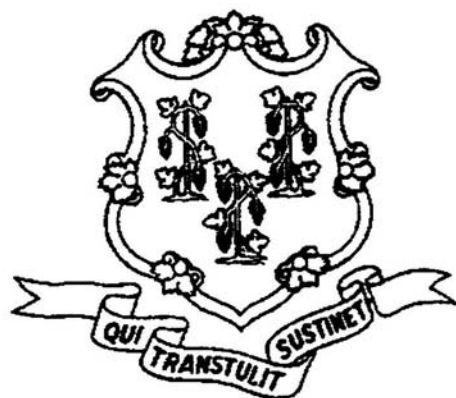


STATE OF CONNECTICUT



THE NUCLEAR ENERGY ADVISORY COUNCIL REPORT

2003

Established Pursuant to Public Act 96-245

**Evan W. Woollacott, Co-Chairperson
John Markowicz, Co-Chairperson**

June 21, 2004

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CHARGE TO THE COUNCIL

Section 17 of Public Act 96-245 created the Nuclear Energy Advisory Council (NEAC) and requires it to:

1. Hold regular public meetings to discuss issues relating to the safety and operations of nuclear power plants and to advise the governor, legislature, and municipalities within a five-mile radius of the plants on these issues;
2. Work with federal, state, and local agencies and the companies operating such plants to ensure public health and safety;
3. Discuss proposed changes in, or problems arising from, the operation of the plants;
4. Communicate, through reports and presentations, with the plants' operators about safety or operational concerns at the plants, and
5. Review the current status of the plants with the Nuclear Regulatory Commission.

COUNCIL MEMBERS

The Council has thirteen (13) members appointed by the Governor, legislative leadership, and the executive bodies in the towns in or near which the state's nuclear power plants are located (Appendix 1).

EXECUTIVE SUMMARY

This is the eighth annual report presented by the Nuclear Energy Advisory Council (NEAC). During Calendar Year 2003, the NEAC met once and received reports from representatives of the Nuclear Regulatory Commission (NRC) and Dominion Nuclear Connecticut. Routine NRC Millstone Power Station inspection and performance assessment reports were also received and reviewed. Since Millstone Units 2 and 3 plant performance (Action Matrix and Performance Indicators) was classified as "GREEN", meaning inspection findings were classified as having low safety significance, only routine baseline inspections were performed by the NRC. In addition, one Special Inspection was conducted as a result of the inadvertent trip of Unit 2 on March 7, 2003. Most of the major Connecticut Yankee activities were associated with the Reactor Vessel, the Spent Fuel Storage facility, and the Fuel Transfer dry runs. The Reactor Vessel was shipped by barge to the low-level radioactive waste facility in South Carolina.

COUNCIL ACTIVITIES IN 2003

MEETINGS:

As required by PA 96-245, the NEAC held one regular public meeting at Waterford Town Hall, Waterford Connecticut to provide a venue for discussion of issues relating to the safe operation of the state's nuclear power plants. Meeting Minutes are included in Appendix 2. A summary of the meeting follows:

March 20, 2003: This was a joint meeting with the NRC Region I and focused on the Annual Assessment Report of Millstone Power Station Units 2 and 3 for the last three calendar quarters of CY 2002. It was reported that overall these two units were operated in a manner that preserved public health and safety and fully met NRC cornerstone objectives. Accordingly, the NRC planned to conduct only baseline inspections at the facility through December 31, 2003.

Millstone I Decommissioning Advisory Committee (MIDAC): There was also one MIDAC Meeting during calendar year 2003. Appendix 3 presents the MIDAC membership and Appendix 4 presents the 2003 MIDAC Activity Report.

REPORT ON ISSUES

MILLSTONE OPERATIONS

As reported by the Nuclear Regulatory Commission (NRC) in regular inspection reports and at a Joint Public Meeting (Appendix 2), Millstone Units 2 and 3 have continued to be operated in a manner that preserves public health and safety. No findings of significance were documented on routine baseline inspections conducted through December 31, 2003. One cross-cutting issue in the area of problem identification and resolution was noted on Unit 2 in the August 27, 2003 mid-cycle assessment letter. The licensee has taken appropriate action to correct this issue. Routine inspections conducted between January 1, 2003 and December 31, 2003 resulted in the identification of three Unit 2 issues and two Unit 3 issues, all of very low safety significance (GREEN). On March 7, 2003, Unit 2 experienced a reactor trip during reactor protection system testing. As a result, the NRC conducted a Special Inspection that reported four findings of very low safety significance (GREEN)

MILLSTONE MONITOR

No Monitor events were conducted since the termination of this program in June 2002.

