Statement before the Transportation and Storage Committee of the Blue Ribbon Commission on America's Nuclear Future

The Honorable Marge Kilkelly, Chair, Maine Yankee Community Advisory Panel on Spent Nuclear Fuel Storage and Removal

The Chewonki Foundation, Wiscasset, ME August, 10, 2010

Chairman Meserve, distinguished Commissioners, my name is Marge Kilkelly. I have Chaired the Maine Yankee Community Advisory Panel since it began 13 years ago in August 1997. I currently serve as the Eastern Region Deputy Director of the Council of State Governments. Prior to that I was a member of the Maine House and Senate for 16 years representing Wiscasset and Lincoln County.

On behalf of the Maine Yankee Community Advisory Panel and our colleagues from Connecticut and Massachusetts, we are honored that you traveled here today to hear our concerns about the spent nuclear fuel and Greater than Class C Waste that remains stored at our three Independent Spent Fuel Storage Installations several years after the end of plant decommissioning and nearly a dozen years beyond the date the Department of Energy was required to begin removing this material. We believe the Community Advisory Boards at Maine Yankee, Connecticut Yankee, and Yankee Rowe provide a unique community perspective that is an essential element to your important work.

Our experience and lessons learned at the local and regional level apply at the national scale, for in both instances it is individuals and communities that are affected by the transportation and storage of spent nuclear fuel and the policy decisions that are made.

The risks of involving stakeholders intensively in a large project like a plant decommissioning or the national work you are undertaking are real, but from our experience they are far outweighed by the benefits. Not everyone is going to agree on a particular policy, and some will be vociferous in their opposition, but the community and individual input can often lead to epiphany moments that otherwise may never be found. When people know their voices are heard, even if they disagree with the outcome, conflict is diminished, trust is established, and often consensus can be reached.

Transparency is essential and transparency is created when time is invested in educating and listening to the public. Further, the role of non technical people in technical decision making should not be underestimated. The "dumb question" can provide an opportunity for new ideas.

The February 2005 report of the Maine Yankee CAP's experience with the decommissioning project is called <u>A Model for Public Participation in Nuclear Projects.</u>

A copy of the report is provided for the record. It is also available on the Maine Yankee website at MaineYankee.com. Also provided for the record is a copy of a paper I presented at the American Nuclear Society's 9th International High-level Radioactive Waste Management Conference in Las Vegas on April 30, 2001. The title of the paper is

Preparing for the After Life, A discussion of Community Involvement in the

Decommissioning of Maine Yankee. Connecticut Yankee Community Advisory Board

Chair Hugh Curley also gave a presentation at that conference. Much of what I will share with you is in contained in these documents.

From 1995 into 1997 Maine Yankee was much in the public eye during steam generator repairs, a state-initiated NRC Independent Safety Assessment and anonymous accusations of safety violations. In the summer of 1997 the company decided to form a CAP to provide advice to the company and to serve as a liaison to the community. At the time, like other nuclear utilities Maine Yankee's communication with the public was mainly through its information center, speakers' bureau, and press releases. The CAP was created by the company but it represented a far different method of outreach to stakeholders.

When Maine Yankee asked me to chair a Community Advisory Panel my key concern was the company's level of commitment. Would they share information in a timely manner? Would CAP members be providing advice not just reviewing action taken by the company? If Maine Yankee was asking community members to spend several years serving on a CAP it needed to be an honest process.

The CAP was established "to enhance open communication, public involvement, and education on Maine Yankee's decommissioning and to "function as an advisory panel."

Inaugural members of the CAP represented a broad cross section of the community including local business, town government, state government, emergency planning, marine resources, education, medicine, environmental interests, and the local anti-nuclear activist group. Four of today's 10 members have served since the beginning or very nearly so. Three others have served for 10 years or more.

The company took several steps early on to fulfill its commitment to the CAP. Maine Yankee first made public at CAP meetings important information such as the Post Shutdown Decommissioning Activities Report and the selection of the decommissioning operations contractor. The company also gave individual CAP members access to previously internal documents.

