## STATE OF CONNECTICUT



# THE NUCLEAR ENERGY ADVISORY COUNCIL REPORT

2006

**Established Pursuant to Public Act 96-245** 

Evan W. Woollacott, Co-Chairperson John W. Sheehan, Co-Chairperson

**December 14, 2006** 

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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 consisted of twelve (12) 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 eleventh annual report presented by the Nuclear Energy Advisory Council (NEAC). During Calendar Year 2006, the NEAC met five times and received reports from representatives of the Nuclear Regulatory Commission (NRC), Connecticut Yankee Atomic Power Company (CYAPC) Representatives, and Dominion Nuclear Connecticut and toured Connecticut Yankee site and the Independent Spent Fuel Storage Installation (ISFI) Dry Cask Storage Area (fence line tour) for Millstone Power Station. Routine NRC Millstone Power Station inspection and performance assessment reports were also received and reviewed. During the fourth quarter of 2005, Millstone Units 2 and 3 plant performance (Action Matrix) was classified as "GREEN", meaning the two inspection findings were classified as having no or low safety significance. In the first quarter of 2006 there were two findings of no or low safety significance but due to two "Unplanned Reactor Trips with loss of Normal Heat Removal" (Scrams) during the reporting period, Millstone 2 crossed the threshold from GREEN to WHITE in one performance indicator. Millstone 3 remained in the GREEN classification. During the second quarter, there were three findings of very low safety significance. In the third quarter there were two NRC identified findings and two licensee revealed findings of very low safety significance. Results for the fourth quarter were not available at the time of this report. Because of the "GREEN" status, only routine baseline inspections were performed by the NRC of Millstone 3. However, there was a supplemental inspection of Millstone Unit 2 to address the Unit's Unplanned Scrams with Loss of Normal Heat Removal Performance Indicator crossing the GREEN-WHITE threshold in the first quarter of 2006. There were no findings of significance in the supplemental inspection. Decommissioning activities at CYAPC are nearly complete. The Reactor Containment Building removal was one of the most significant activities at the CYAPC site during CY2006.

#### **COUNCIL ACTIVITIES IN 2006**

#### **MEETINGS:**

As required by PA 96-245, the NEAC held five public meetings as follows: (1) January 26, 2006, (2) March 29, 2006, (3) August 16, 2006, and (4) December 14, 2006 at Waterford Town Hall, Waterford Connecticut and (5) June 15, 2006 at Haddam Neck Fairgrounds. The purpose of these meetings was 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 meetings follows:

<u>January 26, 2006:</u> The purpose of this meeting was to approve the annual report for CY2005 and plan meetings for the remainder of CY2006.

<u>March 29, 2006:</u> 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 four calendar

quarters of CY2006. 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 September 30, 2006

June 15, 2006: This meeting was conducted at Fair Hall, Haddam Neck Fair Grounds, Haddam Neck, CT following a tour of the Connecticut Yankee site conducted by representatives of the CYAPC. Members of the CYAPC staff presented a status of decommissioning, future plans, site cleanup and remediation. Recent inspection results correspondence received from the NRC was also discussed.

<u>August 16, 2006:</u> This meeting was held at the Waterford Town Hall following a windshield fence line tour of the Millstone Power Station ISFI Dry Cask Storage area. Representatives of Dominion Nuclear Connecticut presented an up date of the Employee Concerns Program and the Safety Conscious Work Environment (SCWE) at the Millstone Power Station and other sites managed by Dominion Resources. There was a brief discussion of the report on Strontium-90 release authored by the Connecticut Department of Environmental Protection.

<u>December 14, 2006:</u> This meeting was held at the Waterford Town Hall. The Annual Report for CY2006 was discussed and approved. The meeting schedule for CY2007 was discussed.

Millstone I Decommissioning Advisory Committee (M1DAC): Since Millstone 1 remains in Safe Storage (SAFSTORE) and no significant activities were conducted at the Unit during the past calendar year, M1DAC did not meet in CY2006. M1DAC committee membership is included in Appendix 3.