NUCLEAR EMERGENCY PREPAREDNESS

No Emergency Plan Evaluated Ingestion Exercise was conducted during Calendar Year 2003. The next Exercise is planned for September 2004.

DECOMMISSIONING

MILLSTONE 1

In July of 1998, it was announced that Millstone Unit 1 would undergo decommissioning. A modified Safe Storage (SAFSTOR) decommissioning option was selected and remains in effect. This involves some decontamination and dismantlement early in the process. After these initial activities are complete, the unit is then placed in safe storage until the other two units at the Millstone site undergo decommissioning. After reviewing Unit 1 requirements, in conjunction with the operational and outage requirements of Millstone Units 2 and 3, it was strategically decided to place Unit 1 in 'Cold and Dark' storage in April 2001. This allowed the safe and efficient separation (from Units 2 and 3) projects as well as the decommissioning projects. All separation projects were completed by April 1, 2001.

CONNECTICUT YANKEE

Dismantlement activities continue at Connecticut Yankee (CY), with the project scheduled to be finished in 2004. Bechtel Power was terminated as the Decommissioning Operations Contractor in July 2003 and this responsibility was transitioned to Connecticut Yankee. Most of the major activities this year were associated with the Reactor Vessel, the Independent Spent Fuel Storage Facility, and Fuel Transfer dry runs. All preparations were completed to remove and package the Reactor Vessel and it was shipped by barge to a low-level radioactive disposal facility in South Carolina. The Independent Spent Fuel Storage Facility was essentially completed and three fuel transfer dry runs were completed.

The Nuclear Regulatory Commission (NRC) reported good radiological controls for work performed and that an effective radiological effluent monitoring program was being conducted at the site. Total exposure in 2003 was approximately 77% of the forecast and overall project dose is about 75% of the total estimated dose predicted in the Post Shutdown Decommissioning Activities Report (PSDAR).

The thirteenth round of groundwater sampling was completed in November 2003. Off-site residential well and fish sampling conducted by the Connecticut Department of Environmental Protection confirmed that elevated levels of tritium and strontium 90 (that were identified in a small number of plant monitoring wells) are confined to the plant site. Groundwater and soil sampling will continue throughout the decommissioning process.

Connecticut Yankee remains in a heightened mode of security and is continually monitoring and evaluating its security program in concert with federal, state, and local authorities, including the NRC, FBI, Connecticut State Police, Connecticut Department of Environmental Protection and the State of Connecticut. The NRC has reviewed CY's security preparations and confirmed their implementation in a confirmatory action letter. All decommissioning plants received similar reviews and confirmatory action letters.

In October 2003, after a multi-year public process, including a formal hearing, the NRC approved the Connecticut Yankee License Termination Plan (LTP). The LTP establishes the procedure for terminating the site's NRC operating license.

CY provides information to the public through daily publications of “CY Today”, its website www.connyankee.com, quarterly meetings of the Community Decommissioning Advisory Committee (CDAC), and activities with the Middlesex Chamber of Commerce.

HIGH LEVEL NUCLEAR WASTE

- NEAC continued to monitor activity to establish a permanent solution for spent nuclear fuel rods disposal. In view of the fact that there are now two nuclear plants currently being decommissioned in Connecticut, failure to establish a permanent repository could adversely affect the State’s economy and homeland security. It is noted that plans are being developed and implemented for the temporary storage of spent fuel in dry cask storage containers at both Millstone and Connecticut Yankee.
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The U.S. Department of Energy’s program schedule for Yucca Mountain is:

- License Application in 2004
- U.S. Nuclear Regulatory Commission Construction Authorization and begin construction in 2007.
- U.S. Nuclear Regulatory Commission License Approval and begin waste acceptance in 2010.
- NEAC will continue to follow the progress of this issue in 2004.

RECOMMENDATIONS

STATE

1. Office of Emergency Management (OEM) should continue to address any emergency preparedness issues at Connecticut's nuclear sites.
2. Department of Public Safety (Division of Homeland Security) and Department of Environmental Protection should continue to address any security issues at Connecticut's nuclear sites.
3. The Governor, Legislature and NEAC should continue to insist that the NRC continue vigilant oversight during the decommissioning of Connecticut Yankee and Millstone 1 and for as long as high-level nuclear waste remains on site.

