

**Maine Yankee Community Advisory Panel on  
Spent Nuclear Fuel Storage and Removal  
Meeting Minutes  
September 1, 2011**

<b><u>Member</u></b>	<b><u>Attendance</u></b>
The Honorable Marge KilKelly, Chair	Yes
Dr. Don Hudson, Vice Chair	Yes
Mr. Steve Jarrett	Yes
Mr. Ralph Keyes	Yes
Mr. Wayne Norton	Yes
Mr. Jay Hyland	Yes
Mr. Dan Thompson	Yes
General Lewis Curtis	Yes
The Honorable David Trahan	No
Mr. Scott Houldin	No

**Introduction**

Chair Marge KilKelly welcomed everyone to the meeting and asked Community Advisory Panel (CAP) and audience members to introduce themselves.

Those in the audience included Wiscasset Board of Selectmen Chair Judy Colby, Wiscasset Selectman Bill Curtis, Wiscasset Selectman Ed Polewarczyk, Westport Island First Selectman George Richardson, Senator Olympia Snowe's representative Brian Whitney, Senator Susan Collins's representative Bobby Reynolds, and Congresswoman Pingree's representative Nick Battista. Reporter Alec Brodsky covered the meeting for the Lincoln County News. Also attending from Vermont as a presenter was Cort Richardson, Director, Northeast High-level Radioactive Waste Transportation Project (NEHLRWT Project).

Chair KilKelly and the CAP congratulated CAP member Steve Jarrett on this being his 50<sup>th</sup> wedding anniversary and presented him with a card from the CAP.

Chair KilKelly also recognized the long service of Don Shuman who has moved to Rangeley and resigned from the CAP. Members signed a card thanking Don for his significant contribution to the CAP since January 2000.

The minutes of the May 27, 2010 CAP meeting were approved with one amendment. General Curtis asked that the Chair and Vice Chair be listed at the top of the attendance list.

The CAP then discussed its continuation which under the Charter expires as of the 2011 meeting unless the CAP chooses to extend itself. General Curtis made a motion to continue the CAP for another two years. Mr. Jarrett seconded the motion. The CAP unanimously approved continuing its work until the 2013 meeting at which time the CAP will again review its continuation.

Vice Chair Dr. Don Hudson said the CAP needs to stay together to remind people in and out of state that we have unfinished business. Without the CAP it's too easy for people to forget that there is spent nuclear fuel stored in Wiscasset.

General Curtis then made a motion to reelect Chair Marge Kilkelly and Vice Chair Dr. Don Hudson to continue in their respective roles for the CAP. Mr. Jarrett seconded the motion and it was approved unanimously.

Chair Kilkelly suggested it is time to review the CAP Charter for any changes that should be made to update the document. The CAP agreed and Chair Kilkelly will work with Maine Yankee Public and Government Affairs Director Eric Howes and other interested CAP members to review the Charter and bring recommendations for change to the next annual CAP meeting.

### **Maine Yankee Independent Spent Fuel Storage Installation Update**

Maine Yankee Vice-President and Independent Spent Fuel Storage Installation (ISFSI) Manager Jim Connell provided the CAP with an update on the ISFSI and other issues related to the Maine Yankee site since the last CAP meeting. Mr. Connell spoke from slides contained in the CAP meeting package.

Mr. Connell began by noting the recent East Coast earthquake and Tropical Storm Irene. The earthquake was not felt at the ISFSI and the effects of Irene were minimal with the loss of off-site power for 12 hours and minor erosion around a culvert. On-site power was maintained with the diesel generator. For both events a site walk down was performed to assess any damage.

Mr. Connell said the October 27, 2010 emergency planning exercise was a success overall with a few open items identified that have been addressed.

Mr. Connell reminded the CAP that as a U.S Nuclear Regulatory Commission (NRC) Part 50 Licensee the Maine Yankee ISFSI is subject to the revised security rules for operating nuclear power plants that became effective in March 2010. However, the NRC provided Maine Yankee and other similarly licensed ISFSIs the opportunity to apply for exemptions from those requirements licensees believe should not apply to their stand-alone ISFSIs. The three Yankee Companies submitted their exemption requests prior to the December 2010 deadline and expect to receive a response from the NRC in September or

October. Mr. Connell stressed that the Yankee Companies are seeking to maintain their current security posture, not in any way reduce it.

Mr. Connell also noted an August 2010 NRC letter to Part 50 ISFSIs indicating that while the new operating plant security rules apply to ISFSIs like Maine Yankee there are no safety or security gaps at stand alone Part 50 ISFSIs.