#### **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 October 31, 2006. Routine inspections conducted between October 1, 2005 and September 30, 2006 resulted in the identification of four Unit 2 issues, six Unit 3 issues and one issue assigned to both Unit 2 and Unit 3, all of very low safety significance (GREEN). In the first quarter of 2006. Unit 2 crossed the threshold from GREEN to WHITE for the "Scrams with a loss of normal heat removal" Performance Indicator (PI) because of a Unit 2 manual trip on February 23, 2006 when instrument air was lost in the turbine building that led to an automatic trip of both operating steam generator feedwater pumps. No findings of significance were identified during Dominion's problem identification, root and contributing cause evaluation. However, this event triggered a NRC Special Inspection that was completed on September 14, 2006, and reported on October 27, 2006. No findings of significance were documented in the final report. The biennial baseline inspection of the identification and resolution of problems was conducted by the NRC in February 2006. Five findings of very low safety significance were identified in the Inspection Report of April 17, 2006. An additional NRC Inspection was completed on

June 16, 2006 that examined activities conducted under the Dominion license as they related to safety and compliance with the NRC rules and regulations and with the conditions of the license. Only one company identified violation that was determined to be of very low safety significance was listed in the July 27, 2006 report of the inspection. In July, an inspection of the Independent Spent Fuel Storage Instillation (ISFSI) was conducted with no violations identified. In August the NRC completed a security baseline inspection. Although the exact findings are not reported due to security concerns, no findings of significance were reported in October 2006 when the cover letter of the inspection report was released. The results of the fourth quarter 2006 inspections had not been released by NRC at the close out time of this report.

# DOMINION EMPLOYEE CONCERNS PROGRAM AND SAFETY CONSCIOUS WORK ENVIRONMENT

Representatives from Dominion Nuclear Connecticut and Dominion Nuclear Corporate Offices briefed NEAC on the recent changes to the Dominion Employee Concerns Program (ECP) and how it is consistent with a Safety Conscious Work Environment (SCWE). Employee Concerns is now addressed as a "Fleet Approach" where the program is able to get expertise from across all Reactor Power Stations owned by Dominion rather than just the Station where there is an employee concern. Dominion has also introduced an Employee Concerns Peer Group as another "confidential alternative avenue to bring concerns forward." Dominion reported that the NRC Problem Identification & Resolution Inspection Report of April 17, 2006 stated that the NRC inspector "determined that personnel are willing to raise issues, and that there was no direct evidence of an unacceptable work environment…No employees indicated that they personally would not raise a concern."

# REASSESSMENT OF MILLSTONE POWER STATION'S ENVIRONMENTAL MONITORING DATA

NEAC reviewed a report by the Connecticut Department of Environmental Protection (DEP) concerning the possible source of Strontium-90 in the soil at a farm in the vicinity of the Millstone Power Station. This report "concluded that the collective sampling in and around the Millstone Power Station show expected levels of residual radioactive fallout from weapons testing and the Chernobyl event and are unrelated to the operation of the Millstone Power Station." While there were questions from NEAC members regarding some specifics in the report as noted in the Assessment by Co-Chairman Evan Woollacott in Appendix 4, the report conclusion was accepted.

#### **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 under go 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**

Major demolition of the former Connecticut Yankee nuclear plant was successfully completed in August 2006. Physical decommissioning, including demolition of a few remaining ancillary buildings and final remediation activities, is scheduled to be completed by the end of 2006. Waste shipments are also scheduled to be completed by the end of the year with 365 million pounds of decommissioning waste shipped since demolition began in 2003. The plant site surpassed the 6 million safe work hour and six years since the last Lost Time Accident (LTA) mark in October 2006.

Demolition of the containment structure was successfully completed in July 2006. Hydraulic hoe rams were used to break up the structure from the bottom up. 40-foot wide pillars were created and then weakened one at a time to allow the containment to settle down on itself until the dome could be reached by the hoe rams. The process took approximately four months. Demolition of the spent fuel pool building was completed in August 2006.

Two groundwater monitoring wells were installed offsite at the Haddam Meadows State Park across the Connecticut River from the former plant to complement onsite groundwater monitoring activities, which will continue for several years.

Final status surveys (FSS) of miscellaneous land areas are scheduled to be completed in early 2007. CYAPC expects to terminate their NRC License for the remainder of its property in the summer of 2007. Approximately 30 acres will remain under NRC license for fuel storage activities. A new administration building will be constructed near the ISFSI to support long-term fuel storage operations.

The Connecticut Yankee Community Decommissioning Advisory Committee (CDAC) held its final meeting as a decommissioning advisory board on November 28, 2006. The committee will transition to a fuel storage monitoring committee in 2007 with meetings scheduled in the spring and fall.

