UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of Docket # 50-293-LR

Entergy Corporation

Pilgrim Nuclear Power Station

License Renewal Application March 2, 2012

PILGRIM WATCH'S SUPPLEMENT TO PILGRIM WATCH PETITION FOR REVIEW OF LBP-12-01

Pilgrim Watch ("PW") through its *pro se* representative, Mary Lampert, respectfully submits the attached new information, *Scientists: Far more cesium released than previously believed*, Akiko Okazaki, Asahi Shimbun, February 29, 2012 believed by PW to be new, significant and material to U.S. Nuclear Regulatory Commission's ("Commission") consideration of PW's Petitions for Review of LBP- 12-01, currently before the Commission, and relevant to the Commission's obligation under NEPA. PW requests that it be included in the record.

Respectfully submitted,

Mary lampert

(Signed Electronically)

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March 2, 2012

ATTACHMENT

Scientists: Far more cesium released than previously believed,[1] February 29, 2012 -By Akiko Okazaki / Staff Writer Asahi Shimbun

A mind-boggling 40,000 trillion becquerels of radioactive cesium, or twice the amount previously thought, may have spewed from the crippled Fukushima No. 1 nuclear power plant after the March 11 disaster, scientists say.

Michio Aoyama, a senior researcher at the Meteorological Research Institute, released the finding at a scientific symposium in Tsukuba, Ibaraki Prefecture, on Feb. 28.

The figure, which represents about 20 percent of the discharge during the 1986 Chernobyl nuclear disaster, is twice as large as previous estimates by research institutions both in Japan and overseas.

It was calculated on the basis of radioactive content of seawater sampled at 79 locations in the north Pacific and is thought to more accurately reflect reality than previous simulation results.

Scientists believe that around 30 percent of the radioactive substances discharged during the crisis ended up on land, while the rest fell on the sea.

This makes it especially difficult to accurately evaluate the total amount of radioactive materials released. Thus, seaborne data is essential to the process.

The scientists measured cesium concentrations in seawater as of April and May last year. They then used a model of diffusion in the atmosphere and the oceans to evaluate the total amount of cesium released. The calculation produced estimates of 30-40 quadrillion becquerels.

The researchers also estimated that 24-30 quadrillion becquerels of that cesium reached the sea.

That combines the roughly 70 percent of the total discharge, which is thought to have reached the ocean, and the cesium content of radioactive water that Tokyo Electric Power Co., the nuclear plant operator, released from the plant to the sea.

While the latest study said 15-20 quadrillion becquerels of cesium-137 was released into the atmosphere, the Japan Atomic Energy Agency estimated the amount at 8.8 quadrillion becquerels. Similar data released by other researchers both in Japan and overseas ranged between 7 quadrillion and 35 quadrillion becquerels.

In the meantime, TEPCO on Feb. 28 began pouring cement on a trial basis from a marine

[1] http://ajw.asahi.com/article/0311disaster/fukushima/AJ201202290025

platform onto the seabed in the port at the Fukushima No. 1 nuclear plant. The work is intended to cover 7 hectares of seabed inside the breakwaters.

The aim is to prevent radioactive cesium that accumulated there from spreading offshore. The project is expected to take 3-4 months to finish.

During the trial, TEPCO will determine what thickness of cement cover is effective for the purpose. Choppy waters due to adverse weather conditions had obstructed the work.

By AKIKO OKAZAKI / Staff Writer