

# STATE OF CONNECTICUT



## THE NUCLEAR ENERGY ADVISORY COUNCIL REPORT

# 2013

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

**John W. Sheehan, Chairperson  
Pearl Rathbun, Vice Chairperson**

**December 12, 2013**

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## **CHARGE TO THE COUNCIL**

Section 17 of Public Act 96-245(now CGS16-11a as amended) 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 eighteenth annual report presented by the Nuclear Energy Advisory Council (NEAC). During calendar year (CY) 2013, the NEAC met four times and received reports from representatives of the Nuclear Regulatory Commission (NRC), Dominion Nuclear Connecticut and Connecticut Yankee Independent Spent Fuel Storage Installation (ISFSI). Routine NRC Millstone Power Station (MPS) inspection and performance assessment reports were also received and reviewed. During the fourth quarter of 2012, Millstone Unit 3 plant performance (Action Matrix) was classified as "GREEN", meaning that all inspection findings for CY 2012 were classified as having no or low safety significance, Millstone Unit 2 had one finding in the second quarter of 2011 that had a low to moderate safety significance (WHITE) in the Initiating Events Cornerstone. This finding was closed in the fourth quarter of 2012 returning MPS2 to a "GREEN" status. This meant that Unit 2 and Unit 3 would have baseline inspections in 2013. In the first quarter of 2013 one NRC-identified finding of very low safety significance (GREEN) was reported during the integrated inspections of Millstone 2 and Millstone 3. The finding was attributed to Millstone 2. Both Millstone 2 and 3 remained in the GREEN classification. During the second quarter, there was one NRC-identified finding of very low safety significance and one finding of very low safety significance identified by the licensee. In the third quarter there was one NRC-identified finding of very low safety significance resulting in a Notice of Violation (NOV), one NRC-identified finding of very low safety significance and three licensee revealed findings, all of very low safety significance. Results for the fourth quarter 2013 were not available at the time of this report. Because of the "GREEN" status, only routine baseline inspections were scheduled by the NRC of Millstone 2 and 3 in CY 2013. Included in those baseline inspections were a Millstone Station Security Baseline Inspection, two Special Security Inspections, Triennial Fire Protection Inspection, Unit 1 Safety and Compliance Inspection, and Special Inspection of Procedures and Process for Responding to Potential Aircraft Threats. There were eight findings in the reported baseline and special inspections.

Scheduled decommissioning activities of the industrial areas at Connecticut Yankee Atomic Power Company (CYAPCO) are complete. The Connecticut Yankee Site with the exception of the Spent Fuel Dry Cask Storage Area was released for unrestricted use on November 26, 2007. Final decommissioning and license termination of the entire site will be completed after removal of spent nuclear fuel (SNF) and greater than Class C (GTCC) radioactive waste that is in dry cask storage. The Connecticut Department of Energy and Environmental Protection (DEEP) conducts radiological environmental monitoring and groundwater monitoring programs and the NRC conducts an annual safety/security inspection of the Independent Spent Fuel Storage Installation (ISFSI).

## COUNCIL ACTIVITIES IN 2013

### MEETINGS:

As required by PA 96-245, the NEAC held four public meetings as follows: (1) April 9, 2013, (2) September 12, 2013, and (3) December 12, 2012 at Waterford Town Hall, Waterford, CT; and (4) May 21, 2013 at Riverhouse at Goodspeed Station, Haddam, CT. 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:

April 9, 2013: 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 quarters of CY2012. It was reported that overall these two units were operated in a manner that preserved public health and safety and Unit 3 fully met NRC cornerstone objectives. Both Unit 2 and Unit 3 would have baseline inspections.

May 21, 2013: This was a joint meeting with Connecticut Yankee Fuel Storage Advisory Committee following a tour of the Connecticut Yankee ISFSI. CYAPO personnel provided a status of the ISFSI and an update of the Federal Nuclear Waste Management Program. Recent Millstone Station inspection results correspondence received from the NRC was also discussed.

September 12, 2013: Dominion Nuclear Connecticut representatives provided a station update following a tour of Millstone Power Station. Recent Millstone Station inspection results correspondence received from the NRC was also discussed.

December 12, 2013: The CY2013 Annual Report was discussed, reviewed, and approved for promulgation. NRC Correspondence and Inspection Results received since the last meeting were discussed. The meeting schedule for CY2014 was approved and possible topics for the meetings were discussed.

Millstone 1 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 CY2013.

## 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

Routine inspections conducted between October 1, 2012 and September 30, 2013 resulted in the identification of four Unit 2 issues, seven Unit 3 issues, and two Site issues. All were determined to be of very low safety significance (GREEN) although one issue

resulted in a Notice of Violation (NOV). An NRC Security Baseline Inspection was completed on April 12, 2013. One unspecified GREEN finding was noted in the May 20, 2013 report of the inspection. On December 31, 2012 the NRC staff completed the annual inspection of the Emergency Preparedness Program and the Security Program at Millstone Power Station that commenced on January 1, 2012. No observations and findings were provided in the March 18, 2013 letter that closed out the inspections. One NRC identified GREEN finding was noted in the Baseline Security Inspection completed on April 12, 2013 and reported in a letter dated May 20, 2013. The specific violation was not noted in the letter due to relations to plant security. No findings were identified in the June 26, 2013 Inspection of the Procedures and Process for Responding to Potential Aircraft Threats reported in a letter dated July 31, 2013. Four observations were identified by the inspectors for future consideration by the Licensee (MSPS). Two GREEN findings and one finding that "...could not be screened to GREEN...and is pending a significance determination" were reported in a September 16, 2013 letter reporting the completion of the Triennial Fire Protection Inspection that was completed on August 8, 2013. The December 11, 2013 letter reporting a Security Inspection that was completed on November 7, 2013 documented four unspecified violations (due to security related information) that the licensee was required "...to take appropriate corrective action to restore compliance in a timely manner." The NRC had not released the results of the other fourth quarter 2013 inspections at the close out time of this report.