#### 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 decommissioned in Connecticut, failure to establish a permanent repository or otherwise dispose of the high level waste could adversely affect the State's economy and homeland security. It is noted that temporary storage of spent fuel in dry cask storage containers has been implemented at both Millstone and Connecticut Yankee.

The U.S. Department of Energy's latest program schedule for Yucca Mountain is:

- License Application in 2008
- U.S. Nuclear Regulatory Commission Construction Authorization and begin construction in 2011.
- U.S. Nuclear Regulatory Commission License Approval and begin waste acceptance in 2017.

This schedule has slipped due to a number of political, financial, and legal obstacles to the project. NEAC will continue to monitor the progress toward a solution to the problem of High Level Nuclear Waste.

#### RECOMMENDATIONS

#### STATE

- 1. Department of Environmental Protection should continue to address any emergency preparedness issues at Connecticut's nuclear sites.
- 2. Department of Environmental Protection should continue to address any security issues at Connecticut's nuclear sites.
- 3. The Governor, General Assembly, Department of Environmental Protection, and NEAC should continue to insist that the NRC continue vigilant oversight of Connecticut Yankee and Millstone Power Station sites for as long as high-level nuclear waste remains on site.

#### NEAC

- 1. Continue to monitor the stability of the Employee Concern Program and Safety Conscious Work Environment and Corrective Action Program at Millstone Power Station.
- 2. Continue to monitor operations and activities at Millstone Power Station and Connecticut Yankee Site, including the dry cask storage programs.
- 3. Continue to encourage the development of a solution to the problem of High Level Nuclear Waste and the safe transfer of high level nuclear waste from Connecticut.

#### NUCLEAR ENERGY ADVISORY COUNCIL MEMBERSHIP

**John W. (Bill) Sheehan** (Co-Chair) Waterford: MBA, Rensselaer Polytechnic. Consultant, former Captain, Nuclear powered submarine.

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

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

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

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

**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 Commission

**John Markowicz** Waterford: BS Engineering, US Naval Academy. Economic director, former chief engineer nuclear powered submarine.

**Pearl Rathbun** Niantic: BA Economics. Eastern Connecticut State University. Director of Emergency Management, East Lyme

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

**James Sherrard** Mystic: PhD 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.

#### Nuclear Energy Advisory Council (NEAC) Meeting Waterford Town Hall Auditorium Waterford, Connecticut January 26, 2006

#### **Members Present**

Mr. John W. Sheehan, Co-Chair

Mr. John Markowicz

Dr. Kevin Ryan

Ms. Marjorie W. DeBold

Dr. Gregg Dixon

Ms. Pearl Rathbun

#### 1. Call to Order

Co-Chair Sheehan called the meeting to order at 7:10 PM at the Waterford Town Hall Auditorium, Waterford, Connecticut.

#### 2. Review NEAC Meeting Minutes

Minutes of the May 18, 2005 NEAC meeting were reviewed and approved. Rough minutes of the March 29, 2005 NEAC meeting were reviewed and approved for inclusion in the Annual Report..

#### 3. CY 2004 Annual Report Approval Confirmation

Rough minutes of the March 29, 2005 NEAC meeting showed that the CY2004 Annual report was approved at that meeting. Motion to confirm that approval made by Mr. Dixon, Seconded by Mr. Markowicz. Passed unanimously.

#### 4. CY2005 Annual Report Discussion

CY 2005 Annual Report was reviewed page by page. There were corrections proposed for the Council Membership page. No other corrections proposed.

#### 5. CY2005 Annual Report Approval

Motion made by Mr. Markowicz, seconded by Mr. Dixon to approve the annual report with the modifications proposed. Co-Chairman Sheehan is authorized to make appropriate additional technical corrections. Motion passed unanimously.

#### 6. Next Meeting Date/Location

Next meeting will be in March in conjunction with the Nuclear Regulatory Commission Annual Report. Date and location to be determined.

It was also proposed that there be a meeting at Connecticut Yankee in the May-June timeframe to discuss decommissioning status including the potential possible past leak in the spent fuel pool. Another meeting in the August- September time frame should be at Millstone to view the dry cask storage at the Millstone station.

