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## NUCLEAR REGULATORY COMMISSION

Title: Pilgrim Nuclear Power Station  
Limited Appearance

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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ATOMIC SAFETY AND LICENSING BOARD PANEL  
LIMITED APPEARANCE COMMENT SESSION

\* \* \* \* \*

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IN THE MATTER OF:  
PILGRIM NUCLEAR POWER  
STATION

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Thursday, July 6, 2006

The above-entitled matter came on for hearing, in the Ballroom of the Radisson Hotel Plymouth Harbor, 180 Water Street, Plymouth Massachusetts, pursuant to notice, at 5:30 p.m., Ann M. Young, Chair, presiding.

BEFORE:

ANN M. YOUNG                      Chairman  
RICHARD F. COLE                  Administrative Judge  
NICHOLAS G. TRIKOUROS          Administrative Judge

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COMMENTERS :

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DAVID AGNEW

REBECCA CHIN

MARY GATSLICK

JOYCE MCMAHON

BARBARA PYE

ARTHUR POWERS

RAYMOND SHADIS

DIANE TURCO

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C O N T E N T S

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COMMENTERS:

MARY GATSLICK . . . . . 4

RAYMOND SHADIS . . . . . 6

DAVID AGNEW . . . . . 12

REBECCA CHIN . . . . . 17

DIANE TURCO . . . . . 23

JOYCE MCMAHON . . . . . 25

ARTHUR POWERS . . . . . 28

BARBARA PYE . . . . . 31

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## P R O C E E D I N G S

(5:34:03 p.m.)

1  
2  
3 CHAIR YOUNG: The first person on my  
4 list is Joyce McMahon. Is she here? If she's not  
5 - I was told she might be running a little late, we  
6 can come back to her. Okay, I see a nod. The  
7 second person is Mary Gatslick.

8 MS. GATSLICK: Right here.

9 CHAIR YOUNG: Okay. We appreciate you  
10 all coming out this evening, and look forward to  
11 hearing from you.

12 MS. GATSLICK: Hi. My name is Mary Jo  
13 Gatslick, and I'm a resident of Plymouth,  
14 Massachusetts. I'm also a member of the  
15 Massachusetts Affordable Reliable Electricity  
16 Alliance or Mass AREA. We are a coalition of more  
17 than 50 business, labor, and community  
18 organizations, as well as independent energy  
19 experts working together to solve Massachusetts'  
20 significant electricity challenges.

21 First, I want to thank the Atomic  
22 Safety and Licensing Board for this hearing, and  
23 the opportunity to speak. Mass AREA supports the  
24 transparency of the license renewal process, and  
25 appreciates this and other opportunities for the

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1 public input on Pilgrim's re-licensing process.  
2 Mass AREA supports re-licensing of Pilgrim Station.  
3 At the May 17<sup>th</sup> NRC hearing, a number of our members  
4 outlined the strong environmental, social, economic  
5 benefits that this plant provides. Most notably,  
6 it's helped Pilgrim mitigate sizeable amounts of  
7 greenhouse gases and toxic chemical emissions that  
8 would otherwise occur from fossil fuel-burning  
9 plants.

10 This plant's social economic benefits  
11 are quite significant. Pilgrim is an important  
12 stable of the southeastern Massachusetts economy,  
13 providing more than \$135 million. That's right,  
14 \$135 million in annual economic activity. It has  
15 more than 500 permanent employees, of which I am  
16 one.

17 Additionally, the plant uses the  
18 services of approximately 130 contractors. It also  
19 supports many civic and charitable activities in  
20 the greater Plymouth area. I personally was  
21 involved with the Retired Senior Volunteer Reading  
22 Program, and our cite, "Pilgrim and Diversity and  
23 Inclusion Council" on a project for the reading  
24 initiative.

25 Please keep these issues in mind as you

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1 do your work. We urge the ASLB to be deliberate  
2 and thorough in evaluating intervenor petitions.  
3 We also urge you to make sure that the re-licensing  
4 process will stay focused on the issues that it's  
5 supposed to be focused on; that is, the safety of  
6 the plant and its environmental impact. Also,  
7 please keep in mind that Pilgrim Station has NRC-  
8 based inspectors at the facility, and has earned  
9 the NRC's highest safety rating.

10 It is critical that the re-licensing  
11 decision regarding Pilgrim be made within the 2-1/2  
12 year time frame that is required. Massachusetts  
13 needs this reliable power source, which provides  
14 approximately 8 percent of the state's electricity  
15 on a daily basis. Thank you.

16 CHAIR YOUNG: Thank you. Arthur Powers  
17 is the next person, but it says he's showing up at  
18 6, so unless he's here, Raymond Shadis.