## **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 involved some decontamination and dismantlement early in the process. After these initial activities were completed, the unit was 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.

No findings of safety significance were found during the inspection of Unit 1 on February 27-28, 2013 and reported in a letter dated March 22, 2013. No findings of a safety significance were found in inspections of Unit 1 on June 4-5, 2013 and July 30-August 2, 2013 and reported in a September 12, 2013 letter.

## CONNECTICUT YANKEE

The Connecticut Yankee Atomic Power Company (CYAPCO) plant began commercial operation in 1968 and produced more than 110 billion kilowatt-hours of electricity during its 28-year operating history. In 1996, the CYAPCO Board of Directors voted to permanently close and decommission the power plant. After two years of planning and preparation, actual decommissioning began in 1998 and was completed in 2007. CYAPCO has operated the NRC licensed Independent Spent Fuel Storage Installation (ISFSI) at the Haddam Neck site since 2004. The spent nuclear fuel and GTCC waste at the ISFSI facility is stored in 43 dry casks containing dual purpose canisters licensed by the NRC for both storage and transportation. The generic storage license for the dry cask storage system expires in 2020. The U.S. Department of Energy is obligated under the Nuclear Waste Policy Act and by contract with CYAPCO to remove and dispose of this waste.

### Current Status

Normal activities continue at the ISFSI.

In June, Phase I of the ISFSI Pad Repair project was successfully completed.

Construction of a 4000 square foot Maintenance Facility was completed in July.

A boom was installed across the end of the discharge canal in August to enhance our ability to control access to the site.

After the removal of eight wells this spring, the CY Groundwater Monitoring Program now includes 36 remaining wells. Previously, the CT DEEP sampling standard required four quarters of sampling below Remediation Standard Regulation limits (RSR's), followed by 3 years of semi-annual sampling below RSR's. Recent DEEP rule changes have removed the semi-annual requirement and all of CY's wells now comply with the state sampling requirements. Accordingly, CY will work with the CT DEEP and EPA to confirm compliance under the new DEEP rules and then lay out a schedule for documenting completion of the program, decommissioning of all site wells, and establishing the process for the termination of the Stewardship Permit.

A non-routine NRC Region 1 inspection occurred in June of 2013 to review the ISFSI pad repair work. No significant issues were identified. The next routine inspection is scheduled for mid-2014.

CY submitted in 2012 an exemption request from some elements of the revised Emergency Planning Rule. The exemption request was granted by the NRC in spring of 2013.

Connecticut Yankee received an offer from U.S. Fish and Wildlife Service ("USF&W") to purchase approximately 38 acres of CY land located along the Salmon River. The

USF&W and CY subsequently reached mutually agreeable terms and conditions and completed the transaction on January 8, 2013.

This land was acquired by CY in August of 2000 and is located adjacent to the 525 acre former plant site. The approximate 38 acres is often referred to as the former Schmidt Property and is designated as Tract 230R in the Salmon River Division of the Silvio O. Conte National Fish and Wildlife Refuge which is managed by the US F&W Service. The Conte Refuge was established to conserve the abundance and diversity of native plants and animals and their habitats in the 7.2 million acre Connecticut River watershed in Connecticut, Massachusetts, New Hampshire and Vermont.

CY has made no decisions regarding the disposition of the original 525 acre former plant site property and has established no timetable for making such a decision. All options that meet shareholder, ratepayer, community, and other stakeholder interests remain open, including multiple uses, recognizing that the CY property includes many important characteristics (such as the spent fuel storage facility requirements, legal easements and utility rights-of-way that must be maintained) that will bear on any future owner and use considerations. CY shall continue to work with parties interested in potential productive and conservation related uses of portions or all of the remaining property.

A joint CY Fuel Storage Advisory Committee and NEAC meeting was held in Haddam, CT in May of 2013. The meeting was preceded by a tour of the CY site.

## **HIGH LEVEL NUCLEAR WASTE**

- NEAC continued to monitor activity to establish a permanent solution for spent nuclear fuel 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 spent nuclear fuel and 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 President's Blue Ribbon Committee Report was submitted to the Secretary of Energy on January 26, 2012 with eight key recommendations to reform the spent nuclear fuel management program. Some of these recommendations will require legislation by Congress and the President. NEAC will continue to monitor the progress toward a solution to the problem of High Level Nuclear Waste.

According to a press release on November 15, 2013 from the Yankee Power Companies CY is sharing in a \$235.4 million award from the Federal Government "for the costs related to the government's failure to honor its contract obligations to begin removing spent nuclear fuel and Greater than Class C waste ...by January 1998." It appears that the company must file suit every five to six years to get the government to pay for past costs of the ISFSI and the fuel modules.