#### 7. Adjournment

Motion was made and seconded to adjourn; no objections; majority voted in favor; meeting adjourned at  $7:28\ PM$ 

#### Nuclear Energy Advisory Council (NEAC) Meeting Waterford Town Hall Waterford, Connecticut March 29, 2006

June 13, 2006

Mr. Evan Woollacott, Co-Chair

Mr. Bill Sheehan, Co-Chair

Rep. Kevin Ryan

Mr. John Markowicz

Ms. Pearl Rathbun

Mr. James Sherrard

Mr. Gregg Dixon

Mr. Paul Blasioli

Dr. Edward Wilds, representing DEP, Commissioner Gina McCarthy

#### 1. Call to Order

Co-Chair Woollacott called the meeting to order at 6:12 PM at the Waterford Town Hall, Waterford, Connecticut.

# 2. Opening Comments: NEAC Co-Chair Evan Woollacott and NRC Co-Chair Paul Krohn

6:13 PM NEAC Co-Chair Woollacott welcomed the public and NRC staff present at the meeting.

NRC Co-Chair Krohn welcomed the public to the joint meeting.

# a. NRC Reactor Oversight Program / Millstone End of Cycle Report: Millstone Unit 2 and 3.

Mr. Krohn introduced the additional members of the NRC Panel: Mr. S. Kennedy, Mr. S. Barber, and Mr. D. Lew. The NRC panel gave a presentation summarizing the findings of inspection activities ending calendar year 2005, see attached presentation. The scheduled was modified to allow NEAC members the opportunity to ask questions during the NRC presentation.

#### c. Public Question Period

In addition to questions asked by NEAC during the NRC presentations, following individuals made comments after the NRC presentation:

Mr. Paul Blanch discussed concerns regarding SCWE, allegations of discrimination, Sr-90 in the environment, and security of intake structures. He would like NEAC to look into concerns.

Ms. Nancy Burton commented on her concerns related to Millstone employees going to CCAM with allegations not NRC, need for protection of intake structures, intrusion detection system being disabled for long periods and the need for a public discussion, fire in U2 being due to duct tape to seal distribution paned instead of welding, Sr-90 issue, information in BEIR VII. She invited NEAC to look into issues.

Ms. Geralyn C. Winslow commented on SFP leak concerns at MP, SNF should remain in Waterford and not shipped to a federal repository, concern about emergency planning with recent hurricane evacuation problems, Sr-90 issue, and would like license for Millstone units revoked.

Ms. Cynthia Besade commented on belief that cancers are increasing around Millstone, security issues should be discussed in public, and her concern regarding the Sr-90 issue.

#### 3. NEAC Business Meeting

a) Review and Approval of January 26, 2006 NEAC Meeting Minutes 9:08 PM motion for approval, seconded, and approved.

#### b) Next meeting date and location

Next meeting scheduled for 7:00 PM June 15, 2006 in Haddam Neck area.

#### c) New Business

No new business discussed.

#### 4. Adjournment

Motion was made, seconded to adjourn; no objections; majority voted in favor; meeting adjourned at 9:15 PM

#### Nuclear Energy Advisory Council (NEAC) Meeting Fair Hall, Haddam Neck Fairgrounds Haddam Neck, Connecticut June 15, 2006

June 16, 2006

Mr. Bill Sheehan, Co-Chair

Ms. Marge DeBold

Mr. John Markowicz

Ms. Pearl Rathbun

Mr. Gregg Dixon

Mr. Paul Blasioli

#### 1. Call to Order

Co-Chair Sheehan called the meeting to order at 7:43 PM at Fair Hall, Haddam Neck Fair Grounds, Haddam Neck, CT after a tour by the members of the Connecticut Yankee (CY) Site escorted by Kelley Smith and Gerry P, van Noordennen of Connecticut Yankee Atomic Power Company.

#### 2. Approval of Minutes of March 29, 2006 NEAC Meeting

Minutes of the March 29, 2006 meeting were approved with the following corrections: a. Correct spelling of member "Greg Dixon" to "Gregg Dixon". B. Correct spelling of "Cynthia Bassaide" to "Cynthia Besade".

# 3. Presentation by CY Staff on Status of Decommissioning, Future Plans, Site Cleanup and remediation

Mr. Gerry P. van Noordennen from CY made a presentation to the membership. Presentation is attached to these minutes. All questions from NEAC members were answered to amplify the presentation. Kelley Smith provided additional information during the presentation from CY.

