DECOMMISSIONING

Holtec to buy Oyster Creek, Pilgrim, Palisades for D&D

Forming a joint venture with SNC-Lavalin to provide accelerated decommissioning services, Holtec is the latest company to jump into the nuclear D&D market.

Hoping to expand into a nuclear plant decommissioning market estimated to exceed $14 billion over the next 10 years, Holtec International is purchasing the closing Oyster Creek, Pilgrim, and Palisades nuclear power plants to carry out prompt decontamination and decommissioning of the sites.

On July 31, Holtec and Exelon Generation jointly announced an agreement whereby Holtec will assume ownership of the Oyster Creek site, including real property and spent nuclear fuel. As the site owner, Holtec will manage all site decommissioning and restoration activities at the 625-MWe boiling water reactor plant, located in Forked River, N.J. Holtec also will take possession of Oyster Creek's decommissioning trust fund, estimated to be around $982 million. The sale of Oyster Creek is expected to close in the third quarter of 2019, pending regulatory approval by the Nuclear Regulatory Commission.

Comprehensive Decommissioning International, Holtec's joint venture with SNC-Lavalin, aims to complete the decommissioning of the Pilgrim plant by 2028.

Exelon announced in December 2010 that it would permanently cease power operations at Oyster Creek. According to Exelon's post-shutdown decommissioning activities report (PSDAR) to the NRC, released in May, the plant is to be shut down on September 17 (*NN*, Aug. 2018, p. 118). The companies said that the sale was not expected to affect the plant's scheduled shutdown.

Following the Oyster Creek announcement, Entergy announced on August 2 that it has agreed to sell the Pilgrim plant in Plymouth, Mass., and the Palisades plant near South Haven, Mich., to Holtec. The sales include the transfer of the licenses, spent fuel, and decommissioning trust funds, as well as the site of the decommissioned Big Rock Point nuclear power plant near Charlevoix, Mich., where only the independent spent fuel storage installation (ISFSI) remains. As of December 2017, there was $1.07 billion in Pilgrim's decommissioning trust fund and about $360 million in Palisades' fund.

Holtec and Entergy hope to close on the sale of Pilgrim by the end of 2019 and expect to file a license transfer request with the NRC in the fourth quarter of this year. For Palisades, the license transfer request would take place closer to its planned shutdown in the spring of 2022, with the sale closing expected by the end of that year. In addition, Entergy is seeking regulatory approval to transfer its Vermont Yankee license to NorthStar Group Services for decommissioning (*NN*, Aug. 2018, p. 119).

Citing market conditions, Entergy announced in October 2015 that it would close Pilgrim, a single-unit, 690-MWe BWR, by June 2019. Palisades, a single-

unit, 805-MWe pressurized water reactor, is scheduled to close in 2022. Entergy acquired Big Rock Point when it purchased Palisades from Consumers Energy in 2007.

Using Oyster Creek's decommissioning trust fund, Holtec said, it will accelerate the plant's D&D timeline, completing the decommissioning work within eight years. Exelon initially had said that it would decommission Oyster Creek using the NRC's 60-year SAFSTOR method at a cost of about $1.1 billion. Holtec will submit a new Oyster Creek PSDAR to the NRC for review and approval. Under the current PSDAR, Oyster Creek's spent nuclear fuel will be moved to dry cask storage by 2024.

Holtec also intends to complete all major D&D work at Pilgrim in eight years, beginning in 2020. A timeline for decommissioning Palisades will be developed closer to its shutdown. For both Pilgrim and Palisades, Holtec expects to move all of the spent fuel out of the spent fuel pools and into dry cask storage within approximately three years of the plants' respective shutdowns.

To decommission the three plants, Holtec has formed a joint venture with Montreal-based SNC-Lavalin: Comprehensive Decommissioning International (CDI), which will be headquartered with Holtec in Camden, N.J. According to the companies, CDI is equipped to cut the total time required to release plant sites, excluding the ISFSIs, for unrestricted use to eight years or fewer, pending regulatory approvals.

Kris Singh, president and chief executive officer of Holtec, said in a statement, "This joint venture expands our existing collaboration with SNC-Lavalin on our small modular reactor, the SMR-160, to the decontamination and decommissioning sector of the nuclear industry. We will leverage our used fuel storage and transport expertise, now in use by 110 nuclear reactors around the world, to pave the way for what we call prompt decommissioning."

Holtec is also currently seeking to license a consolidated interim storage facility for commercial spent fuel near Carlsbad, N.M. According to Holtec, once the facility is licensed by the NRC, fuel could be sent there based on the established use of interim storage locations by the federal government. This would allow Holtec to return decommissioned plant sites to unrestricted use after the spent fuel has been transported off-site.