According to a press release on November 18, 2013, the NRC has directed staff to complete the safety evaluation report on the Department of Energy submission regarding the Yucca Mountain nuclear waste depository. This direction is a result of a August 2013 decision by the U. S. Court of Appeals for the District of Columbia ordering the NRC to continue the evaluation until currently appropriated funds are exhausted.

## **RECOMMENDATIONS**

### **STATE**

1. Department of Energy and Environmental Protection should continue to address any emergency preparedness issues at Connecticut's nuclear sites.
2. Department of Energy and Environmental Protection should continue to address any security issues at Connecticut's nuclear sites.
3. Department of Energy and Environmental Protection should continue radiological and environmental monitoring of Connecticut's nuclear sites.
4. The Governor, General Assembly, Department of Energy and 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.
5. The Governor, General Assembly, and DEEP should encourage the federal government to develop a solution to the spent fuel storage problem and urge the federal Executive Branch and Congress to implement the President's Blue Ribbon Commission 2012 Report near term and long term recommendations.
6. The Governor and the General Assembly should seriously consider and act on the recommendations of the CASE Report on the Future of Nuclear Power in Connecticut.

### **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 Spent Nuclear Fuel, High Level Waste and Greater Than Class C Low-Level Radioactive Waste and the safe transfer of this nuclear waste from Connecticut.

## NUCLEAR ENERGY ADVISORY COUNCIL MEMBERSHIP

**John W. (Bill) Sheehan (Chair)** Waterford: BS, Naval Science, US Naval Academy; MBA, Rensselaer Polytechnic Institute; former Commanding Officer, Nuclear powered submarine.; retired Navy Captain.

**Pearl Rathbun (Vice Chair)** Niantic: BA Economics. Eastern Connecticut State University. Former Director of Emergency Management, East Lyme.

**Gerald D. Hicks** Waterford: BS Mechanical Engineering University of Colorado. MS Operations Research/Systems Analysis US Naval Postgraduate School. Retired Navy Captain, former Commanding Officer, Nuclear Powered Submarine, represents 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. Retired Professor, Mechanical Engineering, US Coast Guard Academy.

**Thomas A. Nebel** Niantic: BS Industrial Engineering New York Polytechnic University; Retired Monsanto/Solutia - former First Responder & NE HAZMAT Coordinator for company; C.E.R.T. Member Missouri & Connecticut.

**Robert J. Klancko** Woodbridge: BSE Chemical Engineering, UCONN. PE, CSP, Engineering Consultant, member State Emergency Response Commission.

**John Markowicz** Waterford: BS Engineering, US Naval Academy. Economic development director, former chief engineer nuclear powered submarine. Deceased January 2013.

**Raymond D. Woolrich** Waterford: BS, Nuclear Science, US Naval Academy; MS Computer Systems and Financial Management, US Naval Postgraduate School; former Commanding Officer, Nuclear Powered Submarine; retired Navy Captain; Naval Analyst, Sonalysts, Inc.

**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, Radiation Division, Department of Environmental Protection.

**NUCLEAR ENERGY ADVISORY COUNCIL**  
**7:00 PM**  
**April 9, 2013**  
**RTM MEETING ROOM**  
**WATERFORD TOWN HALL**  
**15 ROPE FERRY ROAD**  
**WATERFORD, CT**  
**SPECIAL MEETING**

**MINUTES**

**Members Present**

Mr. Bill Sheehan, Chair  
Ms. Pearl Rathbun, Vice Chair  
Ms. Marge DeBold  
Mr. Denny Hicks  
Rep Kevin Ryan  
Mr. Gregg Dixon  
Mr. Tom Nebel  
Mr. Rober Klancko  
Mr. Ray Woolrich  
Mr. James Sherrard  
Dr. Edward Wilds Representing DEEP Commissioner Esty,

**1. Call to Order of Meeting**

NEAC Chair Sheehan called the meeting to order at 7:03 PM at Waterford Town Hall, Waterford, CT.

Moment of Silence in remembrance of the late Captain John Markowicz, USNR (Ret), former Chairman of NEAC.

NEAC members and Nuclear Regulatory Commission (NRC) introduced themselves

**2. PROGRAM:**

**a) Briefing on Millstone Power Station Annual Assessment by Mr. Ronald Bellemey, Branch Chief, NRC and Ms. J. Ambrosini, Senior Resident Inspector, MPS.**

See attached enclosure for NRC presentation. When asked by NEAC the NRC stated that allegation submissions were at normal levels for an operating power station and the Safety Conscious Work Environment principles were being followed at MPS.

**3. Public Comment**

Mr. Paul Blanch contested the NRC comments regarding allegation submissions. He believed that the allegations were increasing based on a review of the NRC web site.

**4. Approval of Minutes of December 6, 2012 NEAC meeting**

Minutes were approved unanimously.