From the outset Maine Yankee provided the resources necessary for the CAP to function efficiently. The first year was largely tutorial. Members learned the basics of nuclear power, plant decommissioning and options for spent fuel storage. After the first year the CAP was prepared to provide advice to the company which it did regularly.

In the first years, the CAP met monthly. By 1999 meetings were every six to eight weeks. Beginning in September 1998 and each year after the CAP met for a day long facilitated session to review the past year and plan its work for the year ahead. In these meetings the company provided the panel with a schedule for anticipated activities, and the panel identified issues of concern for constituents. In 2002 the panel began meeting quarterly. We now meet once a year.

During the seven year Maine Yankee decommissioning project the CAP held over 50 public meetings. Issues ranged from the momentary such as complaints from neighbors about noise from temporary spent fuel cooling fans, to the seemingly indefinite when talking about the storage and disposition of the spent nuclear fuel.

The fan noise issue established the CAP's credibility with the community. In 1998 Maine Yankee installed heat exchangers with large fans to keep the spent fuel cool after isolating the pool from the rest of the plant. When summer visitors arrived on Westport Island, Maine Yankee began receiving complaints from irate neighbors about the incessant fan noise. Their children couldn't sleep and they had to keep their windows closed. A CAP meeting was hastily scheduled so that residents could air concerns. As a result, within weeks modifications to the fans were made resolving the issue.

If only the spent fuel issue could be resolved so readily. As our CAP vice-chair Dr. W. Donald Hudson, Jr. wrote in the CAP's February 2005 report, "I believe we have to plan for changing the culture surrounding waste as we plan for the long-term storage of nuclear material either in Wiscasset or at Yucca Mountain... We have to plan, realistically, to manage the nuclear fuel cycle and its highly radioactive and dangerous by-products for at least another 500 generations." We sometimes call Don our 10,000 year man. We are encouraged by your presence here today that we won't be custodians of the spent fuel for 10,000 years.

The CAP also grappled with how clean is clean radiologically? The NRC's standard is 25 millirem plus ALARA above naturally occurring background radiation; the EPA's is 15 millirem. It was very confusing and disconcerting for the public when two agencies of the federal government were inconsistent on an issue so basic to the decommissioning process. How could there be public confidence that the site would be clean without a consistent standard?

While the CAP did not take a position in favor of one standard or another, we did take a strong position that inconsistency was not acceptable; it had the potential to impact the process / cost/ length of time of decommissioning as well as public confidence that the site would be really clean. The CAP hosted the NRC and EPA at a local school for a first-of-its-kind discussion of their respective radiation standards. The meeting, attended by over 150 citizens brought to the forefront the serious impact on public confidence of this disagreement among the two federal agencies. The meeting was a learning experience for the agencies who began to understand the CAP's commitment to the process and the seriousness with which we undertook our work. The NRC became a regular scheduled presenter at CAP meetings for several years. In the end, due to a lack of resolution on the federal level, the State of Maine chose a more stringent 10 millirem standard with a separate 4 millirem limit from groundwater that became State law.

Communicating scientific data in language that even I can understand is critical. The Maine Yankee site was cleaned radiologically to a level that couldn't be measured directly. It had to be modeled using a fictitious resident farmer who drills his well in the

old containment, drinks the water, irrigates his crops, and raises animals and vegetables that he consumes without exceeding the 10/4 millirem dose limit.

An audience member once asked, "How much is 10 millirem?" The late CAP member and Radiologist Dr. Paul Crary replied, "Like so many angels dancing on the head of a pin."

The role of the CAP in providing additional non-technical review of proposals was important as well. In addition to regulatory scrutiny, the decommissioning plans routinely were put through a public "straight face" test where the perceptions and perspectives of stakeholders were considered and plans sometimes altered as a result.

Maine Yankee's decommissioning operations contractor proposed cleaning the concrete so that it met the criteria of the License Termination Plan and then placing the rubblized concrete in building foundations. Technically and from a regulatory point of view the plan may have been feasible. However, a number of stakeholders viewed this proposal as on-site disposal of radioactive material because the concrete might have detectable levels of radioactivity, albeit at levels permitted by the License Termination Plan. Maine Yankee worked extensively with stakeholders on a plan that resulted in the rubblized concrete being shipped by rail from the site for disposal.