#### 4. Discussion of Correspondence Received

# a) Millstone Power Station – NRC Integrated Inspection Report 05000336/2006002 and 05000423/2006002 dtd May 5, 2006

Report documents Inspection of Unit 2 and 3 for period ending on March 31, 2006 and reported one NRC identified finding and one self-revealing finding of very low safety significance resulting in GREEN standing.

# b) Assessment Follow-Up letter – Millstone Unit 2 Power Plant dtd May 16, 2006

NRC review of Millstone Unit 2 identified that plant crossed the threshold from GREEN to WHITE for the scrams with loss of normal heat removal Performance Indicator (PI) with Millstone reporting of 1<sup>st</sup> Quarter 2006 PI data.

#### c) Response to Letter Regarding Millstone Power Station Units 2 and 3 Essential Fish Habitat Requirements (TAC NO. MC1827 and MC 1828)

Letter is from NRC to official in the Northeast Region National Marine Fisheries Service regarding Essential Fish Habitat Requirements. It appears that the NRC did not consult sufficiently with National Marine Fisheries Service during the development of the Supplemental Environmental Impact Statement for Millstone Power Station license renewal. This letter hoped to correct that situation.

#### 5. Public Comment

There was no Public Comment

#### 6. Next Meeting Date and Agenda

Next meeting will be Thursday, August 17, 2006. Co Chairman Sheehan was tasked to arrange for a tour of the Millstone Power Station Dry Cask Storage area and a briefing by Millstone staff on the status of the Employee Concerns Program {ECP} and the Safety Conscious Work Environment (SCWE). In addition, NEAC member Dr. ED Wilds will be asked to review his DEP report on SR-90 contamination in light of critique by Mr. Paul Blanch. After tour of the Millstone site, the meeting will be at Waterford Town Hall.

#### 7. Adjournment

Motion made to adjourn by Mr. Gregg Dixon, seconded by Ms. Marge DeBold. No Objections, majority in favor. Meeting adjourned at 8:32 PM.

#### **Nuclear Energy Advisory Committee**

#### Thursday, June 15, 2006, 7:30 PM, Fair Hall, Haddam Neck Fairgrounds

#### **Connecticut Yankee Decommissioning Project Status**

#### **Overall Status**

Fuel transfer to dry storage completed in March 2005

Physical decommissioning work scheduled to be completed in fall of 2006

NRC license termination scheduled for summer 2007 - Approximately 400 of 525 acres of backlands have been released from NRC license

Currently focusing on demolition of Containment and Spent Fuel Building and final status surveys

#### **Current Status**

Nine lifts (about 90 feet) of Containment demolished

Self-performance work approximately 91% complete

#### **Industrial Safety**

More than 5.86 million work hours and 5.86 years since last LTA

One OSHA recordable reported so far in 2006 – OSHA Recordable Incident Rate 0.86 per 200,000 hours worked as of 5/31

#### **Radiation Protection**

Overall, project dose through May 20 was 843.4 Person-rem, which is 90.2% of the Post Shutdown Decommissioning Activities Report (PSDAR) estimated dose of 935 Person-rem. The current dose estimate for maintaining the ISFSI and completing the decommissioning project is  $\sim$  860 Person-rem.

#### **Decommissioning/ Building Removal Preparations**

#### Containment

Completion of containment demolition could be as early as July

#### Spent Fuel Project

Pool drained and locked down

Liner removed

Removed about 10 inches of concrete under liner

Characterizing concrete to determine if additional removal needed

Demolition scheduled to be completed in fall 2006

#### Discharge Canal

Discharge structure removed

Sampling underway to determine if dredging required – Preliminary results encouraging

#### Peninsula

Investigating debris areas identified in electromagnetic surveys

- Found two barrels containing items (turbine blades in one and cleaning rags in another) with low levels of fixed contamination Probably placed on peninsula prior to 1980
- Areas of asbestos also being remediated

#### Other Key Work

Intake structure removed and bank remediated

Administration Building and Information Building clean out underway

Final season of archeological surveys underway

#### **Groundwater Monitoring**

License Termination Plan (LTP) 18-month groundwater monitoring period underway (started in December 2005 and is required to be 18 months long including two spring seasons)