**5. NRC Correspondence of note received since last meeting.**

- a) MPS- NRC Integrated Inspection Report dated January 16, 2013
- b) MPS2-Supplemental Information Needed For Acceptance of Requested Licensing Action Re: Spent Fuel Storage Amendment dated February 11, 2013
- c) Endorsement of Electric Power Research Institute Final Draft Report 1025287 “Seismic Evaluation Guidance” dated February 15, 2013
- d) Status of 60-Day Response To Issuance of Flooding Integrated Assessment Guidance Related To the Near Term Task Force Recommendation 2.1, Flooding Reevaluations dated February 22, 2013
- e) NRC Regulatory Issue Summary 2013-02 Impact of Sequestration on NRC Activities and NRC Stakeholders dated March 1, 2013
- f) Supplemental Information Related to Request for Information Pursuant to Title 10 of Code of Federal Regulations 50.54(f) Regarding Flooding Hazard Reevaluations For Recommendation 2.1 of the Near Term Task Force Review of Insights From the Fukushima Dai-Ichi Accident dated March 1, 2013
- g) Annual Assessment Letter for MPS 2 and 3 dated March 4, 2013
- h) MPS3-Second Request for Additional Information To Support review of Amendment Application Regarding Risk Informed Justification For the Relocation of Specific Surveillance Frequency Requirements to Licensee Controlled Program dated March 8, 2013
- i) MPS-NRC Emergency Preparedness Annual Inspection Report; NRC Security Annual Inspection Report dated March 18, 2013
- j) Response To Nuclear Energy Institute Request for Review of Draft Electric Power Research Institute Report “Seismic Evaluation Guidance: Augmented Approach for the Resolution of Fukushima Near Term Task Force Recommendation 2.1 Seismic” dated March 20, 2013
- k) Correction to Title of Response Letter to Nuclear Energy Institute Concerning Central and Eastern United States Ground Motion Model Update Project dated March 22, 2013 – “Response to Nuclear Energy Institute Request for Review of Draft Electric Power Research Institute Report ‘EPRI Ground Motion Model Review Project’” dated March 22, 2013
- l) Dominion Nuclear Connecticut, Inc. MPS 1 NRC Inspection Report dated March 22, 2013

**6. Next Meeting Date and Time**

The next NEAC meeting will be on May 21, 2013 at the River House at Goodspeed Station in conjunction with the CY FSAC Annual Meeting following a tour of the Connecticut Yankee IFSI.

**7. Adjournment** – Meeting adjourned at 8:35 PM.

**NUCLEAR ENERGY ADVISORY COUNCIL**  
**6:00 PM**  
**MAY 21, 2013**  
**RIVER HOUSE at GOODSPEED STATION, East Haddam, CT**  
**SPECIAL MEETING**

**Minutes**

**Regular Meeting Scheduled for May 14, 2013 was Cancelled**

**Meeting was preceded by a tour of the CY ISFI, Haddam Neck, CT starting at 3:30 PM and a dinner at the River House at Goodspeed Station**

**Members Present**

Mr. Bill Sheehan, Chair  
Ms. Pearl Rathbun, Vice Chair  
Ms. Marge DeBold  
Mr. Denny Hicks  
Mr. Gregg Dixon  
Mr. Tom Nebel  
Mr. Robert Klancko  
Mr. Ray Woolrich  
Mr. James Sherrard

**1. Call to Order of Meeting**

CY FSAC Chair Paul DeStefano called the meeting to order at 6:00 PM and welcomed all attendees to the meeting.

**2. Introduction of CY FSAC members and NEAC members**

All members of CY FSAC and NEAC introduced themselves.

**3. Agenda as provided by the CY FSAC**

- a. CY personnel provided SIFSI Site Status Report (see attached enclosure (1))
- b. Mr. Bob Capstick of CY provided Federal Nuclear Waste Management Program update (see attached enclosure (2) )

**4. Public Comment (if not already in FSAC Agenda).**

There was no public comment

**5. NEAC Meeting on Conclusion of the FSAC Agenda**

- 1) **Approval of Minutes of April 9, 2013 NEAC meeting,**  
Minutes approved unanimously (Klancko/Woolrich)
- 2) **Discussion of Correspondence of Note Received since last meeting.**  
No questions on correspondence listed
  1. MPS- NRC Integrated Inspection Report dated April 11, 2013

2. MPS 2 & 3 – Notification of Conduct of a Triennial Fire Protection Baseline Inspection dated April 18, 2013
3. MPS 3 Licensed Operator Positive Fitness for Duty Test dated April 18, 2013
4. EPRI Final Draft Report “Seismic Evaluation Guidance: Augmented Approach for the Resolution of Fukushima Near-Term Task Force Recommendation: Seismic” As an acceptable Alternative to the March 12, 2012 Information Request for Seismic Reevaluations dated May 7, 2013

**3) Next Meeting Date, Time, and Agenda**

Nest meeting will be sometime in July, August, or September depending upon availability of Millstone Personnel for briefing.

**4) Adjournment**

Meeting adjourned at 7:04 PM (Hicks/Rathbun)

**CY ISFSI Operations and Groundwater Monitoring Report  
Connecticut Yankee Fuel Storage Advisory Committee Meeting  
Tuesday, May 21, 2013**

Industrial Safety

There were no Lost Time Accidents, OSHA Recordable Injuries or first aid cases since the last report.

ISFSI Operations

ISFSI operations are normal. No safety or quality issues.