19 MR. SHADIS: Thank you, Your Honor. My  
20 name is Raymond Shadis. I live in Edgecomb, Maine,  
21 a mile and a half down-wind of Maine Yankee former  
22 site. I am technical advisor to the New England  
23 Coalition, not just your ordinary interloper. We  
24 do have members in the area; and, of course, New  
25 England is one of our smaller geographical units,

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1 little to separate one state from another, but  
2 stonewalls. We're all neighbors. The National  
3 Oceanic and Atmospheric Administration regularly  
4 publishes a plume modeling for nuclear power plant  
5 accidents. They publish them on a daily basis, and  
6 they are available to the public the day after any  
7 given day. And typically, plumes from a default  
8 model accident at the Pilgrim Station blanket  
9 Boston, Providence, Worcester, extend as far as  
10 Vermont, and even to Seacoast, Maine, so we all  
11 have a stake in whether or not the Pilgrim plant is  
12 allowed to renew its license.

13 There was a great deal of discussion  
14 earlier today about NUREG 17.38, and this document,  
15 which is titled a "Staff Technical Study of Spent  
16 Fuel Pool Accident Risk at Decommissioning Nuclear  
17 Stations", is something I'm quite familiar with.  
18 The study itself, if you're looking at the question  
19 of whether or not it departs from previous studies,  
20 the information in it, whether or not it contains  
21 new and significant information should be looked at  
22 in the context of its origin.

23 The Maine Yankee Atomic Power Station a  
24 few years into decommissioning, under management of  
25 Entergy Corporation, unilaterally decided to

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1 withdraw its outer security barriers, to downsize  
2 its emergency planning, and wanted permission to  
3 reduce its insurance, and it had unilaterally, as I  
4 said, moved to reduce the outer barriers on its  
5 security. NRC came in and ordered them to re-  
6 evaluate, to reinstall some of those outer  
7 barriers, and to provide new hardened stations  
8 within the spent fuel pool building.

9           Maine Yankee objected that this was a  
10 violation of the backfit rule, and the issue was  
11 taken to NRC, and eventually to NRC technical  
12 staff, to ascertain whether or not there were  
13 significant hazards to be considered, starting from  
14 that backfit rule question. And Maine Yankee went  
15 to the first meeting on this at NRC headquarters.  
16 Commissioner Betta Dikus asked where the public  
17 component was in the discussion, and at that point,  
18 Maine Yankee invited me to participate in the  
19 construction of NUREG 17.38, to accompany them to  
20 NRC headquarters and participate in all the staff  
21 meetings. The NRC commissioners invited me to  
22 present on NUREG 17.38, two meetings into its  
23 construction, and then at the final meeting when  
24 the document was presented to the Full Commission.

25           Let me tell you that this document was

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1 a document that is a composite of previous NUREGs,  
2 previous spent fuel pool, and fuel studies, and  
3 seismic studies, and the tables, the appendices  
4 that are with this document are drawn from more  
5 than a half-dozen different previous studies. In a  
6 sense, the information going into it is not new.  
7 The conclusions that are relevant to us as  
8 concerned citizens, I think a lot of them are new.

9  
10 NRC staff concluded in this document  
11 that the Mark-I reactor containment would offer no  
12 substantial obstacle to aircraft penetration. The  
13 aircraft considered in the tables in the appendices  
14 are commercial aviation aircraft maxing out at  
15 about 44,000 pounds, so very light aircraft,  
16 compared to the aircraft that were involved in the  
17 9/11 incident. And they do admit that depending on  
18 the direction of impact, there is one of the three  
19 exposed walls on the spent fuel pool where there  
20 might be structures that would present some  
21 obstacle to aircraft impact.

22 The act of malevolence is something  
23 that the staff decided they could not assign a  
24 probability to. The probability of one, and the  
25 study, because they were attempting to do

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1 probabilistic risk assessment, they did not include  
2 any consideration of deliberate acts of  
3 malevolence, or acts of terror. They did conclude,  
4 in fact, within the study that a spent fuel pool  
5 fire could not be precluded based on the age of the  
6 fuel. In other words, no matter how old the fuel  
7 was stored in the spent fuel pool, a fire could  
8 still ensue.

9 They referred to earlier NUREGs for  
10 consequences. As you know, risk contains the  
11 elements of both probability and consequences. The  
12 question of risk for us, no matter what the  
13 probabilities may be, tends to gravitate toward  
14 consideration of the consequences. We have been  
15 told by Entergy Corporation wherever they operate  
16 in Vermont, or in New York State, or here in  
17 Massachusetts, that the consequences of a reactor  
18 accident or spent fuel pool fire are relatively  
19 insignificant; that is to say, that the extent of  
20 damage would not be much beyond a few miles from  
21 the reactor.

22 The appendices for 17.38 contain tables  
23 which have considerations of cancer mortalities of  
24 25,000 over a radius of zero to 500 miles from the  
25 reactor. And whether or not these are modeling

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1 considerations or not, they are considerations that  
2 NRC included in their assessment of consequences.  
3 And if we are to take the agency seriously, then we  
4 also need to take these kinds of considerations  
5 seriously.

