

PILGRIM WATCH

April 8, 2013

William Dean
Eric Benner
US NRC
Via Email

RE: NRC BRIEFING PLYMOUTH BOARD OF SELECTMEN PILGRIM'S PLAN FOR A DRY CASK STORAGE FACILITY- PLYMOUTH TOWN HALL- APRIL 2, 2013

Pilgrim Watch prepared the following list of questions in advance of the April 2 meeting to gain insights into Pilgrim's plan for a dry cask storage facility at Pilgrim. We appreciated the opportunity to learn more and especially the candidness of Eric Benner and his willingness to directly answer all questions posed by the public and Board of Selectmen. To assure that we understood the answers correctly, the responses to the questions as we understood them are in *red italics*. We would appreciate corrections to any misunderstandings or incorrect information. Also some questions were not asked or included in the answers given due to time constraints. These are shown in *blue italics* and we respectfully request that the information be provided.

QUESTIONS

PILGRIM'S PLAN FOR ISFSI - SIZE

1. How many casks will the currently planned ISFSI accommodate? *Q. Please provide answer.*
2. More specifically, will the currently planned ISFSI accommodate all casks required through the licensee renewal period, 2032, or will another pad be required? *At the meeting, the NRC said that the currently planned ISFI will accommodate all casks required through the license renewal approval.*

PILGRIM'S PLAN FOR ISFSI - DESIGN

3. Will the pad be enclosed in a structure; simply have a roof overhead (like a carport), or be open? ***It will be open with no enclosure or carport like roof.***

PILGRIM'S PLAN FOR ISFSI- LOCATION

4. Will the ISFSI be within the reactor protected area (PA) as opposed to in a separate/special ISFSI PA where we understand that capabilities for detection and assessment of adversaries and rapid armed response are below those within the reactor PA? ***In reactor protected area***
 - a. If it is in a separate/special PA how does the requirements for the separate/special PA differ from those of the reactor PA? ***NA***
5. Is a site specific EIS required for the ISFSI? ***No***
6. How many feet above sea level will the bottom of the ISFSI be? Please provide documentation. ***Q. Please provide answer***
7. How many feet above the groundwater will the bottom of ISFSI be? ***Q. Please provide answer and documentation.***
8. During NEMO and other storms, how close to the planned location of the ISFSI pad did sea water come as result of a storm surge, breaking waves or anything else? ***Q. Please provide answer and documentation***

MONITORING

9. What is the plan to test the soil for radioactive contamination prior to constructing the pad in order to establish a baseline. ***No plan to do so.*** Will the test results be part of a public record? ***NA***
10. What if any formal agreement has or will be made with the state and/or host community to:
 - a. Continuously monitor the casks for temperature; ***None***
 - b. Continuously monitor for radiation with real-time monitors; ***None***
 - c. Provide a protocol for direct connection and read out of the monitors at computer monitors located at the MA Dept. of Public Health and/or other state/local agency; ***None***

- d. Make summary reports publicly available on MDPH’s website and provide immediate reports to EPZ communities when the monitors read an agreed upon rise? *None*

Comment:

- (i) Real-time, remote monitoring would provide more or less instant notice to state authorities if a cask develops a leak, or if, through shock, vibration, or chemical action, nuclear fuel should lose its structural integrity, or if a cask should be breached through an accident or act of malevolence.
- (ii) Such monitoring is readily achievable, for example a settlement agreement between the State of Maryland and the owners of the Calvert Cliffs Nuclear Station in the licensing of that facility’s Independent Spent Fuel Storage Installation.
- (iii) It is important to assure compliance with monitoring agreements. For example: Entergy failed to comply with a monitoring agreement with the State of Vermont to monitor radiation emitted from dry casks stored at Vermont Yankee.

SECURITY¹

11. What, if any, structures or equipment will be installed at the ISFSI to reduce radiation emanations, eliminate line-of-sight ballistics and rocketry targeting, lessen the potential of aircraft impact, and obscure visual location? *None*
12. Will onsite personnel be required to interdict an attack from sabotage? Will such personnel be provided only if the projected dose at the controlled area boundary not exceed more than 5 rem or some other dose limit (please specify limit, if applicable); or will the security personnel be required to “keep the bad guys out” irrespective of projected release from an attack? *Q. Please provide answer.*
- If projected dose will be the basis at Pilgrim, please answer a-c: Q. Please provide answers to each question.