Dose results to date meet LTP requirements and State RSR's

All monitoring wells meet EPA MCLs for radioactivity. One down-gradient well south of the former Intake Structure (MW-119) has elevated tritium at EPA MCLs – Slight increasing trend over last several months

Off-site monitoring well planned for Haddam Meadows State Park as part of CTDEP groundwater monitoring program

#### **Waste Management**

Approximately 263 million pounds of project waste (excluding large components) shipped since the start of self-performance and through May 27. This is approximately 76% of the estimated 346 million pounds of waste that we expect to ship during self-performance. We anticipate completing waste shipments by December of this year

Shipping containment concrete debris as DOT exempt material to Envirocare and RACE - The material is either loaded in intermodals and trucked to RACE or trans-loaded in Worcester and sent to Utah via rail

#### **Regulatory/Stakeholder Relations**

<u>NRC</u> - FSS package submitted to NRC for release of third property parcel as part of phased release

#### **CTDEP**

Closure criteria established in early 2005

One potential water discharge permit violation under extended consideration – failure to provide continuous pH monitoring since October 2001 for groundwater

Community Decommissioning Advisory Committee

Meeting quarterly

Committee developing draft charter for ISFSI operation starting in 2007

#### Nuclear Energy Advisory Council (NEAC) Meeting Waterford Town Hall Waterford, Connecticut August 16, 2006

Mr. Bill Sheehan, Co-Chair

Mr. Evan Woollacott, Co-Chair

Ms. Marge DeBold

Mr. John Markowicz

Ms. Pearl Rathbun

Mr. Gregg Dixon

Mr. Paul Blassioli

Mr. Jim Sherrard

Mr. Robert Klancko

Mr. Michael Firsick (Proxy for Commissioner Gina McCarthy.)

#### 1. Call to Order

Co-Chair Sheehan called the meeting to order at 7:30pm at the Waterford Town Hall, second floor, after a tour of the Millstone Power Station's Dry Cask Storage Area which occurred between 6:00-6:45pm.

#### 2. Approval of Minutes of the June 15, 2006 NEAC meeting.

Minutes of the June 15, 2006 meeting were approved with no corrections.

#### 3. Program:

A presentation was made by following Dominion Staff: Mr. Skip Jordan, Director Operations & Maintenance, Ms Diane Sieracki, Fleet Manager-Dominion Nuclear Employee Concerns Program, and Mr. Tom Cleary-Representative of the Millstone Employee's Concern Program. A copy of the presentation is attached to these minutes. All questions from NEAC members were answered by the presenters. Mr. Daniel Weekley-Director of Northeast Government Affairs was also present to address questions from NEAC members and the general public.

#### 4. New Business:

The quarterly NRC inspection report was discussed and included with the meeting handouts in addition to a letter from Connecticut Yankee.

#### 5. Public Comment:

Mr. Paul Blanch made a comment concerning his removal from the agenda and the report written by the Connecticut Department of Environmental Protection (DEP) concerning Millstone Power Station's Environmental Data.

Discussion followed by NEAC members concerning having the Connecticut Academy of Science and Engineering (CASE) review the report written by DEP.

Additionally, NEAC members would review the comments made by Mr. Blanch on the DEP report.

#### 6. Next Meeting and Agenda:

The next meeting will be held on Thursday, October 26, 2006 at the Waterford Town Hall. The topic of the meeting will be Millstone Station's proposed power up rate.

#### 7. Adjournment:

A motion was made and seconded for adjournment with no objections. The meeting was adjourned at 9:20pm.

# Presentation to the Nuclear Energy Advisory Council August 16, 2006

#### Slide 2

#### **Presenters**

- ➤ Skip Jordan, Director Operations & Maintenance, Millstone Power Station
- Diane Sieracki, Fleet Manager Dominion Nuclear Employee Concerns Program
- > Tom Cleary, Representative Millstone Employee Concerns Peer Program

Dominion

#### Slide 3

#### Agenda Goals For Tonight's Presentation

- Overview of Terms
- > Dominion ECP Fleet Approach
- > Peer Group Overview
- Safety Culture at MPS
- NEAC Questions

#### **Safety Culture**

"That assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance."\*

\*NRC Regulatory Issue Summary 2006-13, July 31, 2006, adopting safety culture definition of International Atomic Energy Agency's International Nuclear Safety Advisory Group (INSAG), Safety Series No. 75-INSAG-4, "Safety Culture," 1991.