6 CHAIR YOUNG: Let me ask you if you  
7 could sort of wrap-up, and then we can move on to  
8 some other people.

9 MR. SHADIS: Certainly.

10 CHAIR YOUNG: And then if we have time  
11 leftover, we can come back.

12 MR. SHADIS: I would appreciate the  
13 opportunity, and let me just say with respect to  
14 the remote and speculative qualities, as they are  
15 termed, of an act of terror, that on June 20<sup>th</sup> of  
16 this year, NRC did issue an order requiring  
17 compliance with key radiological protection  
18 mitigation strategies to all of their operating  
19 licensees, including Pilgrim. And in it, they  
20 asked the licensees to provide information that  
21 would continue - excuse me - the common defense and  
22 security would continue to be adequately protected  
23 for a scenario resulting from a large fire or  
24 explosion at your site. And they are speaking  
25 specifically of acts of terror, and they're looking

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1 at what the companies may or may not have in place  
2 for mitigating actions, so I point to that. It's  
3 available now as of yesterday on the NRC website,  
4 and I point to that as some kind of evidence that  
5 NRC is, at last, acknowledging this risk, and is  
6 taking it seriously, and gives it credence. Thank  
7 you very much. If I do get the opportunity to come  
8 back and have a discussion with you, if you have  
9 questions on 17.38, I'd be glad to try to answer  
10 you. Thank you.

11 CHAIR YOUNG: Thank you. Is David  
12 Agnew here?

13 MR. AGNEW: Yes. Greetings. My name  
14 is David Agnew, and I reside at 18 Martha's Lane,  
15 Harwich, Massachusetts. I have been a resident of  
16 Cape Cod for 19 years, approximately 30 years from  
17 the Pilgrim Nuclear Power Station. About half that  
18 time I've been down-wind of the reactor's  
19 emissions. I am coordinator of the citizens'  
20 group, Cape Down-Winders.

21 I am here today because I am concerned  
22 with the threat to public health posed by PNPS, and  
23 I seek to minimize its hazard. I offer the  
24 following in support of the motions brought before  
25 you today by Pilgrim Watch and the Massachusetts

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1 Attorney General.

2           Some of the new information since the  
3 original operating license was granted, which  
4 should be considered when assessing environmental  
5 impact and severe accident mitigation analysis -  
6 one, in 1978, Dr. Carl Morgan stated, "There is no  
7 safe level of exposure, and there is no dose of  
8 radiation so low that the risk of a malignancy is  
9 zero." NRC has been loathe to recognize this, but  
10 it was recently confirmed by the National Academy  
11 of Science's Beer-7 report. Two, the effects of  
12 radiation are cumulative - the Rocketdyne Worker's  
13 Study. Three, older persons have greater radiation  
14 sensitivity, ORNL Follow-up Study. Evacuation  
15 plans are necessary and must anticipate shadow  
16 evacuation, Three-Mile Island. The population  
17 within 50 miles of PNPS has increased significantly  
18 with larger automobiles that cause greater traffic  
19 backups. Applicant's evacuation assumptions are  
20 highly optimistic. Six, a core melt can cause a  
21 thyroid cancer epidemic of 100 miles away -  
22 Chernobyl. Seven, Pilgrim's containment is  
23 "virtually certain to fail" in the event it's  
24 really needed, NRC. Eight, the retrofitted direct  
25 force event system may facilitate containment

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1 failure. Nine, populations living near Pilgrim  
2 suffer a high incidence of leukemia. Ten, due to  
3 its vulnerable design and proximity to large  
4 populations, Pilgrim is an attractive target, and  
5 defense against a sophisticated terrorist attack is  
6 essential - Al Qaeda's possession of nuclear  
7 facility plants. Eleven, irradiated fuel will  
8 accumulate on site for decades resulting in a  
9 densely packed fuel pool. This pool is exceedingly  
10 dangerous. National Academy of Science's Spent  
11 Fuel Studies, Studies by Gordon Thompson and Jan  
12 Beyae.

13           During the time I lived on the Cape,  
14 there have been three or four studies of human  
15 cancer incidents in the area. A study by the  
16 Silent Spring Institute found that breast cancer  
17 rates on some parts of Cape Cod are among the  
18 world's highest. Despite the southeastern  
19 Massachusetts leukemia studies finding significant  
20 increases in both thyroid cancer and leukemia  
21 amongst residents of the five towns surrounding  
22 this BWR, none of the Cape studies have  
23 investigated Pilgrim's role in our exceedingly high  
24 rates of breast cancer. Absent any scientific  
25 study exonerating Pilgrim's daily radionuclide

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1 releases, it is reasonable to assume that they have  
2 contributed to these excess cancers.

3 Potential devastation and centuries  
4 long contamination of vast portions of the  
5 environment, flora, fauna, Cape Cod Bay and the  
6 Atlantic Ocean with attendant pollution of  
7 biospheric DNA with mutant cells requires that  
8 security for a pre-deployed nuclear weapon, such as  
9 Pilgrim, with the cesium potential of 11  
10 Chernobyls, must guarantee the successful  
11 deterrence of an attack on the reactor building,  
12 its support structures, and fuel pool from the air,  
13 land, and water by a dedicated, well-organized team  
14 of well-equipped terrorists who do not provide  
15 advance notice. High-level rad waste storage must  
16 ensure no risk of fire and attendant catastrophic  
17 contamination, not densely packed into a single  
18 high-yield vulnerable target.

