

## **Accidents and Breakdowns at “Vermont Yankee”**

*There have been many “minor” accidents at the Entergy Corporation’s “Vermont Yankee” 37-year-old nuclear reactor due to age, a 20% power increase beyond its original design capacity, and cost-cutting measures resulting in deferred maintenance. A partial list since September of 2004 includes:*

- radioactive fuel rods “lost” for 3 months (September ’04);
- transformer fire (June ’05); cracks discovered in the steam dryer (November ’05);
- “hot” shipment that left VY four times more radioactive than allowable federal limits (August ’06);
- cooling tower collapse and automatic shutdown of reactor due to stuck valve (August ’07);
- malfunctioning crane drops cask of high-level spent fuel four inches onto concrete floor of spent fuel area (May ’08);
- discovery of inadequate “fix” of previous year’s cooling tower collapse (July ’08); more cooling tower leaks discovered (September ’08);
- excess radiation exposure forces temporary evacuation of 12 workers (August ’08);
- excess radiation exposure forces temporary evacuation of 25 workers (October ’08);
- discovery of inadequate cooling tower support brackets (October ’08);
- new cracks found in reactor’s steam dryer (November ’08);
- Atomic Safety and Licensing Board (ASLB) finding of inadequate testing of critical spray nozzles for metal fatigue (November ’08);
- temporary breakdown of emergency phone system (December ’08);
- temporary breakdown of emergency radio alert system (December ’08);
- two back-to-back leaks within two days of radioactive water inside the plant, with the latter occurring in a “safety-sensitive” area, causing emergency repairs and a 60% reduction of power (January ’09);

- another leak (not radioactive), this time in switchyard, resulting in 30% power reduction (January '09);
- federal report says Entergy finds radioactive contamination of soil surrounding reactor requiring removal of 135,000 cubic feet at a cost of \$9.1 million once reactor shuts down (February '09);
- with apologies to VT legislators for recent leaks of radioactive water, Entergy says it has replaced its VY site vice-president, general manager, and site manager (February '09);
- January '09 radioactive “steam” leak continues after two unsuccessful repair attempts (February '09);
- Entergy reports another radioactive leak, the third of 2009, and says one of the earlier leaks (after three months of spilling thousands of gallons of radioactive water) was finally fixed a week before this latest leak (April '09).
- The U.S. Nuclear Regulatory Commission (NRC) reports that technicians at Vermont Yankee mishandled a safety issue in the plant’s coolant injection system when, faced with a delay in getting replacement parts for electrical contacts, they failed to take timely, appropriate action (June '09).
- Another leak is reported in the condenser that cools steam before returning it to the reactor as water (following a similar leak in April 2008 that technicians were unable to find), forcing a planned reduction of power “in the next several weeks” so that workers can attempt to locate and repair the leak until a new condenser (estimated to cost \$100 million) can be installed in 2013 or 2014 (June '09).
- Emergency radio, cell phones , and land lines belonging to Town of Brattleboro fail to work during federal disaster preparedness drill designed to determine whether residents of towns near reactor would need to evacuate in the event of a radiation emergency (June '09).

***QUESTION: How long will it be before a “minor” accident turns into a “major” one, with catastrophic consequences for a major portion of New England?***

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(rk – June 2009)