

Pilgrim's Future

Jim Lampert

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Entergy's and Plymouth's Interests

- Plymouth's interests are to:
 - Protect the health and safety of the town,
 - Have Entergy, not Plymouth taxpayers, pay for the costs that will result from long-term storage of spent fuel at Pilgrim.
- Entergy's interest to make a profit and satisfy its shareholders
- Entergy will do only what the NRC requires.
 - For Entergy, costs are critical.
 - NRC “guidance” is not a “requirement.”
 - The NRC often waives, or changes, its “requirements.”

Pilgrim's Nuclear Fuel Three Time Frames

- While Pilgrim remains in operation
 - About 3300 assemblies in the spent fuel pool
 - 580 assemblies in the reactor
 - About 194 assemblies will be put into dry casks every two years
- After Pilgrim ceases operations
 - About 3900 assemblies of spent fuel in the spent fuel pool.
 - Likely until 2092; the spent fuel pool will be about 125 years old
 - No additional fuel assemblies moved into dry casks.
- 2092 and indefinitely thereafter.....
 - All spent fuel assemblies will have been moved out of the spent fuel pool into dry casks.
 - There will be at least 60, and perhaps more than 90, dry casks stored on an outside concrete pad.

Moving Spent Fuel

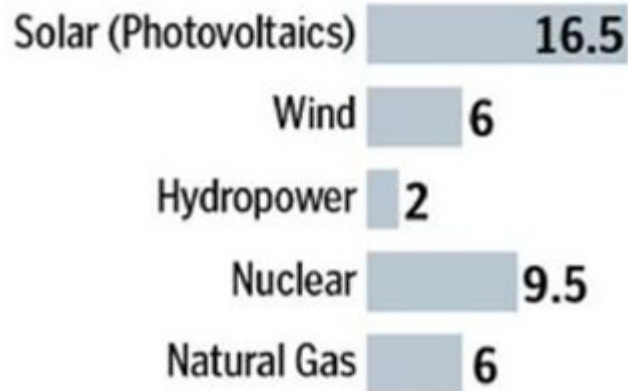
- The NRC likely will not require Entergy to have all spent fuel assemblies out of the spent fuel pool and into dry casks before 2092.
 - The spent fuel pool will then be about 125 years old.
- Entergy could decide to move assemblies from the pool into dry casks earlier.
 - It will make this decision on the basis of economics, not safety.
- No one knows how long dry casks of spent nuclear fuel will remain on-site at Pilgrim
 - The NRC envisions that spent fuel may need to be stored on-site indefinitely, perhaps “forever.”
 - Dry casks and pads would be replaced every 100 years.

Potential Sources of Risk

- Continued Operation
 - Possibly a risk until 2032
 - But Pilgrim may close down earlier
- Spent Fuel Pool
 - A potential risk so long as Pilgrim remains in operation, and
 - Potentially for the next 79 years
- Dry Casks
 - Probably beginning in 2014 or 2015, and
 - For an indefinite and unknown period of time thereafter

Continued Operation?

COST OF ELECTRICITY In cents per kilowatt



SOURCE: National Hydropower Association
GLOBE STAFF

Pilgrim Cash Flow

Year	Revenue	Costs	\$Margin	%Margin
2013	\$233M	\$260M	-\$ 27M	- 11.7%
2014	\$249M	\$279M	-\$ 30M	- 11.9%
2015	\$239M	\$267M	-\$ 28M	- 11.6%
2016	\$244M	\$272M	-\$ 28M	- 11.4%

Source: Nuclear Information & Resource Service,
Based on UBS Report

The Risks from Continued Operation

- Will Entergy to make the investments in personnel, repairs and maintenance that are needed to safely run an over-40 years old reactor that may be closed within a few years?
- There are already signs of insufficient repairs and preventative maintenance
 - 18 Event Reports to the NRC so far this year. The vast majority were equipment related.
 - Pilgrim's number of shutdowns this year is more than ten times the national average.
- As a result, the NRC has dropped Pilgrim's performance rating once, and probably will to drop it again in a month or so.
 - Each drop indicates more failures of increasing safety significance.
 - Each drop is supposed to lead to increased NRC regulatory action including more inspections and NRC involvement in managing Pilgrim.
- The risks of an aging, progressively failing plant likely will remain so long as Pilgrim continues to operate

Risk from Spent Fuel Pool Fire

- Pilgrim is likely to have a spent fuel pool crowded with more than 3300 spent fuel assemblies until 2092; i.e., for the next 79 years.
 - This risk will not go away when Pilgrim shuts down.
 - In fact, the pool will become more crowded when Pilgrim shuts down.
- The Massachusetts Attorney General's Expert said that a fire could cause \$488,000,000,000 in damages, and 24,00 latent cancers.
- The NRC admits that there could be major consequences if there was a spent fuel accident.

Dry Cask Risks

- The general consensus is that dry cask storage is significantly safer than storage of spent fuel assemblies in the spent fuel pool.
 - But the risk is not zero.
- Once the spent fuel pool is empty, Plymouth will have to provide its own emergency planning.
 - Entergy would not be required to maintain offsite systems to warn the public.
 - The typically reduced staff at Pilgrim would have to rely on offsite, i.e., Plymouth, assistance for fire, security, medical or other emergencies.
- Who is going to pay to properly maintain the dry casks and keep them safe for perhaps hundreds of years?

The Land Court Litigation

- The only goal of the litigation is to require Entergy to seek a special permit for its planned dry cask storage facility.
 - The goal is not to shut Pilgrim down, or to prevent spent fuel from being moved out of the pool into dry casks.
- The reason for the appeal is that the Plymouth Director of Inspectional Services and Zoning Board of Appeals said that the Town and its citizens have no say in how that long-term spent fuel storage facility will be built and operated.
 - The special permit process would require an open, public hearing at which you can be heard.
 - The special process allows ZBA to set appropriate conditions that would make for a better site and insure that Town is not stuck with the bill.
- The case could go on for 2 or more years.
- If we are successful, it will be up to Plymouth and its citizens to convince the ZBA to do what it should.