19 In October 2000, NRC study found that  
20 half of all U.S. commercial aircraft can penetrate  
21 five feet of concrete 45 percent of the time. The  
22 fuel pool should be returned to its original and  
23 safer design of low density wrecks. Age  
24 degradation of all safety components must be  
25 thoroughly inspected and certified to meet design

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1 specifications. This include the drywell container  
2 and all systems that may contain radioactive water.  
3 The containment must be upgraded to provide  
4 reliable containment of radioactive material in the  
5 event of a core melt.

6 Any study of the impact of a core melt  
7 pool fire must consider the economic loss of the  
8 Cape and Island's tourism, real estate, and other  
9 industries for 600 years. The reactor must be held  
10 to the same standard as other facilities impacting  
11 aquatic ecology. Pilgrim's once-through cooling  
12 systems massive thermal pollution of Cape Cod Bay  
13 must be replaced by the best technology available  
14 to prevent harm to marine life, cooling towers.  
15 Routine radioactive releases to the environment  
16 must be markedly reduced, and dose effects must be  
17 recalculated based upon our specific population  
18 profiles. Verification of compliance requires  
19 replacing existing radiation monitors with current  
20 more sensitive technology which monitor all egress  
21 routes and report to the public in real time.

22 Emergency planning must be upgraded to  
23 prepare for a surprise attack of significant  
24 radiological consequence, which would impact an  
25 area far beyond the current 10-mile radius.

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1 Updated independent studies of severe accident  
2 consequences must be done. The emergency planning  
3 zone should be expanded to a 50-mile radius, more  
4 closely corresponding to federal studies estimating  
5 the consequences of a core melt. Emergency plans  
6 must be certified as having the full confidence of  
7 their local governments, anticipate shadow  
8 evacuation, and be realistically and regularly  
9 tested.

10 Contentions that emissions of hazardous  
11 levels of radionuclides will not travel over 10  
12 miles are prima facie ludicrous; yet, at present,  
13 there is no meaningful radiological emergency plan  
14 for the Cape and Islands. This region requires a  
15 thorough study of radiological shelters and  
16 evacuation capabilities, local stockpiling of  
17 potassium iodide, training of emergency personnel,  
18 education of the public, and an emergency  
19 notification system. Thank you.

20 CHAIR YOUNG: Thank you. Rebecca Chin,  
21 and I think you had emailed me. Right?

22 MS. CHIN: Thank you. I'm Rebecca  
23 Chin. I am the Vice Chairman of the Duxbury  
24 Nuclear Advisory Committee.

25 The motions brought forward by both the

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1 Massachusetts Attorney General and Pilgrim Watch  
2 reflect the wishes of the citizens in the Town of  
3 Duxbury, as expressed in three articles  
4 overwhelmingly passed by town meeting votes;  
5 Article 6 in 2003, Article 39 in 2005, and Article  
6 40 in 2006.

7 Spent fuel pool fires, the AG's motion  
8 was filed to ensure that the NRC does not grant the  
9 license renewal before Entergy and the NRC address  
10 the risk of a severe accident in the spent fuel  
11 pool, and comply with federal laws for the  
12 protection of public health, safety, and the  
13 environment, and require Entergy to backfit  
14 Pilgrim's design to eliminate or substantially  
15 mitigate the risk of a pool fire.

16 The hearing request of the backfit  
17 petition arise from the safety and environmental  
18 risks posed by Entergy's plan to continue with  
19 high-density spent fuel storage racks in the pool.  
20 The Attorney General asked the Town of Duxbury and  
21 Pilgrim Watch in Contention 4, recognized that our  
22 community's health and safety require low-density  
23 pool storage and hardened dry-cast storage for  
24 reasons expressed, for example, by the Attorney  
25 General's experts, Dr. Gordon Thompson and Dr. Jan

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1 Beyae.

2 In the National Academy of Science's  
3 Spent Fuel Pool Vulnerability Study, Dr. Beyae's  
4 attachment to the AGO's motion estimated the cost  
5 and latent cancers following releases of Cesium-137  
6 from Pilgrim's spent fuel pool and a fire. With a  
7 10 percent release of Cesium-137, the cost in  
8 billions is 105-175, and the latent cancers are  
9 8,000. With 100 percent release of Cesium-137, the  
10 cost in billions is 342-488, with latent cancers at  
11 24,000. These are under-estimates because in  
12 addition to Cesium-137, other harmful radionuclides  
13 would be released with resulting health  
14 consequences, in addition to cancers, birth  
15 defects, reproductive disorders, and diseases such  
16 as heart disease.