General Curtis asked if Maine Yankee has been required to make any changes to security as a result of the new security rules for operating plants. Mr. Connell said the Yankee Companies have not. The NRC has reviewed the current security posture at the three Yankee ISFSIs and at its discretion will not take enforcement action for non-compliance with the new security rules while the exemption requests are pending.

Mr. Connell reminded the CAP that the NRC is working on a major revision to the security rules that will affect all ISFSIs. This effort has been underway since 2009. It could result in significant changes to security at the ISFSI and in emergency planning. The draft rule for the proposed changes is at least a year away. Mr. Connell said that he has been attending NRC meetings on the issue and that Maine Yankee will keep the CAP informed of developments.

Chair Marge Kilkelly noted that most of the Fukushima discussion about damage from the Japanese earthquake and tsunami has been about spent nuclear fuel stored in pools. What affect did the earthquake and tsunami have on the dry cask storage at Fukushima? Mr. Connell said the dry cask units at Fukushima were unaffected.

Mr. Ralph Keyes asked if the Maine Yankee cask system is designed to withstand ground movement in an earthquake even if the casks were to topple over. Mr. Connell affirmed the casks are designed to withstand that event.

Vice Chair Dr. Hudson asked Mr. Connell when the NRC license for the canisters expires. Mr. Connell replied in 2020 and that NRC is now extending canister licenses for 40 years rather than the previous 20 year period. Working with cask vendor NAC International, Maine Yankee expects the application for relicensing the canisters to be submitted to the NRC in 2018. He noted that in addition to the NRC's revised Waste Confidence rule of December 2010 that finds on-site storage safe for at least 120 years, the NRC staff is studying the potential to store spent nuclear fuel on-site for up to 300 years.

Mr. Connell listed the various industry panels Maine Yankee participates on and noted that the issue of how spent fuel canisters are affected by a marine environment such as we have here in Maine will be an issue going forward. The Electric Power Research Institute will be working on this issue next spring on a project involving the Maine Yankee ISFSI. They will be looking at issues such as

the effect of temperature, humidity, and chloride content on spent nuclear fuel canisters.

Mr. Connell updated the CAP that the final report on the 5 year radiological groundwater sampling program has been submitted to the State. Comments on the report were received from the State at the end of June and responses to those comments are being prepared. Mr. Connell said all data indicate the targets have been achieved and the program is complete. He reminded the CAP that chemical groundwater monitoring overseen by the Department of Environmental Protection will be ongoing until 2035 with the next round of sampling in 2013.

Mr. Connell said the quarterly meetings between Maine Yankee and the State of Maine have been constructive and that all indications are the State has enough or more than enough funds with the annual \$220,000 fee to meet its oversight responsibilities.

### **State of Maine Update**

Mr. Jay Hyland, State of Maine Radiation Control Program Manager and CAP member updated the CAP on State oversight activities since the last CAP meeting. Mr. Hyland spoke from a slide titled SNSI (State Nuclear Safety Inspector) CAP Update (since 5/10) contained in the CAP package.

Mr. Hyland noted that the change of Administration has slowed the pace of reports. However, Mr. Hyland said that as the new people become more familiar with the work of his program he expects less of a lag. The SNSI's June report should be issued soon along with the SNSI's annual report.

Mr. Hyland discussed the quarterly field replacements of the environmental thermo luminescent dosimeters (TLD). To assist the understanding of the audience, Chair Kilkelly asked Mr. Hyland to explain the function of a TLD and what the initials stand for. The thermo luminescent dosimeters are designed to measure background radiation in the vicinity of the ISFSI.

Mr. Hyland said the SNSI has completed his radiological walk down of the site with the former East Access Road being the last piece. Nothing of note was found.

Mr. Hyland agreed with Mr. Connell that the radiological groundwater monitoring program is complete and that completing the final report is really a matter of crossing t's and dotting l's.

Mr. Hyland said there is a surplus of \$49,000 in the State's Maine Yankee oversight account from when the State Nuclear Safety Advisor position was eliminated in 2008.

Chair Kilkelly asked about the status of the State's confirmatory report on Maine Yankee's decommissioning and the process for completing it. Mr. Hyland said he had hoped to have a draft ready for the CAP meeting. Completion of the 200 page report has been delayed by the change in Administration. There are now three reviewers when there was one before. Mr. Hyland said he hopes the report will be finished by the end of the year.

### **Spent Nuclear Fuel Removal/Disposal Update**

Mr. Eric Howes, Maine Yankee Public and Government Affairs Director, updated the CAP on the spent nuclear fuel removal/disposal issue since the last CAP meeting. He spoke from slides included with the meeting package.