Planning continues for the ISFSI concrete pad Phase I cosmetic surface test repair. This work is scheduled for the last two weeks in June. The NRC will be on site to monitor the process. Phase II repairs are scheduled for the summer of 2014.

The work on the new storage building construction continues. Estimated completion date is June 1, 2013.

The site septic system, which was not functioning as designed, has been replaced. The new system has 3 times the capacity, is situated in excellent soils, and has upgraded mechanicals.

Groundwater Summary

Results for all groundwater monitoring sampling locations are below the CT Remediation Standard Regulation Requirements (RSR). Fifteen wells that were no longer part of the sampling program were removed in late spring of 2012 in accordance with CT DEEP requirements. After the removal of 8 wells this spring, the Groundwater Monitoring Plan now includes 36 remaining wells. These wells continue to be sampled semi-annually. The current schedule reflects completion of groundwater monitoring in the fall of 2014 and removal of the remaining wells by the end of 2014.

NRC

Site Inspection

The NRC conducted a safety, operations and security inspection at CY in June 2012. CY was issued a Severity Level IV violation during the inspection. The violation is being treated as a Non-Cited Violation. The issue was a Safeguards Information issue that was self-identified. All other inspection areas were found to be in compliance.

The next routine inspection is scheduled for mid-2014. The next non-routine inspection is tentatively scheduled for June of 2013 to coincide with the ISFSI pad repair work.

Cyber Security Assessment

On June 25, 2012, the Commission issued SECY-12-0088, The Nuclear Regulatory Commission Cyber Security Roadmap. It communicates the staff's approach, or roadmap, for evaluating the need for cyber security requirements for several categories of NRC licensees and facilities, including Independent Spent Fuel Storage Installations (ISFSIs). The NRC has formed a working group to determine if the potential threat to ISFSI's systems warrants protections from cyber attack.

A NRC Cyber Security Assessment at Yankee Rowe was conducted on April 23<sup>rd</sup>. The NRC did not identify any cyber security vulnerabilities or impacts, acknowledged several strengths, and appreciated the detailed response to their questionnaire. They were encouraged by the consistency of the 3 Yankees regarding the policy and procedures to manage cyber security threats, and the Companies' proactive response to cyber security. Given the above, the NRC will not visit and will not need any additional information from Connecticut Yankee.

### NRC Region 1 Quarterly Conference Call

CY, MY, and YR have initiated quarterly conference calls with NRC Region 1. The next NRC regional quarterly call is scheduled for July.

### Foreign Ownership Control and Domination

On May 16, 2011, the Yankee Companies requested an exemption from the requirements of 10 C.F.R. 50.38 regarding Foreign Ownership, Control, and Domination. This exemption request has been the discussion of several meetings and teleconferences with the NRC. We have been informed that the request remains under NRC review at a senior level.

### Security Regulatory Guide 5033

The NRC has issued for comment draft Regulatory Guide 5033, "Security Performance (Adversary) Characteristics for Physical Security Programs for 10 CFR 72 Licensees" (ISFSIs). Comments were provided to both NRC and NEI. No response to the comments has been received to date. The NRC identified that rulemaking will take a number of years, with the final rule being issued in 2017 or 2018, following by a 12-18 month time period for implementation.

### Cask Relicensing

The Yankee companies continue to be actively involved with EPRI, NEI and NRC on the issues of canister relicensing and extending the expiration dates of the fuel storage system. Canister license renewal planning activities at CY are underway. A Phase 1 program has begun by the NAC Owners Group for 2013, followed by Phase 2 and 3 programs that are designed to result in a timely relicensing submittal to the NRC in 2018, three years before the license expiration date.

The NRC will not act on this license application until they have addressed the waste confidence rule which is expected to be completed in the next couple of years.

The industry, through NEI, has a petition for rulemaking in front of the NRC to improve dry cask storage and transportation licensing processes. Each Yankee plant submitted a letter in support.

### Sale of a Portion of the CY Property to USF&W

Connecticut Yankee received an offer from U.S. Fish and Wildlife Service ("USF&W") to purchase approximately 38 acres of CY land located along the Salmon River. The USF&W and CY subsequently reached mutually agreeable terms and conditions and completed the transaction on January 8, 2013.

This land was acquired by CY in August of 2000 and is located adjacent to the 525 acre former plant site. The approximate 38 acres is often referred to as the



former Schmidt Property and is designated as Tract 230R in the Salmon River Division of the Silvio O. Conte National Fish and Wildlife Refuge which is managed by the US F&W Service. The Conte Refuge was established to conserve the abundance and diversity of native plants and animals and their habitats in the 7.2 million acre Connecticut River watershed in Connecticut, Massachusetts, New Hampshire and Vermont.

CY has made no decisions regarding the disposition of the original 525 acre former plant site property and has established no timetable for making such a decision. All options that meet shareholder, ratepayer, community, and other stakeholder interests remain open, including multiple uses, recognizing that the CY property includes many important characteristics (such as the spent fuel storage facility requirements, legal easements and utility rights-of-way that must be maintained) that will bear on any future owner and use considerations. CY shall continue to work with parties interested in potential productive and conservation related uses of portions or all of the remaining property.