17 Much of the information on spent fuel  
18 pool fires and the lack of availability of off-site  
19 storage any time soon is new and significant  
20 information; and, therefore, a site-specific  
21 analysis is warranted. We recognize that a spent  
22 fuel pool fire can result either from an accident  
23 due to operator or mechanical failure, or to an act  
24 of malice, such as a terrorist attack.

25 In the latter case, we underscore the

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1 need to address terrorism as a variable in the re-  
2 licensing process based on the recent 9<sup>th</sup> Circuit  
3 Federal Court decision that in essence stated,  
4 "Terrorism must be part of any environmental review  
5 in an NRC licensing decision." The review process  
6 requires a hard look at severe accident mitigation  
7 analysis. It seems obvious, therefore, that the  
8 consequences of a spent fuel fire can be severe,  
9 and must be considered.

10 For security, Duxbury's annual town  
11 meeting voted in 2005 that one of the seven pre-  
12 conditions for not opposing re-licensing was that  
13 on-site security heightened to protect against an  
14 air attack on the main reactor building, spent fuel  
15 pool, and/or critical support structures by a large  
16 or small aircraft loaded with fuel or explosives, a  
17 floating explosive or underwater charge from  
18 entering intake canal, and attack by water or land  
19 from a force comparable in size and strength to  
20 9/11. The adequacy of these security improvements  
21 must be approved by a panel of experts independent  
22 of the nuclear power industry.

23 The National Academy has confirmed that  
24 reactors are known attractive targets, and  
25 vulnerable to attack. Pilgrim is essentially

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1 vulnerable as it is located in America's hometown.  
2 The spent fuel pool is in the attic of the reactor,  
3 vulnerable from three sides as it faces a large  
4 coastline with wooded areas on either side. Again,  
5 the 9<sup>th</sup> Circuit Court provides support.

6 For health, Duxbury supports Pilgrim  
7 Watch's Contention 5, concerning the need to  
8 consider on a site-specific basis 20 more years of  
9 operations and our community's health. Again, town  
10 meetings stated that we will not approve re-  
11 licensing unless reduction of allowable radioactive  
12 emissions into our air and water, so that the  
13 biological impact is no greater than that allowed  
14 from the release of a chemical plant licensed  
15 today. And verification of releases by monitors,  
16 computer linked to state and local authorities at  
17 all points where radiation is released from  
18 Pilgrim, and at appropriate off-site locations.

19 The director's vent system installed at  
20 Pilgrim's Mark-I reactor to protect the containment  
21 from a total rupture is an extension of the  
22 containment ventilation system. It bypasses the  
23 standby gas treatment system filters normally used  
24 to process releases via the containment ventilation  
25 pathway. There is no radiation monitor on the pipe

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1 and valves that compromise that line. Venting a  
2 release in the order of 1 percent of the core's  
3 radioactive iodine and cesium would be very severe.

4  
5 The purpose of the containment is to  
6 provide a barrier between the lethal radiation  
7 inside the reactor and the public. Under the  
8 Severe Accident Mitigation Analysis, Pilgrim's  
9 application stated that a filter will reduce by  
10 half the amount of radiation that would be released  
11 in an accident. Well, half is still a major  
12 benefit for the public health and safety.

13 We want indirect venting; that is,  
14 allowing air to escape only after it has passed  
15 through filters. Unfiltered venting has been judged  
16 unsafe by all regulatory agencies outside of the  
17 United States. Mitigation should be focused on the  
18 protection of public health, safety, and the  
19 regional economy.

20 The town recognized, and those of us  
21 who have lived here for many decades know that new  
22 and significant information outlined by the  
23 petitioners on health impact has been seen in the  
24 past, and in our communities now.

25 Under emergency planning, the town

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1 supports Pilgrim Watch's criticism of the  
2 evacuation time estimates, and evacuation delay  
3 times provided by Pilgrim in their application. A  
4 thorough review of the emergency planning on a  
5 site-specific basis should be part of a SAMR  
6 analysis. The town has stated current plans will  
7 not work; hence, the consequence of an accident  
8 will far exceed the applicant's estimates.  
9 Included as part of the 2005 town vote not to  
10 approve re-licensing unless updated emergency  
11 planning for a new security environment we face  
12 today to protect against an attack or other fast-  
13 breaking accident resulting in major consequence  
14 and accounts for the increased population density  
15 in southeastern Massachusetts.

16 In March of 2006, the town voted not to  
17 support the NRC policy that states, "The minimum  
18 recommendation that shall be made at a general  
19 emergency is to evacuate two miles around, and five  
20 miles down-wind from the plant." The Town of  
21 Duxbury recognizes that the impact from a nuclear  
22 disaster in a general emergency is far greater than  
23 two miles around and five miles down-wind; and,  
24 therefore, planning should not be reduced from the  
25 current ten mile emergency planning zone. Rather,

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1 it should be expanded. Further, the concept of  
2 down-wind is not applicable in a coastal community  
3 where wind directions are variable.

