### **Meeting Minutes**

Yankee Rowe Fuel Storage and Removal Community Advisory Board
October 22, 2009

The Yankee Rowe Fuel Storage and Removal Community Advisory Board held their Fall 2009 meeting at the Yankee Site on October 22, 2009.

Attendees: Allan Twitchell (Whitingham), Lenny Laffond (Rowe), Robert Gallagher (MA DPH), David Nash (Monroe), Marcella Stafford-Gore (Monroe) John Giarrusso (MEMA), Art Schwenger (FC Chamber of Commerce), Dawn Peters (Heath), Bill Loomis (Rowe), Gail Cariddi (North Adams), Anne Skinner (Williamstown), Thomas Wilson (Citizens Awareness Network) and Elaine Richardson (Vita Nuova).

The meeting was called to order at 7:00 p.m. by Lenny Laffond.

Minutes of the April 9, 2009 meeting were approved as written.

A Project Status update was presented by Robert Mitchell (presentation attached).

An update to the Federal Nuclear Waste Issue was presented by Robert Capstick (presentation attached).

Elaine Richardson, Vita Nuova, gave a presentation regarding disposition of Yankee property (presentation attached).

### **CAB New Business:**

Cab Officers: All officers will remain in their respective positions.

Meeting Frequency: Remains unchanged at semi-annual.

Charter Changes: No changes were made to the Charter.

The next CAB meeting is scheduled for Thursday April 29th, 2010 at the site.

The Meeting was adjourned @ 7:50 p.m.

For more information, contact Bob Mitchell at 413-424-5261 X-303 or via email at rmitchell@3yankees.com.

### Yankee Rowe Spent Fuel Storage & Removal Community Advisory Board Meeting

### Thursday, October 22, 2009

### **ISFSI Status**

### **Overall**

ISFSI operations are normal with an emphasis on continued site security and the safe storage of the used fuel, including the implementation of the post closure ground and surface water sampling program and property disposition.

### **Industrial Safety**

There were no OSHA recordable injuries or first aid cases, since the last meeting.

The project has worked more than 3.98 years since the last lost time accident as of October 22, 2009

### **Physical Work**

- Site work since the last meeting consisted of normal equipment and facility maintenance.
- On June 23, 2009, the NRC completed an ISFSI Security Inspection at Yankee and concluded with no findings of significant. A copy of the Inspection Report is included in your handout.

### **Site Closure**

### MA DEP

Yankee received from the MA-DEP the "Phase II-Comprehensive Site Assessment Report – Final Report" date April 8, 2009. Yankee has implemented its post closure monitoring program of the site as set forth in this report. The Post Closure Monitoring will continue at the site for up to 30 Years.

The groundwater sampling completed in 2009 indicated that the decreasing trend with the tritium concentrations is continuing as predicted. Excerpts from the 2009 ground and surface water sampling report is included in you handout.

Yankee is required to continue with the Post Closure Monitoring including final closeout of a portion of the old industrial area just down gradient from the spent fuel pool location. Completion can not occur until the tritium concentration drops below the EPA

drinking water Minimum Concentration Level (MCL) in one well, MW-107C and the Arsenic concentration decreases below the MCL for two consecutive samples in two wells; MW-101A and MW-111C. Tritium remains slightly above the MCL in MW-107C, but is continuing to trend downward based on the 2009 sample results (the limit is 20,000pCi/L and the well is currently at 21,300pCi/L). In 2009 the Arsenic concentration in MW-111C was below the MCL of 0.01pCi/L for the second consecutive sample and will be removed from the program. Well MW-101A was below the MCL for the first time and will be sampled again in 2010.

**Wetland Closure** related to the Water Quality Certification was completed with the issuance of the annual report to the DEP in December 2008.

The Order of Conditions, issued by the Rowe Conservation Commission was completed on September 8, 2009 with obtaining the Certificate of Compliance from the Town and filing in the Franklin County Registry of Deeds. This completes all decommissioning related activities.

### Yankee Property Disposition

- Vita Nuova, LLC with offices in Sandy Hook, CT have been retained to assist YAEC with disposition of its property in the Towns of Rowe and Monroe.
- The "Expression of Interest" (EOI) process is underway and a representative from Vita Nuova is here to review the process with the Board.

NyR 2009-011



### UNITED STATES NUCLEAR REGULATORY COMMISSION REGION I

475 ALLENDALE ROAD KING OF PRUSSIA, PENNSYLVANIA 19405-1415

August 4, 2009

Docket No. 07200031

License No.