# **CONNECTICUT YANKEE FUEL STORAGE ADVISORY COMMITTEE UPDATE**

**May 21, 2013 Meeting**

## **Federal Nuclear Waste Management Program Update**

### **Administration**

- **President's Budget Request for the Used Fuel Management Program**

The President's Budget proposal released in April would provide \$60 million (\$24 million from the federal Nuclear Waste Fund) to continue evaluating the used nuclear fuel management recommendations made by the Blue Ribbon Commission. The budget assumes the construction and operation of a pilot interim waste storage facility within the next 10 years, as well as progress on both full-scale interim storage and long-term permanent geologic disposal. However, the Executive Branch has not proposed legislation to implement these recommendations. One BRC recommendation that was not referenced in the administration's budget was a proposal to establish a new organization dedicated solely to implementing the nuclear waste management program and empowered with the authority and resources to succeed.

- **President's Budget Request Regarding the D&D Fund Fee**

The President's budget request for the FY-14 fiscal year seeks to reinstate a \$200 million annual fee for the Uranium Enrichment Decontamination and Decommissioning (D&D) fund. (Note: the Senate passed budget included the reinstatement of the D&D Fund fee as an assumption of additional revenues. The House passed budget did not). The Fund was established to clean up the three uranium enrichment plants (GDP in TN; Paducah in KY; and Portsmouth in OH) under the Energy Policy Act of 1992 and involved a combination of government contributions and domestic utility assessments from FY 1993-2007. Although the cleanup effort has been significant to date, the work is not completed and it's expected to take decades longer and cost multi-billions more dollars.

The impact on CY if the fee is reinstated is estimated to be \$3.7 million in the first year. The average annual cost for operating the CY ISFSI site is on the order of \$8-10 million. Accordingly, a reinstated D&D Fund fee would result in a significant unbudgeted increase in the annual CY site costs - an increase that would be annually escalated and assessed on ratepayers over an expected 10-15 year time period.

- **DOE FY 2014 Spent Fuel Related Plans**

The DOE report, "Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste" was issued January 2013 and responded to the Blue Ribbon Commission recommendations. The strategy includes recommendations

addressing both full-scale interim storage and long-term permanent geologic disposal, including the implementation of a program over the next 10 years that sites, designs, licenses, constructs, and begins operations of a pilot interim storage facility by 2021 with an initial focus on accepting used nuclear fuel from shut-down reactor sites.

DOE's Nuclear Energy Department's FY 2014 Planned Accomplishments associated with the President's Budget request are to continue activities that support the DOE's Waste Management Strategy document and include: developing design concepts for consolidated storage facilities; exploring the logistics for shipping orphan (shutdown) plant fuel to a consolidated interim storage facility; and completing an analysis for initial used fuel shipments from shutdown reactor sites.

### **Congressional**

- **Nuclear Waste Program Reform Legislation**

Comprehensive legislation has been developed by the Chairs and Ranking Members of the Senate Energy Committee and the Senate Energy & Water Development Appropriations Committee. On April 25<sup>th</sup> the four senators released a bipartisan discussion draft of a bill based on the work of the Blue Ribbon Commission. In the draft legislation, material at the site of a permanently shut down nuclear plant is defined as a "priority waste" that would be first in line for movement to a pilot consolidated storage facility. The members are seeking comment on the draft bill as well as a number of policy and technical questions by May 24<sup>th</sup>. The Yankees will be commenting through the Decommissioning Plant Coalition and a hearing is expected following formal introduction of the bill. Senate Appropriations Committee language is also anticipated similar to the FY-2013 bill that included a pilot consolidated interim storage facility initially focused on the movement of SNF/HLW from shutdown sites.

The House is also expected to introduce comprehensive nuclear waste legislation and will also hold hearings this session, but it's expected that they will await the US Appeals Court Yucca Mountain Licensing Application mandamus ruling before introducing their bill. The differences between the Senate and House on the nuclear waste management issue will likely remain unresolved. While both bodies are expected to introduce legislation and hold hearings this session, the House won't approve legislation unless it includes Yucca Mountain and the Senate won't consider legislation that does include Yucca Mountain - so it is unlikely that any nuclear waste reform legislation will move forward this year.

### **Nuclear Regulatory Commission**

- **Waste Confidence Decision and Rule**

In June 2012, the D.C. Circuit Court of Appeals issued a decision vacating the NRC waste confidence decision and rule. In response to the Court's decision, the Commission decided to stop all licensing activities that rely on the Waste Confidence Decision and

Rule and created a Waste Confidence Directorate to oversee the drafting of a new Waste Confidence Environmental Impact Statement (EIS) and temporary storage rule. The Commission instructed the Directorate to issue the final EIS and Rule by no later than September 2014. CY provided comments through the Decommissioning Plant Coalition at the NRC's November 14, 2012 Waste Confidence Scoping Meeting for the Generic EIS. CY also submitted a formal statement for the record in January 2103 through the DPC emphasizing that the Commission stand by its longstanding tenant that it does not support indefinite on-site storage of spent fuel.

NRC issued a draft scoping summary report in March and announced recently that there will be 10 public meetings this fall including one in Boston. The draft GEIS and proposed rule will look at three interim storage scenarios: 60 years beyond the licensed life of a reactor (total of 120 years); an additional 100 years beyond the 120 years (220 years); and, an indefinite storage of several hundred years. Transportation from reactors to interim storage and the repository will be considered in the draft GEIS. The next NRC Waste Confidence Directorate periodic monthly update conference call will be May 29<sup>th</sup>.