4 In addition, Duxbury's Nuclear Advisory  
5 Committee supports Pilgrim Watch's Contentions 1  
6 and 2 regarding fixed structural components.  
7 Buried pipes and components adding to the aging  
8 management program and assuring the program is  
9 working, on-site monitoring wells to assure  
10 radiation does not leak into the Cape Cod Bay from  
11 buried pipes and components containing radioactive  
12 liquids, and regular UT testing for corrosion in  
13 the drywell and all embedded regions, and  
14 performing root cause analysis.

15 The request for a hearing and petitions  
16 to intervene submitted by Pilgrim Watch and the  
17 Massachusetts Attorney General are valid concerns  
18 of the Town of Duxbury, and an evidential hearing  
19 should be granted to them. Thank you.

20 CHAIR YOUNG: Thank you. Diane Turco.

21 MS. TURCO: Hi. I'm Diane Turco from  
22 College, Massachusetts down on the Cape, and I'm  
23 with Cape Cod Down-Winders. And I've been sitting  
24 here this afternoon, all day actually, listening to  
25 the testimony, and it seems so prudent that the

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1 waste pool fire scenario be considered for re-  
2 licensing Pilgrim, because I think when the  
3 original license was given, the town of Plymouth  
4 wasn't planning to be a waste dump. And what will  
5 happen now with 20 more years of waste being put  
6 into that pool - it was originally designed for 880  
7 assemblies, and now there's over 2,800 assemblies.  
8 And there have been ongoing issues here.

9 I went for a cup of coffee at the  
10 break, and I spoke to the woman at the shop and I  
11 said, you know, there's not many people at that  
12 hearing today, I mean not hearing, but the program,  
13 and she said well, people have been working for  
14 years and nothing is happening, nothing is going to  
15 happen. The public's voice won't be listened to.  
16 But with the good work of these folks here,  
17 hopefully that will happen. And on this side we  
18 have the corporations fighting the people.

19 But one thing that we've been fighting  
20 for on the Cape is to be included in an emergency  
21 planning zone. As the crow flies, we're about 30  
22 miles away, and we do know that if there was an  
23 accident, the radiation plume would travel. It  
24 could travel down to Cape Cod, and for over 15  
25 years we've been trying to get the NRC to expand

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1 the emergency planning to Cape Cod because there's  
2 two bridges, and that's all there is for people who  
3 have to evacuate, so we're a population that is  
4 held hostage, and we're definitely at risk. But  
5 there is a 50-mile emergency planning zone, the  
6 ingestion pathway zone, and the Department of  
7 Public Health has a whole brochure of how to  
8 protect your farm animals, to keep them in a stone  
9 barn with ventilation, and there's nothing for our  
10 children, so it's a very serious situation here,  
11 and this needs to be considered. But it's very  
12 prudent to be concerned about the nuclear waste,  
13 the waste site, and a fire scenario, and I hope  
14 that this panel considers it seriously in the re-  
15 licensing. Thank you.

16 CHAIR YOUNG: Thank you. Has Joyce  
17 McMahon gotten here yet? Good.

18 MS. McMAHON: Good evening. My name is  
19 Joyce McMahon, and I am the Communications Director  
20 for the Massachusetts Affordable Reliable  
21 Electricity Alliance, Mass AREA, for short. First,  
22 let me thank you for the opportunity to address the  
23 Board. We do appreciate your time.

24 Mass AREA is a diverse statewide group  
25 comprised of more than 50 labor unions, trade

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1 associations, businesses, including Entergy,  
2 educators, scientists, advocates, concerned  
3 citizens, and community leaders. We are committed  
4 to finding clean, low-cost, and reliable  
5 electricity solutions that benefit all  
6 Massachusetts. This is an urgent public policy  
7 challenge.

8 We came together in early January after  
9 several warnings were issued by the Federal Energy  
10 Regulatory Commission, and ISO New England, among  
11 others, that energy supplies will be insufficient  
12 to meet demand as early as 2008, and that energy  
13 prices are causing hardship for the region's  
14 businesses and residents, especially the most  
15 vulnerable, such as the elderly and the low-income  
16 populations.

17 While Mass AREA's mission is broad and  
18 focused to include renewable energy, and  
19 encouraging energy efficiency, Mass AREA and its  
20 members fully support the re-licensing of the  
21 Pilgrim Nuclear Power Plant. Given the pending  
22 electricity supply problem, and since no new major  
23 power plants are under development, a process that  
24 typically takes five years from start to finish, we  
25 must keep Pilgrim Station in operation, as on a

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1 typical day it provides 7 to 9 percent of the  
2 Commonwealth's electricity. From an economic  
3 standpoint, the power produced at Pilgrim is lower  
4 cost than the regional average. Since  
5 Massachusetts ranks third in the nation in terms of  
6 highest electricity costs, it becomes even more  
7 important to maintain Pilgrim's very reliable, low-  
8 cost electricity.

9           While the region has just adopted a new  
10 electric market structure, it is quite important  
11 that we keep the supply we have in order to  
12 maintain system reliability. Therefore, it is  
13 imperative that the re-licensing process progresses  
14 in a timely manner, and does not get sidetracked by  
15 or taken in with dealing with issues that are  
16 extraneous to the normal re-licensing process.