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#### Slide 5

#### Safety Conscious Work Environment (SCWE)

"An environment in which employees are encouraged to raise safety concerns, are free to raise concerns both to their own management and to the NRC without fear of retaliation, where concerns are promptly reviewed, given the proper priority, and appropriately resolved, and timely feedback is provided to those raising concerns."\*

\*NRC Regulatory Issue Summary 2005-18, Guidance for Establishing and Maintaining a Safety Conscious Work Environment, August 25, 2005, Attachment 1.

Dominion

#### Slide 6

#### **Employee Concerns Program (ECP)**

The Dominion fleet ECP is an additional mechanism for personnel to report concerns and is consistent with the philosophy indicated in the definitions of Safety Culture and SCWE. Personnel have the option of utilizing the ECP in a confidential or anonymous manner.

# Employee Concerns Program (ECP) Peer Representatives

Employee Concerns Program Peer Representatives are volunteers from a crosssection of disciplines who assist management in ensuring the vitality of the Safety Culture at Millstone Power Station.

Dominic

#### Slide 8



#### Slide 9

## Employee Concerns Program (ECP)

- ➤ ECP as a Fleet Approach
- ➤ 2005 NRC Year-End Report

#### **NRC Reports**

NRC Problem Identification & Resolution Inspection Report, April 17, 2006, page 15:

"The inspector determined that personnel are willing to raise issues, and that there was no direct evidence of an unacceptable work environment. All of the personnel interviewed had an adequate knowledge of the CAP [Corrective Action Process] and ECP. No employees indicated that they personally would not raise a concern."



#### Slide 11

#### **Trending for 2005**

NRC Allegation Program, 2005 Annual Trends Report, page 23:

"An analysis of the trends in allegations does not suggest a SCWE problem at Millstone. A facility-wide culture survey was conducted in late 2004 and identified no areas of concern.... The [NRC] staff will continue to monitor the general trend of allegations ...."



#### Slide 12

# Employee Concerns Program (ECP) Peer Group



Tom Cleary ECP Peer Group Representative

#### **Employee Concerns Peer Group**

- > Independent body staffed by volunteers from a wide variety of departments at Millstone
- Volunteers receive training to serve in the program
- ECP Peer Group is another confidential alternative avenue to bring concerns forward

Dominion

#### Slide 14

#### **Safety Culture at Millstone**



Skip Jordan, Director Operations & Maintenance

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#### Slide 15

## What does the Safety Conscious Work Environment look like today?

- > Dominion encourages employees to bring concerns forward
- > We expect to see concerns and we support that process
- > There are many avenues to bring concerns forward
- > A strong program is all about trust

#### **Conclusions**

- Dominion is committed to a strong Safety Culture and a Safety Conscious Work Environment
- Our programs encourage employees to bring concerns forward and provide a variety of means to do so

3....

#### Slide 17



# Nuclear Energy Advisory Council (NEAC) Meeting Louise Appleby Room Waterford Town Hall Waterford, Connecticut December 14, 2006

#### **Members Present**

Mr. John W. Sheehan, Co-Chair

Mr. Evan Woollacott, Co-Chair (arrived at 7:15PM)

Mr. John Markowicz

Dr. Kevin Ryan

Ms. Marjorie W. DeBold

Mr. Robert Klancko

Ms. Pearl Rathbun

Dr. Edward Wilds

#### 1. Call to Order

Co-Chair Sheehan called the meeting to order at 7:05 PM in the Louise Appleby Room at the Waterford Town Hall, Waterford, Connecticut.

#### 2. Review NEAC Meeting Minutes

Minutes of the August 16, 2006 NEAC meeting were reviewed and approved after motion by Mr. Markowicz and second by Mr. Klancko with Mr. Ryan and Mr. Wilds abstaining.

#### 3. Public Comment

No members of the Public were present to comment.

#### 4. CY2006 Annual Report Discussion

CY 2006 Annual Report was reviewed page by page. There were corrections proposed for the Executive Summary, Council Activities, Reports on Issues, Recommendations, and Council Membership Sections.