Mr. Howes noted that it was just over a year ago that the Transportation and Storage Subcommittee of the Blue Ribbon Commission on America's Nuclear Future (BRC) held a meeting in Wiscasset at the CAP's request. Mr. Howes said that from Maine Yankee's perspective the meeting was successful at highlighting the issues affecting single unit shutdown sites like Maine Yankee that continue to exist only because the federal government has failed to remove the spent nuclear fuel and Greater than Class C Waste as required by contract.

Mr. Howes' presentation contained quotes from the July 29, 2011 BRC draft report emphasizing the need to build consolidated interim storage for spent nuclear fuel and that decommissioned reactor fuel should be "first in line" for transfer to consolidated interim storage.

The BRC's final Report will be submitted to the Secretary of Energy by January 29, 2012. It remains to be seen what the Administration and Congress will do with the BRC Report recommendations. The BRC is accepting comments on the draft through October 31.

Mr. Howes updated the CAP on the status of the Yucca Mountain Program saying for now it has effectively ceased to exist but the outcome of the Administration's efforts to end the program is still pending in the U.S. Court of Appeals and the Congress. He said while the Republican House has been critical of the U.S. Department of Energy (DOE) and the NRC for closing out the Yucca Mountain program, so far the result has been more smoke than fire. Also the Senate is controlled by Majority Leader Reid of Nevada who remains adamantly opposed to the Yucca Mountain Program.

Mr. Howes called the CAP's attention to language in the Report accompanying the FY 2012 House Energy and Water Appropriations bill that directs the DOE in its FY 2013 budget request to include a plan for consolidated interim storage and priority for transferring spent nuclear fuel stored at decommissioned reactor sites.

This language was sponsored by Congressman Courtney of CT who represents the district where Connecticut Yankee is located.

Another positive development is Senator Murkowski's (R-Alaska) bill cosponsored by Senator Mary Landrieu (D-Louisiana) that would require the development of two consolidated interim storage facilities with priority for spent nuclear fuel from decommissioned sites. This bill is unlikely to move forward this fall as Congress waits for the final BRC report in early 2012, but Mr. Howes noted the bipartisan support is encouraging.

Mr. Howes concluded his presentation with an update on the Yankee Companies' ongoing litigation with the DOE. The trial in the phase II case is scheduled for early October in the U.S. Court of Federal Claims. Both sides have submitted their briefs on the appeal in the Phase I case and are waiting for the oral argument to be scheduled in the U.S. Court of Appeals. Mr. Howes reminded the CAP that Maine Yankee was awarded approximately \$82 million in the Phase I decision in September 2010 but that the Government appealed that decision in November 2010.

Chair Kilkelly reminded the CAP and the audience that money awarded by the courts in lawsuits or paid out in settlements between the DOE and utilities comes from the tax payer funded judgment fund administered by the U.S Department of Justice. Ratepayers and taxpayers pay the financial cost of DOE's failure to remove the spent nuclear fuel as required by contract.

Chair Kilkelly said in addition to paying into the Nuclear Waste Fund as required for the disposal of Maine Yankee spent nuclear fuel, Maine Yankee ratepayers paid to rerack the spent fuel pool more than once; paid to build the ISFSI and transfer spent fuel to the ISFSI; and now are paying indefinitely to operate the ISFSI.

Vice Chair Dr. Hudson said he recalled a Maine Yankee graphic from early in decommissioning that showed the radioactive decay curve of the spent nuclear fuel. The radioactivity dropped off sharply in the first few years and then became a classic long-tailed curve that goes on for a long, long way into the future with little change. Dr. Hudson encouraged recreating the graph as a way to remind the public that the nature of the radioactive spent nuclear fuel will remain unchanged for a very long time. He said we need to keep saying this is not municipal waste and that it is just dumb to store it in this way at multiple sites around the country.

Dr. Hudson went on to say in his view it makes no sense to start a new organization to manage the disposal of spent nuclear fuel as recommended by the draft BRC report. Why attempt to create a whole new department especially in the political climate we face in 2011?

Mr. Howes responded it is his understanding the BRC draft is not looking to create a new federal government department but rather a quasi governmental entity similar to the Tennessee Valley Authority with a board of directors and management team.

Mr. Cort Richardson said one of the reasons for suggesting a new organization is because the DOE isn't set up for success. Lack of funding is a major issue.

Mr. Ralph Keyes questioned whether consolidated interim storage could happen here at Maine Yankee, especially with the emphasis on decommissioned reactor fuel being first in line for transfer to consolidated interim storage.

Mr. Wayne Norton said the consent based approach is key to the BRC draft report recommendation on siting whether it is consolidated interim storage or a repository. Mr. Norton said there are communities who may find this attractive, especially if there are financial incentives and associated research and development on closing the nuclear fuel cycle and the effects of long term interim storage of spent nuclear fuel.

