

August 10, 2011

The Honorable Daniel A. Wolf
Massachusetts State Senator
Cape and Islands District
State House, Room 511B
Boston, MA 02133

SUBJECT: RELICENSING OF PILGRIM NUCLEAR POWER PLANT

Dear Senator Wolf:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter of July 12, 2011, to Chairman Gregory B. Jaczko in which you expressed concerns about the safety of extended operation of Pilgrim Nuclear Power Station (Pilgrim). In particular, you requested that the Nuclear Regulatory Commission not grant the license renewal application filed by Pilgrim unless certain issues are more fully addressed. The issues raised in your letter include: the safety of wet storage for spent fuel rods; the adequacy of the 10-mile Emergency Planning Zone; the lack of a credible comprehensive evacuation plan to evacuate residents of Cape Cod; and, the advisability of permitting Pilgrim to operate for an additional 20 years using old technology.

The Pilgrim license renewal proceeding is presently pending before an Atomic Safety and Licensing Board (Licensing Board) and the Commission. Under Commission regulations, the Commission has an adjudicatory role in the Pilgrim license renewal proceeding. An appeal and a separate petition are currently pending before the Commission with respect to the license renewal proceeding. There are also additional issues pending before the Licensing Board, including one relating to the spent fuel wet storage, which may also come before the Commission. Due to the nature of the Commission's role, all members of the Commission must remain impartial while the case is pending. At this time, therefore, the Chairman cannot discuss or comment on the issues involved in this matter. The Chairman may, however, discuss the status of the proceeding and the performance of the facility in general.

A copy of your letter and this response will be served on the participants in the Pilgrim proceeding and will be referred to the Executive Director of Operations, William Borchardt, for review.

Sincerely,

/RA/

Andrew L. Bates
Acting Secretary

cc: Pilgrim Service List



COMMONWEALTH OF MASSACHUSETTS
THE GENERAL COURT
STATE HOUSE, BOSTON 02133-1053

The Honorable Steven Chu
Secretary
U.S. Department of Energy
1000 Independence Avenue SW
Washington, D.C. 20585

The Honorable Gregory B. Jaczko
Chairman
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

July 12, 2011

Re: Relicensing of Pilgrim Nuclear Power Plant

Dear Secretary Chu and Chairman Jaczko:

As the Massachusetts State Senator from the Cape and Islands in Southeastern Massachusetts, I represent constituents from most of Cape Cod and all of Martha's Vineyard and Nantucket who live in close proximity to and generally east of the Pilgrim Nuclear Power Station in Plymouth, Massachusetts.

For nearly 40 years our region has benefited from Pilgrim's energy output. For much of that time, Cape and Islands residents have also expressed concerns about the plant's safety. A quick look at the geography helps explain this; should there be a serious problem at Pilgrim, our region would be directly impacted, and if heaven forbid a broad evacuation should ever be necessary, our residents would be involved.

Concerns have intensified in light of the safety breaches, explosions, partial meltdowns, and radiation releases at Japan's Fukushima Daiichi plant.

Recently, I had the opportunity to join fellow legislators on a visit to Pilgrim, where we received an extensive briefing from plant officials. In addition, I have reviewed R. W. Borchardt's response to issues raised in a letter to your office from

Massachusetts State Senate President Therese Murray, Massachusetts House Speaker Robert DeLeo, Massachusetts Governor Deval Patrick, and Massachusetts Attorney General Martha Coakley.

I would now like to put on record my concerns, in advance of any final decisions regarding re-licensing of the plant.

Spent fuel rod storage: More than 3000 spent fuel rods now stored at Pilgrim after nearly 40 years of operation are presently held in wet storage, in a holding tank filled with water originally intended to contain no more than 880 rods, located on the upper floor of the reactor building. My understanding is that increased fuel rod loading in this tank is necessary because other storage facilities have never been approved to receive this radioactive waste, and no national facility is anticipated in the foreseeable future.

