

**Maine Yankee
Community Advisory Panel (CAP) on Decommissioning
Meeting Minutes – Adopted 6/17/04
Thursday, March 25, 2004**

<u>Member</u>	<u>Attendance</u>
Paul D. Crary M.D., PA	Yes
General Lewis Curtis	Yes
Mr. Ted Feigenbaum	Yes
Senator Chris Hall	Yes
Mr. Don Hudson	No
Representative Ken Honey	Yes
Mr. Steve Jarrett	Yes
Mr. Ralph F. Keyes	No
Senator Marjorie L. Kilkelly	Yes
Senator Charles Pray	Yes
Mr. Don Schuman	Yes
Mr. Raymond Shadis	Yes
Mr. Dan Thompson	Yes

Chair Kilkelly called the meeting to order at 6:00 p.m. CAP members introduced themselves.

Meeting Introduction and Regulatory Update

Mr. Michael Meisner, Maine Yankee Vice-President and Chief Nuclear Officer, began his presentation by noting that 2004 marks the final full year of decommissioning and that by this time next year the project will be very nearly done. This year has gotten off to a very good start unlike 2003 where a number of delays in decommissioning and fuel transfer occurred.

Fuel transfer was successfully completed on February 27, thus concluding, to the best of Maine Yankee's knowledge, the largest continuous fuel transfer project ever. Fuel transfer was completed safely and for 10 percent less worker dose than estimated. About 120 people are leaving the project now that fuel transfer is finished, leaving the site workforce at about 285.

With fuel out of the pool the pace of demolishing the remainder of the plant is quickening. Containment demolition is now scheduled for September rather than late fall. Along with demolition the key activity from now until the conclusion of the project is final status survey (FSS) work that will result in land under Maine Yankee's Nuclear Regulatory Commission (NRC) license being shrunk to the Independent Spent Fuel Storage Installation (ISFSI). As FSS packages are completed they are sent to the NRC

for review and approval. This process will assure that when the end of the project is reached the NRC will have but one remaining FSS package to review. To avoid a delay in License Termination approval at that point, Maine Yankee has requested that this fall the NRC approve the License Termination for all of the land under the license except the ISFSI. The License Termination would become effective when the final FSS package has been approved. Maine Yankee recently presented this request to the NRC at a meeting in Washington.

In other federal regulatory matters since the CAP's November 20, 2003 meeting, Mr. Meisner noted the following: The NRC approved the LTP amendment request to leave in place some activated concrete behind the reactor cavity liner; NRC approved the technical specification exemption regarding icing beneath ISFSI casks; and NRC Commissioners affirmed the Atomic Safety Licensing Board decision dismissing the State of Maine's request for a hearing on the October 2002 Interim Compensatory Measures on security.

In State regulatory matters the Department of Environmental Protection plans to hold a public meeting to provide information and solicit comments on the RCRA (Resource Conservation Recovery Act) closure process for release of the backlands which is nearly complete. The meeting is 6:00 p.m. March 30 at Chewonki.

Mr. Meisner concluded his remarks by announcing that Maine Yankee and Friends of the Coast (FOTC) have agreed on the selection of Dr. C.T. Hess of the University of Maine at Orono to head up a team that will conduct a study this summer of off-site and intertidal zone sediments to determine how licensed liquid radioactive effluent discharges from Maine Yankee are distributed in the environment. Other team members include the Woods Hole Oceanographic Institution and Normandeau Associates. In the 1998 FERC settlement, Maine Yankee agreed with Raymond Shadis, Executive Director of FOTC, to fund and conduct an environmental field survey of marine sediments in the Back River. In the 2001 LTP settlement, Maine Yankee further agreed with Mr. Shadis to conduct a similar study in the intertidal zone surrounding selected portions of the Maine Yankee property. The extensive sampling for the study should largely occur during the summer months. A final report should be publicly available through Maine Yankee or FOTC near year's end. A description of this program "Maine Yankee Marine Study" is included with these minutes as **Attachment 1**.

There were no questions for Mr. Meisner.

Decommissioning Update

Mr. Rocky Benner, Maine Yankee Decommissioning Director, provided an update on decommissioning status. He spoke from a handout and overhead slides entitled "Maine Yankee Decommissioning Status," a copy of which is included with these minutes as **Attachment 2**. Prior to the meeting Mr. Benner took available CAP members and several members of the local media on a site tour.