Mr. Dan Thompson said it's his observation that governments lose memory over the long term. The BRC did listen to the CAP last summer. We should remind them that we have years of experience with the spent nuclear fuel issue from a community perspective and we would like to help. Change it around from just reviewing the report to helping.

### **October 12 Boston Meeting on BRC Draft Report**

Mr. Cort Richardson, Director of the NEHLRWT Project provided the CAP with information on his organization and the BRC October 12 meeting in Boston that is being co-hosted by the BRC and the Council of State Governments Eastern Regional Conference (COSG-ERC). The NEHLRWT Project is based in Montpelier, VT and is part of the COSG-ERC. Mr. Richardson spoke from slides contained in the CAP package.

Mr. Richardson recommended the BRC draft Report Executive Summary as a good overview of the draft Report for those who may not have time to read all nearly 200 pages of the draft Report.

Mr. Richardson highlighted the Waste Isolation Pilot Project (WIPP) in New Mexico as a success story for high-level radioactive waste disposal the past 12 years. He said WIPP's success is due in large measure to the transport and disposal protocols developed with communities, tribes, and states. Mr. Richardson said it is a good model that needs to carry over to the federal program. He said people are pretty happy with the program and its democratic process.

Mr. Richardson said the NEHLRWT Project strongly supports the recommendation of the BRC draft report for spent nuclear fuel from shutdown reactors to be first in line for transfer to consolidated interim storage.

He went on to say a sound transportation program is needed and planning for siting and transportation planning need to move forward together.

Mr. Richardson said that even if progress is made in the short term when the BRC report is finalized it will still take years before any spent fuel moves. He noted that it took 10 years for the NRC to license the Private Fuel Storage facility in Utah and that project is stalled due to federal and state objections.

Mr. Richardson said there has to be assurance that permanent storage is being developed at the same time as interim storage so communities potentially interested in interim storage do not fear interim will become permanent in their community.

Regarding the October 12 BRC meeting in Boston, Mr. Richardson said the COSG-ERC was approached by the BRC to jointly sponsor the meeting.

Chair Kilkelly asked if Mr. Richardson could talk about the CAP's role at the Boston meeting.

Mr. Richardson said the agenda for the meeting has not been finalized but the morning will likely be panel discussions on topics of interest to the region and certainly decommissioned plant issues will be a subject for panel discussion. The afternoon will consist of breakout sessions with groups considering questions raised in the BRC draft Report and reporting back to the full meeting. There will also be a public comment period.

Mr. Richardson said the CSG-ERC would like to have representatives from groups like the CAP attend the meeting and that he has been working with Bob Capstick, Director Public & Government Affairs for Connecticut Yankee and Yankee Rowe, to identify stakeholders for participation. Mr. Capstick was in the audience at the Maine Yankee CAP meeting.

Mr. Richardson encouraged the CAP to submit comments on the draft report for the October 12 meeting saying BRC Commissioners came here. They will listen to you.

Again expressing concern about the loss of institutional memory, Mr. Thompson asked what the Commission is doing in other regional meetings. Mr. Richardson said the upcoming Denver meeting is the only one so far with a published agenda but that the meetings will focus on issues of importance to each region with a mix of panel discussions, small group breakout sessions, and public comment.

## **CAP Discussion of Draft BRC Report**

Chair Kilkelly reminded the CAP and audience that the annual CAP meeting was deliberately planned later in the year than usual to allow for discussion of the draft BRC report. She noted that the BRC draft Report recommendations includes the CAP's central focus that spent nuclear fuel should be removed from decommissioned reactors sites to consolidated interim storage on a priority basis.

Chair Kilkelly suggested that the CAP ought to identify three points to make in response to the BRC draft report, and that the first should be thank you for listening and including our central message to you.

Vice-Chair Dr. Hudson said the CAP ought to endorse the draft report's first Recommended Strategy for "A new, consent-based approach to siting future nuclear waste management facilities." Dr. Hudson said that's where the paralysis is. If a willing host emerged, the rest could fall into place. Dr. Hudson agreed with Mr. Thompson that the CAP has 15 years' experience. How can we help? We want to help you with the implementation.

Mr. Thompson added that he has experience with WIPP and knows how the WIPP impasse was broken and why WIPP is successful. The CAP has the community based experience to be helpful.

Mr. Norton said when the BRC report is submitted to the Secretary of Energy in January 2012, their job is done. We need to be thinking about what we can do to keep the momentum after the BRC Report is final. How do we ensure the momentum isn't lost?