### **Yucca Mountain License Application**

In July, 2011, Aiken County South Carolina, the States of South Carolina and Washington, NARUC and others sued the NRC for failing to review and approve or disapprove the Yucca Mountain License construction authorization application. The Petitioners requested that the U.S. Court of Appeals issue a writ of mandamus to compel the NRC to complete its review of the Yucca Mountain license application and issue a final decision approving or disapproving the application. Petitioners alleged the agency's action suspending the licensing proceeding and failing to complete the review violated the Nuclear Waste Policy Act. NRC contended that the Court should not grant the extraordinary remedy of mandamus because NRC's available appropriated funds are nowhere near what are necessary to complete the licensing proceeding, and in recent years Congress has appropriated nothing for that purpose. There were several status reports filed by the parties last month regarding the continuing resolution passed in March as it related to the issues before the Court. The Court has yet to take any action.

### **DOE Spent Fuel Lawsuit Status Update**

- **Phase I Case**

In February 2013, the federal government paid the Yankee Companies (Connecticut Yankee, Maine Yankee, and Yankee Atomic) nearly \$160 million in damages for the costs related to the government's failure to honor its contract obligations to begin removing spent nuclear fuel and Greater than Class C waste from the three Yankee sites by January 1998. These Phase I litigation damages represent damages through 2001 for Connecticut Yankee and Yankee Atomic and through 2002 for Maine Yankee. The US

government did not to appeal the US Court of Appeals judgment of May 18, 2012 that confirmed the US Court of Federal Claims awards to Connecticut Yankee in the amount of \$39,667,243; and Maine Yankee of \$81,690,866; and increased Yankee Atomic's damages to \$38,268,655.

The damage award funds were transferred from the U.S. Treasury to the three companies and have been deposited into their respective trust funds. Based upon existing regulatory agreements, the funds remaining after the payment of federal and state taxes will be used for the benefit of ratepayers. On May 1<sup>st</sup>, the three Yankee companies submitted filings to the Federal Energy Regulatory Commission which included stipulations signed by representatives of the three states regulatory bodies in support of the filings that detail an approach as to how to apply the proceeds from the damage awards to the benefit of ratepayers now and into the future.

- Phase II and III Cases

The ongoing litigation is being conducted in phases as an earlier US Court of Claims decision ruled that utility companies such as the Yankee Companies cannot receive damage awards for costs that have not yet been incurred. As a result, the Yankees have, and will continue to litigate with the DOE every several years to request damages for costs incurred. The Yankees are currently seeking additional damages from the DOE in a second round of cases that were filed in 2007 (in the amount of approximately \$247 million) that was litigated in 2012, but has yet to be decided, and plan to file a third round of damages claims by the end of 2013.

**NUCLEAR ENERGY ADVISORY COUNCIL  
6:00 PM  
SEPTEMBER 12, 2013  
BOARD OF EDUCATION CONFERENCE ROOM  
WATERFORD TOWN HALL  
WATERFORD, CT  
SPECIAL MEETING**

**AGENDA**

Meeting will follow a Tour of the Millstone Power Station which starts at 2:00 PM at the Sillin Training Center, Millstone Power Station and a brief dinner in the Town Hall Auditorium starting at approximately 5:00 PM.

**Members Present**

**Mr. Bill Sheehan, Chair  
Ms. Pearl Rathbun, Vice Chair  
Mr. Denny Hicks  
Mr. Tom Nebel (attended to tour only)  
Mr. Gregg Dixon (did not attend tour)  
Dr. Edward Wilds  
Mr. Ray Woolrich**

**1. Call to Order**

**Meeting was called to order by Chairman Sheehan at 6:02 PM.**

**2. Approval of Minutes of May 21, 2013 NEAC meeting**

**Motion was made, seconded and passed to approve the meeting minutes of May 21, 2013. Dr. Wilds abstained.**

**3. PROGRAM:**

**a) Update on Millstone Station Operations by Dominion Nuclear Connecticut Representatives**

**Presentation was made by Government Relations Director Kevin Hennessy and Plant Manager Matt Adams. See the attached presentation.**

**4. Public Comment**

**a) Nancy Burton made several comments and requests:**

- i. Why didn't Millstone mention in its presentation the issue with the radiation monitors. Millstone responded that they are only down during routine preventative maintenance that must be done to ensure proper operation.**

- ii. Commented that per GSC 22a-135 a posting of when unusual releases occurred was required and wanted to know if any release was scheduled during radiation monitor maintenance.
- iii. She is concerned about worker health and requested that NEAC place an item on its agenda to discuss taking a survey of workers to track their health. Chairman indicated that this item would be taken under consideration.
- iv. Interested in the cooling towers and asked if Millstone had made a calculation of the waste heat contribution to the environment. She requested that NEAC place an item on its agenda to discuss this issue. Chairman indicated that this item would be taken under consideration.
- v. She asked what are the consequences to the environment by using high burn-up fuel. Asked if Millstone would comment on application before the NRC. Millstone indicated that it was not prepared to comment on this specifically. She requested that NEAC place an item on its agenda to discuss this issue. Chairman indicated that this item would be taken under consideration.
- vi. Stated that shortly after 9/11 US DHS recommended at taxpayers' expense that Millstone install barriers around the intake structures. Asked why Millstone hadn't installed barriers. Millstone replied that it complies with all security orders and modifications to the plant. Millstone will meet future requirements in timely, objective manner and comply. Millstone was not aware of any DHS requirements. She requested that NEAC place an item on its agenda to discuss this issue. Chairman indicated that this item would be taken under consideration.