Mr. Benner told the panel that the project is now 86.3 percent complete and that safety continues to be strong. With fuel out of the pool demolition work is progressing rapidly. His presentation covered overall progress, site restoration, future demolition and waste. He highlighted some major activities completed since the last CAP meeting such as demolition of the primary vent stack, completion of forebay backfill, installation of large tents to process waste and water, backfill of the Primary Auxiliary Building with flowable fill, and the stockpiling of 18,500 cubic yards of sand. Mr. Benner noted that over the course of the last five weeks hundreds of trucks hauling sand, concrete, and forebay fill came and went safely on the site.

Mr. Thompson asked what is flowable fill? Flowable fill is mostly sand with a little bit of concrete. It is an effective medium for backfilling foundations because it flows into all below grade areas much more readily than sand. In a couple of days it is solid enough to walk on. Chair Kilkelly asked how the project is doing on radiological dose. Mr. Benner replied that we expect to complete decommissioning for less than half the U.S. Nuclear Regulatory Commission dose limit of 1115 person-REM. Mr. Meisner added that we are unaware of any decommissioning project that has done so well in managing radiological dose.

Regulatory Update

Randy Ragland, U.S. Nuclear Regulatory Commission Region 1, Health Physicist, briefed the CAP on NRC's activities for the last two NRC inspection periods. He spoke from a handout and overhead slides entitled "Maine Yankee Community Advisory Panel Meeting," a copy of which is included with these minutes as **Attachment 3**.

Mr. Ragland stated that NRC continues to oversee all phases of decommissioning and conducts regular inspections that routinely include security of spent nuclear fuel. NRC involvement at the site is mainly through monthly inspections, weekly teleconferences and independent and confirmatory measurements conducted by the Oak Ridge Institute for Science and Education (ORISE). Additionally, the NRC coordinates activities with the State of Maine.

Focus of inspections has been on risk significant decommissioning activities, fuel transfer, operation of the ISFSI, safeguards and security and the Final Status Survey program.

Mr. Ragland was asked by Mr. Pray to comment about steps NRC has taken in the security area post 9/11. Mr. Ragland explained that as a health physicist his primary role is not security and that there are others at NRC with more knowledge in this area. However, he noted that among other initiatives since 9/11 the NRC established the Nuclear Security and Incident Response Office, which develops overall agency policy and provides management direction for evaluation and assessment of issues involving security at nuclear facilities. The office is also the point of interface for NRC with the Department of Homeland Security and other federal agencies with security

responsibilities. NRC has also greatly increased staffing in the security area, has issued orders for plants to increase security, and has put in place measures to tighten access control. Mr. Pray then asked what value ORISE brings to NRC's oversight of Maine Yankee's final status survey process. Mr. Ragland replied that NRC contracts with ORISE because they are expert in this field, do not contract with the industry and are therefore independent.

Spent Fuel Pool Discharge Update

Mr. Jim Connell, Maine Yankee Radiation Protection Manager, gave a presentation on spent fuel pool rack removal, clean up and water discharge. He spoke from a handout and overhead slides entitled "Spent Fuel Pool Water Discharge," a copy of which is included with these minutes as **Attachment 4**.

Mr. Connell explained that the pool capacity is about 425,000 gallons. It held 23 racks which are being cleaned, removed and packaged as waste. After treatment, water will be released through the licensed discharge path in batches to the Back River. Samples of the water are being split with the State and NRC. The fuel pool discharge process is very similar to that used previously for the release of reactor cavity water. Final pool cleaning will be by scrubbing and wet vacuuming.

Times Record reporter Bob Kalish asked how many cells are there per rack? Mr. Connell replied 60 to 90 depending on the rack. Mr. Thompson asked what kind of stainless steel the racks are made of. Mr. Connell replied that he thought the stainless steel was 304 but he wasn't positive. (Following the meeting Mr. Connell clarified the steel is 304L stainless).

Independent Spent Fuel Storage Installation and Fuel Removal Update

Prior to his presentation on Maine Yankee's transition to a stand alone ISFSI, Mr. Meisner gave Mr. Shadis an opportunity to provide his comments on the marine study Mr. Meisner discussed in his opening remarks since Mr. Shadis arrived at the meeting after Mr. Meisner discussed this topic. Mr. Shadis distributed a FOTC press release on the river study which is entitled "Sheepscot Estuary Radiation Survey Contract Awarded," which is included in the CAP record of this meeting as **Attachment 7**. Mr. Shadis commented that the University of Maine/Woods Hole is a very impressive team and that Dr. Tom Hess probably knows the radiological features of the river better than anyone. Mr. Shadis said that the Friends of the Coast can't help but be pleased with the selection and that the results of this study will benefit future generations. Mr. Shadis praised the effort of Maine Yankee's technical people in working with the FOTC in the two-year development of the study proposal. Mr. Shadis noted there were countless meetings with creative ways found to get at the goals. This was a real education and a gratifying process. Mr. Shadis also said that Friends of the Coast has its work cut out for it as long as there is fuel on site or plant derived radionuclides in the environment but that FOTC is expanding its mission to other areas of the environment as well. He then

distributed an advertisement FOTC is participating in with other groups praising recent environmental efforts by Senators Snowe and Collins.