¹ See: NRC Regulations (<http://www.nrc.gov/about-nrc/regulatory/rulemaking/potential-rulemaking/isfsi-security.html>)

- a. What information will be available or used by security personnel to “project” the dose at the controlled area boundary.
 - b. What is the basis for assuming that projected release calculations are reliable?
 - c. Have projected release calculations and the information on which they will be based been validated by experimental data?
13. Will the ISFSI be part of NRC’s security force-on-force exercises or will Entergy be exempted from having to conduct NRC-evaluated force-on-force (FOF) exercises that include the ISFSI, despite the clear evidence from past history that such exercises are critical in assessing whether or not security plans that look good on paper will be effective in practice? *Q. Please provide answer*
- Comment: If there is no requirement that security forces interdict adversaries before they commit sabotage on a spent fuel cask, there would be no point in conducting FOF exercises.
14. More generally, what if any security and safeguards measures will be required for the ISFSI; and what evidence is it based upon that such measures will be sufficient to deter, interdict, and/or repel a substantial and well-planned attack in force - such as one equivalent to the number of attackers, logistical support, training, skills, and determination of that demonstrated in the attacks on the World Trade Center and the Pentagon on September 11, 2001? *Q. Please provide answer; and also explain Bellamy's apparent statement that facilities have successfully defended against essentially all previous FOF exercises; our understanding is precisely the contrary.*

FINANCES

15. What is the projected cost (total and year-by-year) of the dry cask facility and all associated structures, including the transport road? *Q. Please provide answer.*
16. Has Entergy asked, or will it ask, that any decommissioning trust fund monies be used in connection with the dry cask storage facility while Entergy is operating? If so, how much, for what, and when? *No.*
- Q. Please respond to the following and explain why the information below differs from the response given by NRC at the April 2 meeting that no monies from the DTF had or could be used for spent fuel management.*

NRC Decommissioning includes activities that reduce residual radioactivity to permit release property & termination license following shutdown (10 CFR 50.2) and excludes spent fuel management (10 CFR 50.54 (b)(b)). Nevertheless, NRC has approved requests for exemptions. 5 years prior to license termination or 2 years after permanent shutdown, licensees submit to NRC both its spent fuel management plan (10 CFR 50.54 (b)(b)) and funding program & decommissioning cost estimates (10 CFR 50.75 (f)(3)). Some licensees, such as Pilgrim and Vermont Yankee, asked NRC for an exception in accordance with 10 CFR 50.12 from the requirements of 10 CFR 50.82(a)(8)(i)(A) to use the DTF for spent fuel management expenses. In both cases NRC approved the exception finding a sufficient amount of funds in the decommissioning trust fund and granted the exception.

Over two months ago, Pilgrim Watch filed a FOIA (Feb 27, 2013) asking for a record of U.S. licensee requests for exemptions and NRC's responses. We have been told that NRC's response is "pending."

Also, please provide documentation of all licensee requests for exemptions and NRC responses

17. Will or have any costs associated with dry cask storage at PNPS be paid with monies recovered from DOE in connection with DOE's breach of the Master Agreement? If so, how much, for what, and when? *Q. Please provide answer.*
18. Have or will any costs associated with dry cask storage at PNPS come out of Entergy's operating budget; and if so how much, for what, and when? *Q. Please provide answer.*

PERMITS

19. What state permits are required to build or operate the ISFSI? By when are they required to be obtained. Have any been obtained, and if so, what are they, when were they obtained, and from whom? *Q. Please provide answer.*
20. What local permits are required to build or operate the ISFSI. By when are they required to be obtained. Have they been obtained, and if so, what are they, when were they obtained, and from whom? *No building permit was required; local construction permits apply. Q. Please provide answer to the following question: Are any other local permits required?*

LICENSE RESTRICTION

21. Is Entergy restricted to storing only spent fuel assemblies that are generated at Pilgrim Station? Does Entergy have any plan, desire or intent to store at PNPS any spent fuel or high-level radioactive waste that was generated anywhere else? *Yes, Entergy is restricted by its General License to storing only waste generated onsite.* *Q. Please provide answers to the following questions: Has there been any instance in the US that permitted a reactor was permitted to store spent fuel or high-level radioactive waste that was generated at another site? If so please specify. What process would Entergy have to follow, and from whom would it be required to obtain licenses/permission, to permit them to store at PNPS any spent fuel or high-level radioactive waste that was generated anywhere else?*

CASKS

22. Will Entergy use single or dual-purpose casks - that is casks intended for both storage and transportation? *Internal welded casks will be used for both; new surrounding concrete structures will be used for transportation*
23. What is the manufacturer and model number of the casks Entergy plans to use? *Holtec Hi-Storm* *Q. Please provide the answer to the following question: Who will provide the surrounding concrete structures used for (a) on-site storage and (b) transportation?*

Movement Fuel from Pool to ISFSI

24. Does Entergy have onsite the equipment required to transfer the fuel from the pool to the ISFI- High Track and Vertical Cask Transporter- or is that equipment shared among Entergy sites? *Shared*

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