Numerous experts report that spent fuel rod storage poses significant long-term problems and therefore risk. Entergy, Pilgrim's operator, has proposed transferring the oldest spent fuel rods into dry cask storage, considered a safer alternative, beginning in 2015. This transfer is planned in part to create more wet storage space for additional highly radioactive spent fuel, given that re-fueling remains necessary as the plant functions. While previous correspondence from your office has indicated that such storage should pose no danger, we must report that the lengthy timeframes involved, common sense, and recent events in Japan, add to our concerns. In addition, we have not yet heard the answer to a crucial question: If engineers designed this wet storage facility to hold 880 spent fuel rods 40 years ago, why – from a safety point of view, not due to expediency or political necessity – should we allow so much more radioactive volume in the same aging tank? My understanding is that the spent fuel rods presently in wet storage are many times more radioactive than the reactor core itself.

Evacuation and emergency response: After consultation with knowledgeable public safety officials who are at the front lines of our region's emergency preparedness, who know our communities intimately, I must raise two disturbing concerns:

First, a 10-mile Emergency Planning Zone, as presently defined, seems inadequate. By way of comparison, in the aftermath of the tragedy at Fukushima, the Japanese government has acknowledged that there is significant contamination 31 miles from the damaged plant.

Second, in the event of a catastrophe at Pilgrim, an orderly and timely evacuation of Cape Cod could well be unrealistic given a year-round population of more than 200,000 people, and an additional 500,000 summer residents and visitors. Narrow land and limited egress make our situation unique. Any evacuation would by geographic necessity mean huge volumes of vehicular traffic exiting across Cape Cod Canal via one of only two bridges. What's worse, the most heavily trafficked routes between Boston and Cape Cod carry travelers through Plymouth and very close to the reactor. The northern part of my district, the hooking arm of Cape Cod, defines Cape Cod Bay and brings inhabitants much closer to Pilgrim as the crow flies (and radiation might travel) than overland mileage charts suggest.

In sum, to date we have seen no credible, comprehensive plan to protect Cape Cod residents in the event of a tragedy similar to the one that occurred in northeastern Japan, and our local experts are very concerned about the feasible implementation of any such plan.

Aging technology: As a first-generation nuclear reactor, Pilgrim was designed with the best technology that existed more than 40 years ago. There is universal understanding that such technology no longer is state of the art; for example, many newer reactors do not use the same cooling systems or containment vessels. In addition, there are concerns about electrical conduits and other aging elements that cannot by definition be considered as safe and reliable as new and improved systems. Re-licensing this plant would extend its life to 60 years. In what other industry are we using technology that is more than 60 years old? In what other industry are the inherent risks greater?

My position is that to date, all of these concerns have not been adequately addressed. If they are, I would support re-licensing the plant. If they cannot be addressed to full satisfaction and public confidence, I urge you not to re-license Pilgrim and instead work with our local communities, business and political leaders to decommission the plant and find ways to transform the site so it remains a positive contributor to the local economy. Whether such a transition must take place now or years from now, it is inevitable. While these transitional issues might be seen by some as beyond the typical scope of NRC work, I suggest that this type of planning is essential for our nuclear and energy future.

Sincerely,



Daniel A. Wolf
Massachusetts State Senator
Cape and Islands District
State House, Room 511B
Boston, MA 02133

Cc: Governor Patrick; Attorney General Coakley; Secretary Sullivan; Secretary Heffernan; Senate President Murray; Massachusetts Congressional Delegation; State House Delegation, Cape & Islands

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
ENERGY NUCLEAR GENERATION CO.)
AND)
ENERGY NUCLEAR OPERATIONS, INC.) Docket No. 50-293-LR
)
(Pilgrim Nuclear Power Station))

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing **Letter from Andrew L. Bates, Acting Secretary, to Senator Daniel A. Wolf, Regarding Relicensing of Pilgrim Nuclear Plant** have been served upon the following persons by Electronic Information Exchange (EIE) and by electronic mail as indicated by an asterisk*.

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Docket No. 50-293-LR

**Letter from Andrew L. Bates, Acting Secretary, to Senator Daniel A. Wolf,
Regarding Relicensing of Pilgrim Nuclear Plant**

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Docket No. 50-293-LR

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**Letter from Andrew L. Bates, Acting Secretary, to Senator Daniel A. Wolf,
Regarding Relicensing of Pilgrim Nuclear Plant**

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Rebecca Chin, Vice Chair*
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[Original signed by Nancy Greathead]

Office of the Secretary of the Commission

Dated at Rockville, Maryland
this 11th day of August 2011