Connecticut Yankee ISFSI Site Visit
June 26, 2015

NDCAP members and staff attending: Chair Kate O'Connor; Members Dave Andrews, Chris Campany, Bill Irwin, Jim Matteau and Steve Skibniowsky; and staff Tony Lieshinskie. Following is a bullet list of main points taken, along with very helpful technical additions by Tony (those notes are in italics).

- Our hosts at the site were Brantley (Brant) Buerger, CY ISFSI Manager, and Robert (Bob) Capstick, Directory of Regulatory Affairs for the Yankee Companies.
- The visit included a brief orientation meeting, a visit and discussion at the ISFSI site, and a wrap up discussion.
- The site cleanup was completed in 2007 (see chart and note).

Yankee Atomic Plants; Shutdown & DECON Timelines

Source: http://www.meredithnewin.com/yankee_decommissioning.pdf for CY, MY & YR

	Connecticut Yankee	Maine Yankee	Yankee Rowe	Vermont Yankee
Operation Begins	1968	1972	1960	1972
Shut Down	1996	1997	1992	2014
Years in Service	28	25	32	42
DECON begins	1998	1998	1992	?
DECON Complete	2007	2005	2007	?
Years for DECON	9	7	15	?
Years Shut Down to DECON Complete	11	8	15	?

Note: The 2007 date for the CY site clean-up completion is the date that the NRC released CY from its Reactor Operating / Possession (10 CFR 50) license. Technically, site clean-up to Connecticut state environmental standards is still on-going. It is expected that CT will release the portions of the CY site not required for the CY ISFSI for unrestricted use sometime this year. (I intend to learn more about this. The NRC reports that a total of 10 former power reactors have completed decommissioning / license release, including CY, Maine Yankee & Yankee Rowe. However, Brant noted that once the CY site receives its formal release for unrestricted use from Connecticut, it will be only the second former power reactor site released for unrestricted "green field" use. The other released site is Fort St. Vrain, a former high temperature, gas-cooled reactor in Colorado that was converted to a gas-fired power station).

- Current staff are 2 FT and several PT, mostly security.
- Important maintenance tasks include monitoring vents and clearing if needed to avoid loss of airflow and overheating.

- Staff operates on what they call a "fire house model", in which each person takes responsibility for several tasks and functions. A primary reason is to avoid the boredom that likely would result from doing long repetitive tasks in a quiet, isolated environment.
  - Related to the above, each guard spends 1 hour at a time in the security building, rotating out to other jobs.

- The DFS system is NAC, vertical casks similar to Holtec. (http://www.nacintl.com)
  Note: DFS / Dry Cask Storage System: one significant difference between Holtec and NAC dry casks is that the Holtec overpack casks include both an inner and outer steel casing. The NAC overpacks (used at CY) do not have an outer steel casing. Also (something I learned from Joe Lynch this week, who previously worked on CY's decommissioning), NAC's cask moving system is considerably different than Holtec's. NAC's system moves the casks to an ISFSI via a specialized tractor-trailer vehicle. Holtec's moving system, nicknamed 'Cletus,' is reminiscent of the tracked vehicle NASA used to move space shuttles and Saturn V rockets to Cape Canaveral launch pads.

- The site's annual operating budget is $10 million.

- The owner controlled area is a 300 meter radius.
  - 100 meters is the minimum requirement. Site conditions, including the presence of the former discharge canal, made the larger area desirable.
    Note: The minimum Owner Controlled Area radius of 100 meters is required by 10 CFR 72.106. An additional reason for CY implementing a 300 meter (~985 feet) radius OCA was based on the results of a "cask breech" accident analysis. A similarly large OCA radius at VY could present problems due to the proximity of Vernon Elementary School and might also raise boating access issues on the Connecticut River similar to those noted for CY's former discharge canal.

- The total site is 525 acres, of which the ISFSI is 5 acres.

- The specific facility site was excavated 3 feet and backfilled.
  - A major exception is the exact location of the reactor building itself, which was leveled and mounded with 3 feet of gravel.
  - It was noted that locating the ISFSI well away from the facility made decommissioning easier.
    Note: Potential future CY site use: It was noted that during CY's active decommissioning, there were parallel efforts to redevelop the site as a gas-fired or alternate fuel source electric generating station. (This factored into the decision to locate the ISFSI considerably away from the reactor facilities.) These efforts collapsed during the 2008 Recession. There are currently no efforts for any site redevelopment.

- The site manager stated that CY found prompt decommissioning to be the superior option for reasons of:
  - lower cost;
  - institutional memory;
  - community benefit; and
  - potential future use.

CEO Wayne Norton had planned to join the meeting by phone but was unable to do so. He wrote an experience report about the Maine, Connecticut and Rowe Yankee stations which is available here: http://www.meredithangwin.com/yankee_decommissioning.pdf

Two handouts were received during the site visit, and they are attached.