

Entergy's Pilgrim Nuclear: Key Findings and Recommendations

NGRP Elevation Analysis Report, February 2015

Background: Entergy's Pilgrim Nuclear Power Station is located directly on Cape Cod Bay. During the historic January 2015 Nor'easter nicknamed "Juno" Pilgrim was forced into emergency shutdown.¹ Climate change patterns threaten the infrastructure Pilgrim relies on for daily operations and outside storage of high-level nuclear waste. This waste was just moved to a concrete pad about 175 feet from the shoreline, where it will be stored for hundreds of years or longer.²

Decision-making by Entergy and the U.S. Nuclear Regulatory Commission (NRC) is impaired because it is based on site and sea level data going back to the 1960s.

Jones River Watershed Association's report by Northeast Geospatial Research Professionals (NGRP) recommends that Entergy conduct a new site evaluation to ensure that accurate information is used in management and regulatory decision-making.

Key Findings of JRWA & the NGRP Report:

- Entergy's most current plans merely add to outdated information from 1968. The plans do not reflect current topographical elevations and do not provide a basis for evaluating the site's relation to sea level. **Mean sea level in 2015 is more than 6 in. higher than in 1968.**
- The height of the **breakwater jetties and other elevations at Pilgrim appear significantly lower** than shown on Entergy plans when using the most current elevation data.
- Entergy plans use mixed and outdated standards of measurements for vertical elevations and water levels. NGRP found **discrepancies in vertical benchmarks ranging from +4 in. to (minus) 15 ft.**³

Recommendation: Entergy should do a professional, comprehensive land survey and flood assessment of the entire Pilgrim Reactor Protected Area that provides reliable benchmarks and sea level predictions for storm tides, surge, and waves.

For more information, visit www.jonesriver.org/pilgrim-elevation-analysis

¹ NRC Event reports on three mechanical failures relating to shutdown are available at <http://www.nrc.gov/info-finder/reactor/pilg.html>; Pilgrim Event Reports: # 50769, 1/27/15 at 0402 hours (Automatic Reactor SCRAM on Turbine Trip Due to Loss of Offsite Power); #50771, 1/27/15 (Loss of High Pressure Coolant Injection); # 50790, 2/5/15 report for event on 1/27/15 (Loss of Sea Water Intake Bay Level Instrumentation Due to Loss of Instrument Air).

² <<http://www.capecodbaywatch.org/radioactive-waste/>>

³ NGRP Report, Appendix C, available at:
<www.capecodbaywatch.org/wp-content/uploads/2015/02/Elevation_Analysis2015_COMPLETE_FINAL.pdf>