Holtec International

Holtec International announced in August 2019 that the NRC had certified its HI-STAR 100MB transport cask, which the company said is “destined to become America’s workhorse for transporting used nuclear fuel.” Holtec added that it expects the cask to be employed to transport spent fuel of all different sizes and lengths from nuclear power plants around the country to its proposed interim storage facility in New Mexico, or directly to a repository.

Part of Holtec’s line of HI-STAR metal casks, the 100MB cask is an enhanced version of the company’s HI-STAR 100 transport cask, which was initially licensed in 1998. The 100MB has been engineered to ship radioactive materials packaged in a multipurpose canister (MPC) or in a bare basket, as well as transport both moderate-burnup or high-burnup fuel in the various sizes used by light water reactors, and to transport fuel with as little as 3.5 years of decay after discharge from the reactor.

The 100MB also shares many design elements with Holtec’s recently licensed HI-STAR 190 universal cask, a larger cask intended to transport the extra-large canisters deployed in the last five years, as well as some large legacy waste canisters. The 100MB cask uses similar gamma shielding material and design as the 190, and the type and placement of the neutron shielding material in the 100MB is identical to that used in the 190. The impact limiters of the 100MB are also similar to those of the 190 cask.

According to Holtec, the certification of the 100MB cask at present includes the allowance of MPC-32M high-capacity canister and F-24M and F-32M baskets, all using Metamic-HT as basket material for optimal performance. The cask, however, is sized to hold any canister loaded in the industry up to 68.5 inches in diameter, which covers most canisters commissioned into dry storage in the United States before 2014, the company said. Holtec also said that it is continually developing and imple-