Mr. Meisner then briefed the panel on Maine Yankee's progress toward establishing a stand-alone ISFSI. He spoke from a handout and overhead slides entitled "Transition to the ISFSI, A Phased Approach," a copy of which is included with these minutes as **Attachment 5**.

Maine Yankee is taking a phased approach toward achieving a stand-alone ISFSI. The project began last year and will be complete when the NRC approves shrinking the operating license to the ISFSI next year. The transition involves hundreds of procedure changes. Key to success of this transition is appointing a highly qualified ISFSI manager. Mr. Meisner introduced ISFSI Manager John Niles who has a wealth of experience from his many years in Maine Yankee operations and decades in the industry. Mr. Niles is heading up the transition effort.

Until spent fuel transfer was complete at the end of February, Maine Yankee had fuel at the ISFSI, in the fuel pool, and in transit when canisters were being transported. With all of the fuel now at the ISFSI, the control room has been relocated to the ISFSI and security at the fuel pool has been eliminated and replaced with industrial security controls. The ISFSI continues to receive support from the decommissioning organization in areas such as radiation protection and maintenance but over this year the ISFSI will transition to a stand-alone facility. Those working at the ISFSI once it is a stand-alone facility will be trained as multi-hatted specialists in security, fuel fundamentals/radiation protection, and emergency planning.

Senator Chris Hall asked how many permanent staff would be assigned to the ISFSI – 4-6 plus contracted security? He also asked whether there has been a change in the people providing security with the switch from Pinkerton to Securitas. Mr. Meisner replied that while the final organization is still being completed, there won't be many people beyond security and that it will likely be in the range Senator Hall indicated. Mr. Meisner noted that the security people will be multi-hatted. Also the change from Pinkerton to Securitas was in name only. The same security officers are in place and many of them have been part of the security force for years and live locally.

Following Mr. Meisner, Mr. Eric Howes, Maine Yankee Public and Government Affairs Director, made a presentation on the various efforts Maine Yankee is engaged in with the State and others to remove spent fuel from the site as soon as possible. Mr. Howes spoke from a handout entitled "Efforts to Remove Spent Nuclear Fuel From Maine Yankee," which is included with these minutes as **Attachment 6**.

Mr. Howes updated the CAP on the ongoing lawsuit with the Department of Energy (DOE), including that a July trial date has been set. He also spoke about the current effort with the State, congressional delegation, the Decommissioning Plant Coalition, and the Nuclear Waste Strategy Coalition to support reform of the way the DOE waste program is funded so that hopefully Congress will allocate adequate funding for Yucca

Mountain development. Without a significant increase in historic funding levels, DOE will have no chance of meeting its goal of beginning to receive spent fuel at Yucca Mountain in 2010. The key activity this year is submission of a license application for Yucca Mountain by the DOE to the NRC. The quality of that application will be an early indicator of the level of progress. Mr. Howes noted that there is considerable discussion in Congress regarding the DOE waste program and that just that day Congressman Tom Allen had submitted a statement strongly urging removal of the fuel at a hearing of the Energy and Air Quality Subcommittee on which he serves. A copy of Congressman Allen's statement is included in the record of this meeting as **Attachment 8**. A number of senior DOE officials testified at the subcommittee hearing.

Mr. Howes also discussed a New England effort to identify interim storage possibilities outside the region. Maine Yankee and the State of Maine are participants. The initiative is part of the Yankee Atomic FERC settlement. The objective is to identify storage alternatives that could receive spent fuel from the three Yankee plants prior to the time Yucca Mountain would be available. The most likely prospect currently is Private Fuel Storage (PFS) in Utah. PFS could receive an NRC license by the end of this year with construction to follow depending on market conditions. Maine Yankee monitors the progress of PFS.

Chair Kilkelly asked is there a way to calculate the real cost to New England electric customers of DOE's delay in removing fuel? It is more than the \$1.6 billion that has flowed to the Nuclear Waste Fund. For example the cost of reracking Maine Yankee's spent fuel pool three times is not in that number. Mr. Feigenbaum responded that the lawsuit with DOE attempts to quantify the other costs such as reracking and building an ISFSI. Those costs are part of the monetary damages Maine Yankee and the other Yankees are seeking to recover.

Chair Kilkelly followed by asking if Congress has the information relative to additional costs over and above what has been collected through the Nuclear Waste Fund. Mr. Howes indicated that Maine's delegation is aware of the other costs.