5. **NRC Correspondence Received since May 21, 2013 meeting.**  
See the attached list.

6. **Next Meeting Topic, Date and Time (Currently scheduled for December 12, 2013 at 7:00 PM)**  
Finalizing annual report is primary focus of next meeting.

7. **Adjournment**  
Motion was made, seconded and passed to adjourn meeting at 6:55 PM.

**NUCLEAR ENERGY ADVISORY COUNCIL**

**7:00 PM**

**December 12, 2013**

**LOUISE APPLEBY ROOM  
WATERFORD TOWN HALL  
15 ROPE FERRY ROAD  
WATERFORD, CT 06385  
REGULAR MEETING  
MINUTES**

**Members Present**

Mr. Bill Sheehan, Chair  
Ms. Pearl Rathbun, Vice Chair  
Mr. Tom Nebel  
Mr. Denny Hicks  
Mr. Ray Woolrich  
Mr. Dwayne Gardner representing Commissioner Esty

**1. Call to Order of Meeting**

NEAC Chair Sheehan called the meeting to order at 7:05 PM at Waterford Town Hall, Waterford, CT

**2. Approval of Minutes of September 12, 2013 NEAC meeting**

Approval of Minutes of September 12, 2013 with one correction. Motion was made and seconded by Rathbun /Hicks\* to approve minutes; no objections; unanimous vote in favor.

**3. Public Comment**

No public comment

**4. NRC Correspondence Received since past meeting**

Chair Sheehan passed out the list of NRC correspondence received and forwarded to Council members via email. See Attached. No Questions

**5. CY 2013 Annual Report Discussions**

The Council discussed the 2013 Annual Report. Only minor edits made to correct grammar and letter spacing.

**6. CY 2013 Annual Report Approval**

Motion made by Nebel and seconded by Woolrich to approve the 2013 Annual Report with the minor edits discussed; no objections; unanimous vote in favor.

**7. Approval of Regular Meeting Schedule for CY 2014**



Motion was made by Nebel and seconded by Rathbun to accept 2014 meeting schedule as presented; no objections; unanimous vote in favor. Schedule attached.

**8. Programs for CY 2014**

Council discussed potential topics for 2014. See Attached list of potential topics.

**9. Next Meeting Date and Time**

April 17, 2014 at Waterford Town Hall. Time to be determined in coordination with the U.S. Nuclear Regulatory Commission.

**10. Adjournment**

Motion was made by Woolrich and seconded by Hicks to adjourn; no objections; unanimous vote in favor; meeting adjourned at 7:32 PM.

**NRC Correspondence Received Since Last NEAC Meeting**

5. MPS 1 – DNC, Inc. Millstone Power Station Unit 1 Inspection Report dtd 09/12/2013.
6. MPS – NRC Triennial Fire Protection Inspection Report dtd 09/16/2013
7. Summary of the September 12, 2013 Public Meeting to Discuss Implementation of Japan Lessons Learned Near-Term Task Force Recommendation – Seismic Walkdowns dtd 10/04/2013
8. MPS 2 & 3 – Interim Staff Evaluation and Request for Additional Information Regarding the Overall Integrated Plan for Implementation of Reliable Spent Fuel Pool Instrumentation Order dtd 09/29/2013
9. Response Regarding Licensee Phase 1 Staffing Submittals Associated with Near-Term Task Force Recommendation Related to the Fukushima Dai-Ichi Nuclear Power Plant Accident dtd 10/23/2013
10. Request for Additional Information Associated with Near-Term Task Force Recommendation on Seismic Walkdowns dtd 11/01/2013
11. MPS – NRC Integrated Inspection Report and Notice of Violation and Independent Spent Fuel Storage Installation Report dtd 11/08/2013
12. MPS – Request for Additional Information Re: Changes to Security Plan Revision 18 dtd 12/04/2013
13. MPS – NRC Security Inspection Report dtd 12/11/2013

**2014 Meeting Schedule**

Thursday April 17, 2014 – NRC 2011 Performance Evaluation

Tuesday May 20, 2014- Tour of Connecticut Yankee Independent Spent Fuel Storage Installation

Thursday September 18, 2014 – Tour of Millstone Power Station/Dominion Update

Thursday December 11, 2014 – Annual Report Preparation

Special Meetings would be at the call of the Chairman.

**Possible NEAC Meeting Topics - 2014**

Joint NRC/NEAC Meeting

Tour of Millstone Power Station followed by Dominion Update Brief

Update on Dominion Operator Training Requirements

Update on Employee Concerns and Safety Conscious Work Environment

Status of Low Level Radioactive Waste Disposal Compact

Status of Blue Ribbon Commission Report Action Items

Tour of Connecticut Yankee (CY) Independent Spent Fuel Storage Installation (ISFSI)

Annual Report Preparation