SFGL-13

Robert Mitchell ISFSI Manager Yankee Atomic Electric Company 49 Yankee Road Rowe, MA 01367

SUBJECT:

YANKEE ATOMIC ELECTRIC COMPANY - NRC ISFSI SECURITY

INSPECTION REPORT 07200031/2009001

Dear Mr. Mitcheli:

On June 23, 2009, the U.S. Nuclear Regulatory Commission (NRC) completed an Independent Spent Fuel Storage Installation (ISFSI) security inspection at your Yankee Atomic Electric Company site. The inspection covered the NRC's Additional Security Measures (ASMs) for the Physical Protection of Dry Independent Spent Fuel Storage Installations. The enclosed inspection report documents the inspection results, which were discussed on June 23, 2009 with you and members of your staff.

The inspection examined activities conducted under your license as they relate to security and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Thank you for your cooperation during this inspection.

Sincerely,

/RA/

Judith A. Joustra, Chief Decommissioning Branch Division of Nuclear Materials Safety

Docket No. 07200031 License No. SFGL-13

Enclosure: NRC Inspection Report No. 07200031/2009001 w/Attachment: Supplemental Information

### cc w/encl;

W. Norton, President and Chief Executive Officer

R. Capstick, Government Affairs

J. Fay, General Counsel

J. Connell, QA Manager

C. Pizzella; Treasurer

R. Walker, Department of Public Health, Commonwealth of Massachusetts Commonwealth of Massachusetts, SLO Designee

Citizens Awareness Network

### U.S. NUCLEAR REGULATORY COMMISSION REGION I

### INSPECTION REPORT

Inspection No.

07200031/2009001

Docket No.

07200031

License No.

SFGL-13

Licensee:

Yankee Atomic Electric Company

Location:

49 Yankee Road

Rowe, Massachusetts 01367

Inspection Dates:

May 21-22 and June 23, 2009

Inspectors:

John J. Nicholson, Health Physicist

Decommissioning Branch

Division of Nuclear Materials Safety (DNMS)

Orysia M. Masnyk Balley, Health Physicist

Decommissioning Branch, DNMS

Dennis R. Lawyer, Health Physicist Decommissioning Branch, DNMS

Approved By:

Judith A. Joustra, Chief

Decommissioning Branch, DNMS

### SUMMARY OF FINDINGS

IR 07200031/2009001; 05/21-22/2009 and 06/23/2009; Yankee Atomic Electric Company; Independent Spent Fuel Storage Installation (ISFSI) Security Inspection

This report covers an announced inspection conducted by regional-based ISFSI/decommissioning inspectors. This inspection consisted of a review and evaluation of the physical security program for the stand alone Independent Spent Fuel Storage Installation (ISFSI) at the Yankee Atomic Electric Company site, a decommissioned reactor facility, in Rowe, Massachusetts. The inspection consisted of observations of ISFSI physical security related activities in progress, evaluation of additional security measures (ASM) in place for the ISFSI, interviews with personnel, and an examination of procedures and security records. The inspectors used Temporary Instruction (TI) 2690/010, "Inspections of ASMs for Dry Cask Storage at ISFSI(s) Not Co-Located at an Operating Reactor Facility" to conduct the Inspection.

NRC-Identified and Self-Revealing Findings

ISFSI Security

No findings of significance were identified. (Section 1.1)

### REPORT DETAILS1

### 1.0 ISFSI Security

1.1 Independent Spent Fuel Storage Installation (ISFSI) Not Co-Located at an Operating Reactor Facility (TI 2690/010)

### a Inspection Scope

The inspectors reviewed the Yankee Atomic Electric Company's Physical Security Plan (PSP) and implementation of the requirements of the Additional Security Measures (ASMs) in place for the ISFSI. The inspectors reviewed procedures and records (including training records) and interviewed security personnel. The inspectors verified that the licensee's facility had appropriate physical barriers and had redundant communications capability between the onsite security force and the Local Law Enforcement Agency (LLEA). The inspectors toured the ISFSI and Alarm Station and observed the licensee's security officers perform equipment functionality tests for illumination systems; communications systems between the Alarm Station and security officers, LLEA, and the remote alarm monitoring station; surveillance/assessment system; and intrusion alarm system. Additionally, the inspectors evaluated the licensee's handling and storage of safeguards information in accordance with regulatory requirements.

### b, Findings

No findings of significance were identified.