Dr. Hudson suggested the CAP should ask the BRC to prioritize their recommendations.

Chair Kilkelly suggested that the CAP should offer support for the BRC's recommended "near-term actions" in the areas of finance, storage, and transportation found on page 133 of the draft Report.

General Curtis suggested that the CAP urge the BRC to recommend federal sites for the storage of spent nuclear since the federal government has nuclear storage capabilities.

Mr. Howes responded that the BRC stated in the draft report Executive Summary that they will not be recommending storage or disposal sites as part of their report and that General Curtis's recommendation may be something to consider as part of the implementation phase after the final report is issued.

John Arnold, Yankee Company staff, took notes on a flip chart during the CAP discussion of how the CAP will respond to the BRC draft report. Below is a transcript of what John wrote on the flip charts with the summary of points the CAP agreed to make October 12 listed first. Eric Howes will draft the CAP response for review based on the information below:

- 1. Thank the BRC for including the CAP's central point that decommissioned reactor fuel should be moved on a priority basis to centralized interim storage.**
- 2. Endorse the BRC's consent-based siting recommendation.**
- 3. Support BRC's near-term actions in finance, storage, and transportation.**

### **Supporting Points to include in comments or discussion October 12**

- Our experience is available to support conclusions.
- CAP is a community based, non-technical model for communication.
- We want to help with implementation.
- The action plan is not clear.
- We want to support the implementation process, not just the plan.
- Ask BRC to prioritize its recommendations at the October 12 meeting.
- The federal government has nuclear storage capabilities that should be considered.
- Siting is key to resolving the spent nuclear fuel issue.
- Near-term could be fairly long-term meaning years.

### **Public Comment**

Chair Marge Kilkelly thanked the congressional staff representatives and selectmen for attending the CAP meeting and listening to the discussion.

Westport First Selectman George Richardson said Maine Yankee has had a law suit since 1998. The issue is likely to go on for years. This is a very difficult task.

Chair Kilkelly said we are the burr under the saddle.

Vice Chair Dr. Hudson said he has had a number of people say leave it where it is forever. Dr. Hudson disagrees with that approach and said it makes no sense to leave spent fuel stranded at six decommissioned reactor sites when these sites could be closed out and reused.

Mr. Norton said it's not a six unit problem. It's a hundred unit problem. Every operating plant will someday shutdown and be in the same position as the Yankee sites. Mr. Norton said he's pleased that people in the industry are beginning to appreciate that fact.

Mr. Cort Richardson said if we contemplate on site storage for 300 years it is here forever. That's older than our country. We'd better get moving on this while institutions with an understanding of the issue are here.

Chair Kilkelly said it may take a long time but any motion forward is progress even if it's incremental.

Mr. Jarrett asked if there is an effort to reprocess the spent nuclear fuel like they do in Europe and Japan. Here we are standing still on trying to move it. Every 3-4 years we start over with this issue when there is a change of Administration.

Mr. Norton responded that the Commission looked at reprocessing and chose to focus mainly on storage, transportation, and disposal while leaving reprocessing research and development to the DOE. New commercially viable reprocessing technology may be decades away. That said, consolidated interim storage makes sense from a long term management perspective in part because a consolidated facility could serve as a research and development site for a host of issues including reprocessing and the effects of long term storage.

Wiscasset Selectman Ed Polewarczyk asked is there any hazard to me living a half mile away from the ISFSI? Mr. Connell said no there is not.

Mr. Polewarczyk said there would be an impact on every taxpayer in Wiscasset if the facility weren't there. It comprises 5-10 percent of the town's tax base. Mr. Polewarczyk reminded the CAP Bailey Point is a valuable piece of land that Wiscasset has an interest in once the spent nuclear fuel is removed. He also said he hopes the spent nuclear fuel is eventually reprocessed for the usable uranium since nuclear power is one of the cleanest, most efficient forms of energy.

Vice Chair Dr. Hudson said it will be a very long process to get all the fuel off the site. It will take years to transition to another use.

Chair Kilkelly said the whole issue of consent is critical. We have seen in Nevada the county and communities near Yucca Mountain support the project, but the major population base in Las Vegas and the State of Nevada do not.

Mr. Norton noted that another big challenge is infrastructure. We have infrastructure issues such as bridges we haven't begun to address in order to move thousand ton packages over the rails.

Mr. Cort Richardson agreed saying the rolling stock isn't built yet or configured to work in the real world.

Mr. Thompson said new nuclear power plants are being stymied by the spent nuclear fuel problem. Do we or don't we use nuclear power in the future? We need to solve this problem.

**The meeting adjourned at 8:15**

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