17           Mass AREA encourages the ASLB to stay  
18 focused on your charge, the safety and  
19 environmental impact of the plant, while evaluating  
20 and determining intervenor petitions. Thank you  
21 again for the opportunity to speak here this  
22 evening. Mass AREA looks forward to contributing  
23 to the process over the next 18 to 24 months.

24           CHAIR YOUNG: Thank you. Mr. Arthur  
25 Powers.

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1 MR. POWERS: Good evening. My name is  
2 Arthur Powers. My wife and I have been residents of  
3 the Town of Plymouth for over 30 years. Like many  
4 people in the region which experience cold winter  
5 and hot summers, we are very concerned about the  
6 high price of power, which mean has made staying  
7 cool in the summer, warm in the winter very, very  
8 expensive, as we all know. I also don't think  
9 prices will go down any time soon. In fact, we all  
10 know they're going to rise.

11 This is why I came to speak at this  
12 meeting, in addition to some others. With little  
13 research, one would find out that nuclear power is  
14 one of the cheapest powers to generate, and it  
15 means the cost to people like yourself and myself,  
16 and my family, and my friends is to consumers least  
17 expensive. This is because nuclear power plants,  
18 like Plymouth, make power without buying expensive  
19 gas and oil, much of which comes from other parts  
20 of the world, some places which have less than  
21 favorable views of the United States of America.

22 Everyone is talking about independence  
23 for energy, to lower the energy cost. We have a  
24 great example how that independence is possible  
25 right here in Plymouth. We just heard the speaker

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1 before me saying that the cost to generate the 7 to  
2 10 percent electricity is the cheapest around.

3 I've been listening today, and the last meeting I  
4 was at they were talking about the safety problems  
5 and things of this nature.

6 I know that they're working on it,  
7 because I have associates that work at the plant.  
8 I read the papers. I also know what will happen if  
9 there's a nuclear explosion. I was in Japan in  
10 1946, so I know what it looks like. I also know  
11 what Buzzard's Bay looked like last year when  
12 90,000 gallons of oil landed up in Fair Haven and  
13 on the shores. Haven't seen that over here in  
14 Plymouth. I also know what it looked like up in  
15 Chelsea a few months ago when Exxon had an oil  
16 spill, when one of their discharge pipes let go. I  
17 was also at a meeting here when the Town of Duxbury  
18 spoke, saying how great their shellfish is doing.  
19 Shellfish was there, the plant is here, so they're  
20 doing okay. So I can see the concern, and when you  
21 people look at all the options here, you have to  
22 look and say okay, what has Plymouth done for the  
23 town, what has it done for the Commonwealth, what  
24 has it done for the country?

25 This is what we're after. We're

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1 looking at something that's going to benefit the  
2 people. Yes, we have a problem with a catastrophe,  
3 but we also had a problem in 1978. There was  
4 nowhere to go because the ways the streets and  
5 highways of the Commonwealth are built, it's rather  
6 difficult to get around with the masses of people  
7 that we have. That's just one problem. It wasn't  
8 created by the problem with power plants. They had  
9 nothing to do with it. It's something that has to  
10 be addressed separately. How do we get all these  
11 people out of here? And yes, the wind does blow in  
12 different directions, I agree with that  
13 wholeheartedly. But yet, if precautions are taken  
14 and people are aware of this factor, it could be  
15 remedied.

16 I also have seen catastrophes down in  
17 Florida, where people could not get out, just by  
18 sheer volume of people, because there was no  
19 prepared relationship from one town to another.  
20 Plymouth, and Duxbury, and Kingston set the  
21 greatest plan going to get people out of here, but  
22 once they get up to Boston and say okay, we're  
23 going to come up 128, for example, and the traffic  
24 is going to be northbound in two lanes, these are  
25 the things that have to be addressed. And I don't

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1 think that we have to worry about that right at  
2 this stage in this thing. The main concern is  
3 let's re-license the plant, because (a) it's going  
4 to employ the people; (b) the taxes that the town  
5 will generate and the surrounding towns as a result  
6 of it being here will be offset. Everybody's  
7 worried about the plant going away and losing the  
8 tax dollars. The Town of Plymouth is deciding to  
9 get \$200 million for the schools we badly need by  
10 re-licensing the plants. The tax money will be  
11 there.

12 And in conclusion, cheap power made  
13 right here in the United States seems to me, and a  
14 lot of other people, a great solution to much of  
15 our energy problems locally by using a nuclear  
16 plant to keep my bills, your bills, and nationally  
17 easing our dependence on oil, and I hope you keep  
18 this in mind. Thank you.

19 CHAIR YOUNG: Thank you. Is there  
20 anyone else here who has not signed up who'd like  
21 to speak? Okay. You want to just read off?