NEAC

1. Continue to monitor the stability of the Employee Concerns Program and Safety Conscious Work Environment at Millstone Power Station.
2. Continue to monitor operations and decommissioning activities at Millstone Power Station and Connecticut Yankee, including the dry cask storage programs.
3. Continue to encourage the prompt activation of the Permanent Nuclear Waste Storage Repository at Yucca Mountain and the safe transfer of nuclear waste from Connecticut to this site.
4. Continue to monitor the implementation of enhanced security measures at nuclear sites within the State of Connecticut.

Appendix 1
2003 Nuclear Energy Advisory Council Membership

NUCLEAR ENERGY ADVISORY COUNCIL MEMBERSHIP

John Markowicz (Co-Chair) Waterford: BS Engineering, Naval Academy.
Economic director, former chief engineer nuclear powered submarine.

Evan W. Woollacott (Co-Chair) Simsbury: MBA, Wharton School, Former
Vice President, Combustion Engineering, and Vice Chair, CT DPUC.

Majorie W. DeBold Haddam: BA Psychology and Child Development, UC Berkeley.
Retired teacher, former First Selectman of Haddam.

Gregg W. Dixon PhD Niantic: Mechanical Engineering (Nuclear) Stanford University.
Mechanical Engineering Section Chief, US Coast Guard Academy.

John Helm, Sr. Groton: MS Mechanical Engineering, Columbia. Consultant, former
experience includes Nuclear Submarine development.

Mark Holloway Waterford: BS Interdisciplinary Sciences, Charter Oak. Task Manager
and analyst in nuclear submarine development.

Robert J. Klancko Woodbridge: BS Chemical Engineering, UConn. Engineering
Consultant, member, State Emergency Response Board.

Pearl Rathbun Niantic: BA Economics. Three Rivers C-TC. Administrative Assistant,
Office of Emergency Management & Fire Marshal's Bureau, East Lyme.

Rep. Kevin Ryan Oakdale: OD, Pennsylvania College of Optometry. Legislator,
Adjunct Faculty, University of New Haven.

John (Bill) Sheehan Waterford: MBA, Rensselaer Polytechnic. Project Manager,
former Captain, Nuclear powered submarine.

James Sherrard, PhD Mystic: USCG Academy, Nuc. & Mech. Eng. MIT/UConn.
Chairman, Nuclear Engineering Technology Department, TRCTC.

Edward L. Wilds, Jr. Griswold: PhD Physics, UConn. Director, Division of
Radiation, Department of Environmental Protection.

Awaiting Appointment

Paul A. Blasioli Waterford: Manager, Environmental Services, Dominion Nuclear
Connecticut.

Appendix 2
2003 NEAC Meeting Minutes

**Nuclear Energy Advisory Council (NEAC) Meeting
Waterford Town Hall
Waterford, Connecticut
March 20, 2003**

March 28, 2003

Mr. John Markowicz, Co-Chair
Mr. Evan Woollacott, Co-Chair
Mr. Paul Blasioli
Ms. Marge DeBold
Mr. Robert Klancko
Ms. Pearl Rathbun
Rep. Kevin Ryan
Dr. Edward Wilds, representing DEP, Commissioner Arthur J. Rocque, Jr.

1. Call to Order

Co-Chair Woollacott called the meeting to order at 7:09 PM at the Waterford Town Hall, Waterford, Connecticut.

2. Review of December 19, 2002 NEAC Meeting Minutes

Co-Chair Woollacott informed the committee members that the December 19, 2002 NEAC Minutes were approved through an electronic vote.

3. Opening Comments: NEAC Co-Chair Evan Woolacott and NRC Co-Chair Randy Blough

NEAC Co-Chair Woolacott welcomed the public and NRC staff present at the meeting. NRC Co-Chair Blough gave a short presentation on the reactor oversight process.

4. NRC Reactor Oversight Program / Millstone End of Cycle Report: Millstone Unit 2.

Mr. Stephen (Max) Schneider, Unit 2 Senior Resident Inspector summarized the findings of inspection activities from January 1, 2002 to December 31, 2002 and the Unusual Event on March 7, 2003. The scheduled was modified to allow NEAC and public questions at the end of the NRC presentation.

Millstone Unit 3.

Mr. Paul Cataldo, Unit 3 Resident Inspector summarized the findings of inspection activities from January 1, 2002 to December 31, 2002. The scheduled was modified to allow NEAC and public questions at the end of the NRC presentation.

5. Public Question Period

In addition to questions asked by the public during the NRC presentations, a letter from Ms. Geralyn C. Winslow was read into the record.

6. NEAC Business Meeting

a. Annual Report

Dr. Wilds reported that the 2003 Annual Report was completed and available in electronic format.

