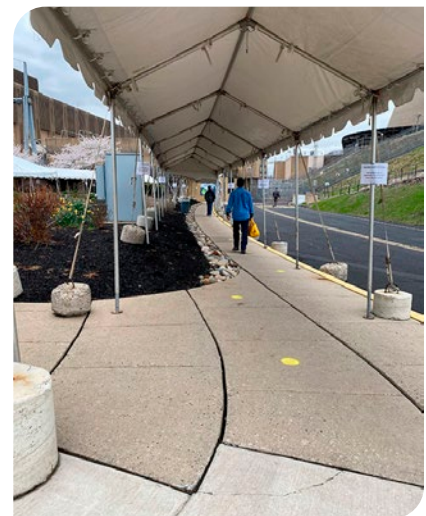
Electrostatic disinfecting and foggers were used throughout the plant, including bins in the Main Access Facility.



Updates from the field were done in large areas where there was a lot of space to maintain distance.



Portable handwashing stations were placed throughout the plant, along with hand sanitizer at entries and elevators.



Workers stood on yellow dots spaced six feet apart leading up to the Main Access Facility.