#### 5. CY2005 Annual Report Approval

Motion made by Mr. Markowicz, seconded by Mr. Klancko to approve the annual report with the modifications proposed. Co-Chairman Sheehan is authorized to make appropriate additional technical corrections. Motion passed unanimously. Mr. Evan Woollacott presented his "Millstone Power Station Environmental Monitoring Data – An Assessment" Report. Motion made by Mr. Klancko and seconded by Mr. Markowicz to include as an Appendix in Final report and that

Reports on Issues section be modified appropriately. Motion passed unanimously.

#### 6. Programs for CY2007

Possible programs for CY2007 include the March joint meeting with NRC; briefings by Dominion Nuclear Connecticut on Employee Concerns, Safety Conscious Work Environment, Corrective Action Program, and Power Up Rate Procedures. A briefing on status of proposed Yucca Mountain High Waste Storage Facility was also discussed. Co-Chairman Sheehan will coordinate.

#### 7. Next Meeting Date/Location

Next meeting will be in March in conjunction with the Nuclear Regulatory Commission Annual Report. Date and location to be determined. Other meetings will be held in May-June and August September time frames.

#### 8. Adjournment

Motion was made and seconded to adjourn; no objections; majority voted in favor; meeting adjourned at 8:24 PM

#### 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: Former 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. Selectman, Town of Waterford
- **Geralyn Winslow**, Waterford: Southern Connecticut State University and University of Arizona. Paraprofessional, lifelong resident of Waterford, member of Citizens Regulatory Commission (CRC).

#### MILLSTONE POWER STATION ENVIRONMENTAL MONITORING DATA AN ASSESSMENT

EVAN WOOLLACOTT DECEMBER 14, 2006

AT THE LAST MEETING OF THE NUCLEAR ENERGY ADVISORY COUNSEL (NEAC), I WAS ASKED TO LOOK AT THE REPORT PREPARED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND PROVIDE COMMENTS FOR CONSIDERATION BY THE NEAC. FOLOWING ARE MY NOTES:

THE DEP'S REPORT WAS IN RESPONSE TO STATEMENTS MADE BY THE CONNECTICUT COALITION AGANST MILLSTONE (CCAM) THAT "ROUTINE OPERATIONS OF MILLSTONE ARE IN VIOLATION OF FEDERAL HEALTH STANDARDS AND ARE ILLEGAL."

IT WAS DEP'S CONCLUSION THAT THE SAMPLING IN AND AROUND MILLSTONE SHOW RESIDUAL RADIOACTIVE FALLOUT FROM WEAPONS TESTING AND THE CHERNOBYL EVENT AND ARE UNRELATED TO THE OPERATION OF THE MILLSTONE STATION.

IN ADDITION TO NORMAL BACKGROUND RADIATION, MANMADE PRODUCTS CONTRIBUTE AN AVERAGE RADIATION DOSE PER INDIVIDUAL OF ABOUT 360 MILLREMS. THE REPORT LISTS THE MAJOR MANMADE SOURCES INCLUDING 200 FROM RADON. OF THE 360 MILLIREMS 2 ARE FROM "OTHER SOURCES". NUCLEAR PLANTS ARE INCLUDED IN THE OTHER SOURCES.

WITHOUT GOING INTO DETAIL, THE REPORT RESULTS INDICATE THAT:

THE SAMPLING LEVELS OF CONCERN TO CCAM ARE SIGNIFICALNTLY BELOW ESTABLISHED HEALTH AND SAFETY LIMITS.

THE RATIOS OF SR 89 TO SR 90 AND CE 134 TO CE 137 FOUND IN THE GOAT MILK SAMPLES DO NOT MATCH RATIOS GENERATED BY THE MILLSTONE POWER STATION.

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THERE WERE LOWER CONCENTRATONS OF RADIONUCLIDES IN MILK SAMPLES LOCATED CLOSER TO MILLSTONE.

I HAVE REVIEWED THE DATA AND DISCUSSED THEM WITH TWO NUCLEAR ENGINEERS I KNOW. ONE OF THEM WAS SENT BY THE US GOVERNMENT TO REVIEW CHRYNOBYL.

THEY AGREE THAT THE DEP EVALUATION IS APPROPRIATE AND WOULD SUPPORT ITS CONCLUSIONS.

BOB KLANCKO MADE AN INDEPTH REMEW OF THE DEP REPORT. HIS COMMENTS WOULD BE WELL TAKEN IF WE WERE CONSIDERING A FORMAL EVALUATION BY THE DEP.