7. Adjournment

Motion was made by Mr. Klanko; seconded by Co-Chair Markowicz to adjourn; no objections; majority voted in favor; meeting adjourned at 9:20 PM

Appendix 3

2003 Millstone I Decommissioning Advisory Committee (MIDAC) Members

Nuclear Energy Advisory Council

Millstone 1 Decommissioning Advisory Committee

Pearl I. Rathbun (Co-Chair), Niantic: BA Economics, Eastern Connecticut State University. Emergency Management Director, Town of East Lyme.

Rep. Kevin Ryan (Co-Chair), Oakdale: O.D., Pennsylvania College of Optometry. Legislator, Adjunct Faculty University of New Haven.

Jerome Bobruff, M.D., New London: M.D. Degree, Yale University. Private Practice.

Joseph M. Coleman, Niantic: BSME, University of Notre Dame. Retired. Former experience includes Civil Engineer, Bethlehem Steel Company; Supervisor of Shipbuilding, USN and Electric Boat Division of General Dynamics Corp.

Gregg W. Dixon, Ph.D., Niantic: Ph.D., Mechanical Engineering (Nuclear), Stanford University. Mechanical Engineering, U.S. Coast Guard Academy.

Wayne L. Fraser, East Lyme: First Selectman, Town of East Lyme.

Robert A. Moore, Niantic: Master of Theology, Boston University. Pastor of Niantic Community Church.

James R. Sherrard, Mystic: MS Nuclear Science and Ph.D. Program in Nuclear Engineering, Catholic University of America. Chairman of Nuclear Engineering Technology Department, Three Rivers Community-Technical College.

Doran Shumway, Oakdale: School of Radiologic Technology, Windham Community Memorial Hospital, Willimantic. Former radiation control specialist, Connecticut Department of Environmental Protection.

Paul A. Suprin, Waterford: BA Psychology, Central Connecticut State University. Senior Commercial Lending Officer.

Geralyn Winslow, Waterford: Southern Connecticut State University and University of Arizona. Paraprofessional, lifelong resident of Waterford, member of Citizens Regulatory Commission (CRC).

Appendix 4

2003 MIDAC Activity Report

M1DAC Activity Report for May 2003

To: Nuclear Energy Advisory Council

From: Pearl I. Rathbun, M1DAC

Date: June 25, 2003

The 2003 annual M1DAC meeting was held on May 15, 2003, at Waterford Town Hall, Waterford, CT. The agenda included a review of the Nuclear Regulatory Commission's inspection report covering the period from July 2002 through January 2003, a final recap on fuel pins discovered missing from Unit 1, and an update on the decommissioning project.

Mr. John Wray from NRC Region I distributed copies of the presentation for the evening and reported on his responsibilities under Dr. Ronald Bellamy for decommissioning in the region.

Mr. Wray explained that although the latest inspection report did not uncover any violations, there were some issues that needed to be addressed, including improper radiological control area access and a mold and fungi problem. Mr. Wray relayed details of an incident where an employee had gained access to the radiological control area (RCA) without proper permit or dosimetry equipment. He described the incident as being a combination of human error and mechanical deficiencies, noting that corrective action was being taken.

Mr. Wray stated that the inspection also uncovered a mold and fungi problem, explaining that conditions are right in certain areas of the plant for mold and fungi to form. He said he was impressed by the licensee's actions to correct the problem.

In his discussion of the missing fuel pins, Mr. Wray noted that the search for the pins has been terminated and a fine has been imposed. He said the NRC has determined there would be no adverse environmental concerns if they had been buried at Barnswell or Washington.

Mr. Wray updated the committee on decommissioning status and activities. He noted that original plans to build an ISFSI (Independent Spent Fuel Storage Installation) for Unit 1 had been modified for the option of wet storage in the spent fuel pool. He said the pool has been rearranged so as to create the lowest energy state, which will provide safer storage conditions. Mr. Wray did report, however, that Dominion is planning an ISFSI for Unit 2, noting that there is only a small percentage (1%-2%) chance that fuel from Unit 1 would find its way into this ISFSI.

Mr. Wray said it's expected that reactor parts slated for storage should find their way into the spent fuel pool (SFP) and remaining wastes shipped by the fall of 2003. He explained that draining the reactor vessel and cavity water should be completed during the spring of 2004, and by the summer of 2004 the reactor vessel shielding package and work on permanent gates for the SFP should be completed. He estimated that SAFSTOR status should be achieved by August 2004.

During the business portion of the meeting, committee members agreed to meet in May of 2004 and possibly again in August or September, depending upon decommissioning events.

Pearl I. Rathbun
M1DAC Co-chair