

Indian Point Energy Center

Buchanan,
New York

Dry Cask Storage

The IPEC Dry Cask Storage team is reaching the end of a 35-month strategic effort to transfer spent fuel from wet to dry storage. Preparations to remove the fuel from the Unit 2 spent fuel pool, and place it in leakproof steel and concrete casks are complete and the first fuel moves occurred the first week of Jan. 2008.



The new fuel handling gantry-cantilever crane was installed in the Unit 2 fuel storage building loading bay in the summer of 2007.

A new 110 ton gantry crane was fabricated in Seattle, Wash. and it was installed in the Unit 2 fuel storage building loading bay, in the summer of 2007. Other critical components fabricated for IPEC include a heavy-haul transporter for the casks, and the casks themselves, along with tools and equipment that are used to move them.

Why Dry Cask Storage?

Like many nuclear power plants across the country, the Indian Point spent fuel pools are filling up. Indian Point will use the onsite Independent Spent Fuel Storage Installation as an interim measure until a national repository in Yucca Mountain, Nev. is made available.



Hi-Storm casks will be used to store fuel from Units 1, 2 and 3. The casks will be moved to the spent fuel buildings as they are needed for fuel transfer.

ISFSI Pad Construction

The ISFSI pad that will house the loaded Hi-Storm storage casks, is approximately 100' wide x 200' long and located north of Unit 2. The pad is shown above. The casks and pad are located within the site's protected area fence. Approximately 480 truckloads of concrete and some 21 miles of rebar were used to form the 2 ½ foot thick pad. A six foot thick bed of compressed engineered fill (about 11,000 tons), provides a foundation for the pad and acts as a shock absorber in the event of any nearby seismic activity. Concrete was mixed on site to avoid excessive truck traffic through the surrounding community.

Recent Activities

Unit 2 fuel storage building modifications were completed in the Fall of 2007. This includes installation of the 110 ton gantry crane, modifications to the fuel storage building loading bay floor and training site personnel to own and perform the cask loading process. Transfer of the first fuel assemblies into three dry storage casks will be complete in Jan. 2008. The ISFSI will be used to store Unit 3 fuel as well.

