

Holtec's 1,500th Dry Storage System Safely Loaded at Ameren Missouri's Callaway Energy Center's Below-Ground Storage Facility

Holtec International is pleased to announce the successful loading last week of its 1,500th spent fuel dry storage system. Number 1,500 was loaded as part of the ongoing campaign at Ameren Missouri's Callaway Energy Center. Holtec's state-of-the-art HI-STORM UMAX subterranean dry storage system has been in service at Callaway since 2015. The MPC-37 multi-purpose canister, which utilizes a basket made entirely of Holtec's patented Metamic-HT material, developed and used for its maximum heat rejection capabilities, is used to place 37 pressurized water reactor assemblies into each HI-STORM UMAX vertical ventilated module.

"There has been a strong collaboration between our teams and I truly appreciate the strong focus on doing the work safely, correctly and to the highest standards of excellence," said Fadi Diya, Senior Vice President and Chief Nuclear Officer of Ameren Missouri.

"Just as we shared the milestone in 2015 of deploying the world's first subterranean dry storage system under a general license, we are proud to share this milestone with Ameren," says Pierre Oneid, Holtec's Senior Vice President and Chief Nuclear Officer. "Holtec is dedicated to continuing its leadership of the nuclear industry in innovation to meet the fuel storage needs of our industry partners."

Greg Klein, Ameren's Project Manager of Dry Cask Storage at the Callaway Energy Center said, "Thank you to the Holtec leadership for supporting this current third loading campaign. It is exciting to be part of the historic milestone for loading the 1,500th canister. It has been a great partnership from the beginning, from building and then loading the first HI-STORM UMAX underground storage system back in 2015."



Holtec's 1,500th Canister Being Positioned to be Safely Placed into the HI-STORM UMAX System at Ameren Missouri's Callaway Energy Center

Callaway's first MPC was loaded by the Holtec and Ameren Team, marking the industry's first HI-STORM UMAX deployment and successor of Holtec's underground system installed at PG&E's Humboldt Bay in 2008.

The HI-STORM UMAX subterranean storage system is also installed at Southern California Edison's San Onofre Nuclear Generating Station (SONGS). The site's 73rd and final multi-purpose canister was placed into storage in 2020.



HI-STORM UMAX ISFSI at Ameren Missouri's Callaway Energy Center

Holtec's HI-STORE Consolidated Interim Storage Facility (CISF), currently undergoing licensing for deployment in New Mexico, will feature the proven HI-STORM UMAX technology. A licensing decision by the Nuclear Regulatory Commission is expected by the middle of this summer. HI-STORE would provide a supremely safe, secure, retrievable and centralized facility for storing spent nuclear fuel for an interim period instead of the dispersed storage at multiple nuclear plant sites around the country.

Holtec began its quest to develop safe, innovative technologies in the late 1980s and played a preeminent role in the nuclear industry by expanding the wet spent fuel storage capacity at over 110 nuclear units around the world. Holtec then launched its dry storage and transport cask product line in the early 1990s. Today, Holtec's dry storage and transport product line is protected by over 130 US patents (excluding those issued by foreign jurisdictions) serving a global client base of 137 nuclear units. Virtually all equipment being built in our three manufacturing plants has one or more innovations embedded in it.

Holtec's innovations in dry storage include the industry's first multi-purpose canister, the first dual purpose metal cask, the first transport cask qualified for high burn-up and mixed-oxide fuel, and the first double wall canister. Cutting edge innovations also include using a robotic welder that reduces dose to workers and executing manufacturing processes that protect the surface of the canister and improve and extend a canister's service life. Another innovative development is the laser peening of the weld seams, which eliminates a root cause of canister stress corrosion at marine sites further extending a canister's service life.

Our readers can be sure that the stream of innovations that have characterized us and propelled our growth in the past will continue to be the mainstay of our future business successes.