22 MS. PYE: Barbara Pye.

23 CHAIR YOUNG: Hi.

24 MS. PYE: Hi. My name is Barbara Pye.  
25 I'm a resident of Duxbury, Massachusetts, and I'm

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1 just here to - I don't have a prepared statement -  
2 just to say that I'm opposed to the re-licensing of  
3 the plant. People here are saying that they're  
4 concerned about it, it's a great business. They  
5 have money to give the Town of Plymouth if  
6 something happens at the plant. It doesn't matter.  
7 People won't have a job, because there will be no  
8 place to live. I'm opposed to it for all the same  
9 reasons that that gentleman was saying, emergency  
10 evacuation. The plans will not work. I mean, in  
11 Duxbury, you can't get out of town on the 4<sup>th</sup> of  
12 July, and so that's one of the problems. I'm  
13 opposed to it because of the spent fuel pool, a  
14 fire that might occur there. And a possible  
15 terrorist attack. And to me, it just seems like  
16 it's unconscionable that people have to come up  
17 with new information to the NRC to oppose re-  
18 licensing. I mean, look what happened September 11<sup>th</sup>  
19 - nobody thought it was going to happen. To think  
20 that something will possibly happen to say oh, my  
21 God - we should have done something about it. I  
22 think that you don't have to have new information.  
23 All the information that's been provided by the  
24 people, the Attorney General and Pilgrim Watch I  
25 think is sufficient enough to oppose the re-

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1 licensing. And any of my extra time I'd like to  
2 give to the people that are more knowledgeable  
3 about it. Thank you.

4 CHAIR YOUNG: Thank you. Is there  
5 anyone else? Does anyone know of anyone else who  
6 is planning to come to the meeting? We'll wait a  
7 little while longer. Mr. Shadis, if you'd like to  
8 speak just a few more minutes - I don't know that  
9 we have any questions, but if you want to just  
10 briefly finish up your remarks.

11 MR. SHADIS: Thank you, Your Honor. I  
12 appreciate that. Just briefly, in terms of  
13 questions of qualifying contentions and the  
14 requirement of new information - I'd just like to  
15 observe, there are many ways to define that. Is it  
16 information newly developed, or information newly  
17 available to the public - two different things.  
18 And I can't think of the exact case cite, but the  
19 Yankee Row case, and I believe it was their license  
20 termination plan case, there was an ASLB decision  
21 that it was not so much counting or looking at the  
22 dates on documents as information became available,  
23 but that the panel might take a cumulative look at  
24 the information; that is to say, that the panel  
25 might consider how that information gathered

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1 together in a timely way led interveners to the  
2 conclusions or to the assessments that they had.  
3 And certainly, with respect to the issues of spent  
4 fuel pool accident risk, and with issues regarding  
5 terrorism, it's a moving target, it's an evolving  
6 field. Information is constantly coming forward.  
7 The NUREG 17.38 was the, according to Commissioner  
8 McGaffigan, their least favored NUREG. And it was,  
9 in essence, the question was sent packing. They  
10 went out looking for consultants to review some of  
11 the material, some of the questions raised wound up  
12 going through Congressional Committee and back to  
13 the National Academy of Sciences, because they did  
14 not like the conclusions.

15 The staff, NRC staff, was asked to re-  
16 evaluate some of that, and we've never gotten  
17 through the process, so that information is still  
18 coming forward, still evolving, and I believe that  
19 you have the discretion available to you to take it  
20 into consideration. A brief reading of the  
21 regulations and our understanding of it is that an  
22 Atomic Safety and Licensing Board panel has the  
23 discretion to take up any safety or health issue  
24 that might come to its attention during these  
25 proceedings, and to pursue it either sui sponte or

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1 through elicitation of further information from the  
2 participants. And it is only the good judgment,  
3 the discretion, and the volition that is needed to  
4 pursue these issues, so you have this particular  
5 issue. And it broadly has been laid at your feet, .  
6 so to speak, and whether or not the particular  
7 requirements of NEPA or of Commission practice have  
8 been fully met or not does not determine whether or  
9 not this is a valid issue. In other words, legal  
10 decisions do not determine physics, so I would beg  
11 you to consider that in your deliberations.

12 CHAIR YOUNG: Thank you.

13  
14 MR. SHADIS: Thank you.

15 CHAIR YOUNG: Is there anyone else here  
16 who would like to speak? Well, I guess we can wait  
17 a little to just make sure there's no latecomers.  
18 We appreciate everyone coming out who did, and  
19 offering your input, and thoughts, and time, and  
20 being good public citizens. Thank you.

21 (Whereupon, the proceedings went off  
22 the record at 6:20:57 p.m.)  
23  
24  
25

CERTIFICATE

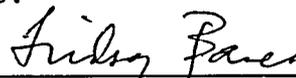
This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

Name of Proceeding: Entergy Nuclear Vermont  
Yankee, LLC and Entergy  
Nuclear Operations, Inc.  
Limited Appearances

Docket Number: 50-293-LR and  
ASLBP No.06-848-02-LR

Location: Plymouth, MA

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.



\_\_\_\_\_  
Lindsey Barnes  
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