### 2.0 Exit Meeting

The inspectors discussed preliminary inspection findings with Robert Mitchell, ISFSI Manager; Yankee Atomic Electric Company, and members of his staff on May 21, 2009, at the conclusion of on site inspection activities. On June 23, 2009, a telephone exit interview was conducted with Wayne Norton, President and CEO, Yankee Atomic Electric Company, Robert Mitchell, and other ISFSI site managers. The licensee did not identify any of the documents reviewed or statements referenced to specific processes as proprietary in nature.

ATTACHMENT: SUPPLEMENTAL INFORMATION

<sup>1</sup> A list of acronyms used in the report is included at the end of the Report Details.

### A-1 SUPPLEMENTAL INFORMATION

### PARTIAL LIST OF PERSONS CONTACTED

Robert Mitchell, ISFSI Manager, Yankee Atomic Electric Company Joseph Fox, Security Officer
David Levesque, Shift Supervisor, Yankee Atomic James Lenois, ISFSI Manager, Connecticut Yankee Wayne Norton, President & CEO, Yankee Atomic Michael Schmidt, Security Officer Timothy Snyder, Security Officer Davis Yorke, Operations Specialist

James Connell, ISFSI Manager, Maine Yankee

### INSPECTION PROCEDURES USED

TI 2690/010 Inspections of ASMs for Dry Cask Storage at ISFSI(s) Not Co-Located at an

Operating Reactor Facility

IP 81001 Independent Spent Fuel Storage Installation(s)

### ITEMS OPENED, CLOSED, AND DISCUSSED

Opened, Closed, and Discussed .

None.

### LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on the list does not imply the Nuclear Regulatory Commission (NRC) inspectors reviewed the documents in their entirety but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document, or any part of it, unless this is stated in the body of the inspection report.

NRC Order EA-03-097 "Additional Security Measures Associated with Access Authorization," issued on August 18, 2004

Yankee Atomic Electric Company Physical Security Plan (Rev. 18, dated 11/28/2006)

### **ACRONYMS**

ASM	Additional Security Measures
DNMS	Division of Nuclear Materials Safety
ISFSI	Independent Spent Fuel Storage Installation
LLEA	Local Law Enforcement Agency
NRC	Nuclear Regulatory Commission
PSP	Physical Security Plan
TI	Temporary Instruction

Attachment

### POST CLOSURE GROUNDWATER AND SURFACE WATER MONITORING REPORT, SPRING 2009

### YANKEE NUCLEAR POWER STATION

Prepared for:
Yankee Atomic Electric Company
Yankee Nuclear Power Station
49 Yankee Road
Rowe, Massachusetts

Prepared by:
MACTEC Engineering and Consulting, Inc.
511 Congress Street
Portland, Maine 04101

April 2009

Project No. 3617087152



### 1.0 INTRODUCTION

MACTEC Engineering and Consulting, Inc. (MACTEC) has been contracted by Yankee Nuclear Power Station (YNPS) to conduct the Post Closure Groundwater and Surface Water Monitoring Program at their site, located at 49 Yankee Road in Rowe, Massachusetts.

YNPS completed its decommissioning in 2007, under the regulatory oversight of the Nuclear Regulatory Commission (NRC). However, as part of the closure process, ongoing groundwater and surface water monitoring is still required under the Massachusetts Department of Environmental Protection (MassDEP) to demonstrate that the groundwater is in compliance under the Massachusetts Contingency Plan (MCP) and for post closure monitoring for the Beneficial Use Determination (BUD) Area and the Southeast Construction Fill Area (SCFA). This report presents the findings from samples collected in March 2009 in support of the site closure requirements under the MCP.

### 2.0 BACKGROUND

Through the site closure process, a comprehensive investigation was conducted to characterize environmental conditions and to develop the conceptual site model, not only to identify source areas and impacted media, but to also describe the fate and transport of both chemicals and radionuclides in soils, groundwater, and surface water. These findings have been published in numerous reports and have achieved the appropriate regulatory approvals. The conceptual site model for groundwater at YNPS was published in the Final Groundwater Conditions Report, submitted to the NRC on February 15, 2007 (YNPS, 2007).

As part of the decommissioning project, 81 groundwater monitoring wells were installed to characterize the hydrogeology as well as groundwater quality. Currently there are 53 wells that remain on site. Of these wells, 13 groundwater monitoring wells are currently sampled to demonstrate compliance with the MCP and to support post closure monitoring. As recommended below, the remaining 40 wells may now be abandoned as not to become a potential conduit for surface runoff to impact groundwater conditions. However, should YNPS prefer that the wells remain operational, there is no indication that the wells have deteriorated and they do not pose a risk to groundwater quality.

