

# HOLTEC HIGHLIGHTS

A Summary Report to Our Clients, Suppliers, and Company Personnel

## THREE YEARS!

We are pleased to report that Holtec International will submit a license amendment request (LAR) by Labor Day 2011 to enable the transfer of *high burnup* fuel with as little as three years cooling from the spent fuel pools into dry storage. This LAR will be submitted on the docket for Holtec's HI-STORM FW MPC Storage System. As we reported earlier (Holtec Highlights 26.09), the HI-STORM FW MPC Storage System received its initial Certificate of Compliance from the USNRC on June 13, 2011 (USNRC Docket No. 72-1032). The presently approved certificate contains one regionalized heat load pattern for the MPC-37 and one for the MPC-89 and focuses on plants that have a broad mix of "new" and "old" spent fuel assemblies in their spent fuel pools.

This LAR proposes heat load patterns for the HI-STORM FW to accommodate plants that have loaded canisters with predominantly low decay heat fuel assemblies over the years, and have thus substantially depleted the number of cold fuel assemblies remaining in their pool inventory. This LAR has also been prompted by the cataclysmic events at Fukushima Daiichi which indicates that a more rapid movement of used fuel in wet storage to dry storage may be the preferred approach. Holtec has informed SFST of the upcoming submittal on the HI-STORM FW docket and will be requesting an expedited review.

The preliminary safety analyses results show that fuel assemblies with decay heat at 2 kW (PWR) and 0.9 kW (BWR) can be stored in MPC-37 and MPC-89, respectively, with peak fuel cladding temperatures (PCT) in the range of 715°F. This is essentially in the same range as the maximum PCT for the currently licensed heat load patterns and well below the 752°F regulatory limit for normal long-term storage.

The LAR for the HI-STORM FW alternate heat load patterns to enable loading of the three-year cooled fuel with *high burnup* will call upon only one discipline (thermal) review and would thus consume minimal NRC resources. Its impact on our system users, however, will be significant because it would give them much greater latitude in deciding when to transfer fuel from wet to dry storage.

The ability to load high *burnup* spent fuel with three-year cooling time is made possible by use of METAMIC-HT as the basket material for the HI-STORM FW multi-purpose canister. The regulatory approval of METAMIC-HT as the sole constituent of the fuel basket for the HI-STAR 180 dual purpose cask occurred in 2009 followed by licensing of MPC-37 and MPC-89 in the HI-STORM FW this year. Another licensing approval of a METAMIC-HT bearing basket (MPC-68M in the HI-STORM 100 docket) is expected to be imminent.

Holtec International has successfully completed the commissioning of the 28 million dollar manufacturing facility in Orville, Ohio (named Orrvilon) for manufacturing METAMIC-HT in large quantities.



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