Mr. Shadis asked assuming an interim site is opened, is there a new DOE acceptance schedule since the last published schedule of 1996? Mr. Feigenbaum replied that the acceptance schedule has not changed and in his view will not change until the lawsuits are resolved.

Mr. Shadis noted that with the recently approved power uprate at Vermont Yankee, that plant will run out of pool space in 2008-2009. He speculated that DOE might establish a new queue structure so that operating plants running out of pool space like Vermont Yankee won't have to bear the capital expense of constructing ISFSIs. If this were to occur, fuel at shutdown plants like Maine Yankee could remain on-site indefinitely. Mr. Feigenbaum replied that we've always envisioned there would be a swap market where utilities could swap places in the queue. The swap market could make DOE pickup rates at contract holder facilities more efficient. Mr. Meisner added that

operating plants realize 2010 is a fiction and all utilities will be planning for ISFSIs. It won't impact Maine Yankee's place in the queue.

Mr. Pray brought up a March 17 letter that he sent to the Maine congressional delegation urging funding reform for DOE's waste program. His letter addressed to Congressman Thomas Allen was handed out to the CAP and is included in the record of this meeting as **Attachment 9**. Mr. Pray indicated the delegation is very receptive to funding reform and innovative ideas for removing fuel. Members clearly understand the importance of this issue. Additionally, Mr. Pray spoke about the State's involvement in regional coalition building through participation in the Yankee Atomic initiative and an effort to enlist the support of environmental groups in New England for fuel removal. That work will get underway this summer with the help of MacKenzie Keliher, a student at the University of Maine at Farmington, who has worked with environmental groups in the past. Mr. Pray introduced Ms. Keliher.

Mr. Shadis asked what are the upcoming key points in the DOE Yucca Mountain process? Mr. Pray noted the State of Nevada court cases – Nevada v DOE and Nevada v NRC. Mr. Feigenbaum identified the DOE license application to NRC. Will it be filed by the end of this year? Will it be accepted by NRC when it is filed? If it is accepted, a lengthy process including public hearings will begin. If not accepted as complete, that would be a real set back. If DOE does not receive the \$880 million it seeks for Yucca Mountain this year, that would be a significant set back.

Mr. Shadis asked when the CAP toured Yucca Mountain there were lots of things undecided about the storage of spent fuel and the design of the facility. Have any of those issues been resolved? Mr. Feigenbaum replied outstanding issues will be nailed down in the license application. DOE has indicated it is on track to file in December.

Update on CAP Report and Committee Business

Chair Kilkelly and Mr. Howes briefed the CAP on plans to invite a senior DOE official to the next CAP meeting to address the panel on the Administration's plans for removing spent nuclear fuel. Though unsuccessful, last year the CAP invited DOE Secretary Abraham. This time the invitation will go to Dr. Margaret Chu, Director of Civilian Radioactive Waste Management. If Dr. Chu is unable to attend, she will be asked to send a designee. Mr. Howes has responsibility for drafting the letter of invitation.

Ms. Catherine Ferdinand gave the CAP an overview of her work on the CAP report and thanked panel members for providing feedback on the report to date. Mr. Thompson praised Ms. Ferdinand's work to date noting that it is on track to accomplish what we set out to do. Mr. Schuman echoed Mr. Thompson's commendation saying he was particularly impressed with how concise the overview is nine pages could have been fifty.

Ms. Ferdinand suggested that the next step be a facilitated session where the CAP could finalize accomplishments, lessons learned, and recommendations. A facilitated

session to include lunch was set for the morning of May 19 at the Harraseeket Inn in Freeport.

In the near future Ms. Ferdinand will send a questionnaire to panel members seeking input on accomplishments, lessons learned and recommendations. Material received will be collated by facilitator Pamela Plumb and sent to CAP members prior to the May 19 session. Ms. Ferdinand and Mr. Howes will also seek the input of former CAP members.

The minutes of the November 20, 2003 meeting were adopted.

Chair Kilkelly asked the panel to address a concern raised by the librarian at the Wiscasset Library that the CAP record takes up considerable shelf space and has never been accessed by anyone. The library would like to discontinue carrying the CAP material. CAP members agreed that this should not be imposed on the library, especially if no one is looking at the material. Mr. Shadis said FOTC would like to have it and it was agreed that Mr. Shadis will contact the library to arrange for removal of the material.

The next CAP meeting was set for 6:00 p.m. Thursday, June 17 at Chewonki. Mr. Howes suggested that the CAP may want an update on containment demolition at that meeting since it is possible the demolition will have occurred by the time the CAP meets in September.

The meeting adjourned at 8:40 p.m.