Maine Yankee's decommissioning was also the first to use controlled explosives. This technique, which was used three times, enhanced project safety and expedited the

demolition process. The idea of using explosives at a nuclear power plant site just after 9/11 seemed a real challenge from a public perception stand point. However, the demolition company in a presentation to the CAP carefully explained the process to the community and assured stakeholders that radiological and other risks from this proposed activity were small.

A significant measure of the success of the decommissioning and the role of the CAP was that hundreds of people came in September 2004 to watch the explosive demolition of the containment building – in fascination not fear. They knew what was going to happen, felt secure in the information they received and took pictures of the implosion.

The CAP process was transparent with no distance or filter between the decision makers and the general public. As a local newspaper reporter put it, "The CAP meetings became Maine Yankee's report card."

CAP members were very interested in learning all they could about the storage of spent nuclear fuel. At the first CAP meeting Maine Yankee invited the panel to become engaged in the "wet versus dry" discussion. At that time the company had not yet made a decision on whether to leave the spent fuel in the pool or move it to dry cask storage. As part of our education we visited dry cask storage facilities in Michigan, Maryland, and Colorado. In June 1998 the CAP went on record favoring dry cask storage at Maine Yankee. Later in the decommissioning we also visited Yucca Mountain to learn about plans for spent fuel disposal.

With decommissioning nearing a successful conclusion, in early 2005 the CAP voted to shift its emphasis to monitor the interim storage of spent nuclear fuel at the Maine Yankee site as it is too easy for an out of sight out of mind mentality to take hold. We also changed our Charter to advocate for the prompt removal of the spent fuel to a location outside New England.

It was clear then as it is now that no one knows how long this material will remain stored here. As one CAP member put it at the end of plant decommissioning, "This marks the end of a process, but not the end of the story." Recently another member put it slightly differently, "It's ironic that the stakeholders involved in Maine Yankee's decommissioning were able to reach consensus on challenging issues like site restoration and demolition debris disposal but still we are left with the legacy of the spent nuclear fuel because the federal government has not been able to do the same."

You have just returned from a visit to the ISFSI and have seen for yourselves that absent the 60 canisters of spent nuclear fuel and 4 canisters of GTCC waste stored there, Bailey Point would be a great location for another industrial enterprise that could rival Maine Yankee in terms of high paying skilled jobs and economic benefit to the community.

With the plant buildings removed and the site restored what remains is the valuable infrastructure that served Maine Yankee so well for 25 years: a rail line to the 180-acre

site, public water and sewer, a 345 Kv switchyard, a 115 kv switchyard; deep water access, and a barge slip.

Five years after the end of decommissioning we are left with a facility that costs electric ratepayers \$6-\$8 million per year to operate and valuable real estate that can not be reused until the spent fuel and GTCC waste is removed.

The Maine Yankee CAP adds its voice to those calling on the federal government to make it a priority to remove to centralized interim storage the spent nuclear fuel and GTCC waste from single-unit shutdown reactors sites. A site that only stores waste is the most inefficient method of storage. Moving this material will reduce the number of sites storing and securing spent fuel; relieve electric rater payers of the burden of paying the storage costs, and free these sites for other useful purposes.

Here at Maine Yankee we broke new ground through the emphasis on transparency and consensus building. Even though decades of work have gone into trying to close the back end of the fuel cycle, in many ways the work your Commission is undertaking is new ground as well since as a nation we haven't yet found a success path.

The Community Advisory Panel model builds trust among stakeholders and leads to project success if you have the courage to take the risks inherent in an open process.

Success depends on: Educating panel members, educating the public; embracing openness, respecting diversity, listening, taking risks; encouraging public involvement; answering questions; and sharing knowledge.

We hope you carefully consider how our accomplishments and lessons learned at Maine Yankee can be transferred to the national stage. Again, thank you for coming to listen. We look forward to helping you in any way we can, and I'm happy to answer any questions you may have.