### 3.0 SCOPE OF WORK

Groundwater monitoring for closure under the License Termination Plan (LTP) has been completed. However, groundwater and surface water monitoring is still required to reach closure under the MassDEP and to support post closure monitoring, and as such, this program was completed in accordance with the MassDEP-approved Groundwater Monitoring Plan to Support Closure under the MCP (ERM, 2007) as well as the Phase II - Comprehensive Site Assessment Report (MassDEP, April 08, 2009).

The sampling program included the sampling of 13 groundwater monitoring wells and nine surface water sample locations. The sampling program is summarized in Table 1. The sampling locations are shown on Figure 1. All groundwater samples were collected in accordance with Low Stress (Low Flow) Purging and Sampling guidance (USEPA, 1996a) and in accordance with the Health and Safety Plan (MACTEC, 2006). Field data records are presented in Appendix A, and a summary of the field data parameters is presented in Table 2.

The radiochemistry data were validated in accordance with Site procedure RP-05, Rev. 2 (YNPS, 2009). Chemical analytical data were validated in accordance with EPA Region 1, New England Validation Guidelines (USEPA, 1989 and 1996b). A summary of the data validation findings and tabulated validated data are provided in Appendix B-1 (radiological), B-2 (chemical), and B-3 (validation checklists).

### 4.0 FINDINGS

Groundwater samples were submitted for both radiological and chemical parameters.

### 4.1 RADIOLOGICAL PARAMETERS

Radionuclides in groundwater are compared to the United States Environmental Protection Agency's (USEPA's) Maximum Contaminant Level (MCL). In additional to these criteria, data are also evaluated over time to assess if trends are decreasing, stable, or increasing. A change of 15 percent from the Spring 2008 event has been used to identify trends.

Groundwater samples were collected from 10 monitoring wells and seven surface water locations for analysis of radionuclides. Consistent with previous events, tritium was the only radionuclide positively identified in groundwater. The tritium results from the March 2009 sampling event are presented on Table 3 along with previous data to demonstrate that there continues to be a generally downward and/or stable trend in tritium concentrations. Radionuclides were not detected in any of the surface water locations sampled during this event.

Consistent with historical results, the highest concentration of tritium was detected at MW-107C at 21,300 picocuries per liter (pCi/L), with the next highest detection reported at monitoring well MW-107D (8,210 pCi/L). The MCL for tritium is 20,000 pCi/L. As shown on Table 3, these detections are consistent with the conceptual site model; tritium remains elevated at a few locations; however, the concentrations are generally trending downward. Additionally, because the tritium source was removed as part of Site Closure, this trend is anticipated to continue over time.

In addition to the ongoing monitoring program, surface water locations SW-408, SW-011 and Monroe Dam were collected for the first time under the post closure monitoring program and therefore trend data analyses can not be evaluated. These data will be evaluated as the monitoring program continues.

### 4.2 CHEMICAL PARAMETERS

Groundwater chemical data are evaluated using the GW-1 groundwater standards (310 CMR 40.0974(2)) (MassDEP, 2008). For the analyses where GW-1 standards are not published, data are compared to Massachusetts MCLs or Massachusetts Secondary MCLs (SMCLs) (MassDEP, 2007). Surface water chemical data are evaluated using USEPA Ambient Water Quality Criteria (AWQC) (USEPA, 2002). For the analyses where AWQC are not published, data are compared to Massachusetts MCLs or SMCLs (MassDEP, 2007).

<u>Former Industrial Area.</u> Two monitoring wells (MW-101A and MW-111C) are sampled for only arsenic as part of the monitoring program and are located in the Former Industrial Area. Arsenic was not detected at either location. A summary of arsenic data from monitoring wells MW-101A and MW-111C, including previous sampling events, is presented on Table 4.

<u>Former Southeast Construction Fill Area.</u> Samples were collected from three groundwater monitoring wells (CFW-1, CFW-5, and CFW-6) and five surface water locations (SW-1 through SW-5) to assess the potential environmental impacts from the Former SCFA. A summary of the sampling program is presented in Table 1.

No volatile organic compounds (VOCs) were detected in any of the groundwater or surface water samples at concentrations greater than the screening values. Several metals and other naturally occurring compounds were detected in both groundwater and surface water samples; however the concentrations are consistent with background and historic data. Only iron and manganese were detected at concentrations that exceed the SMCLs. SMCLs are used to assess the aesthetic qualities of drinking water and are not health-based standards; concentrations that exceed SMCLs are not necessarily indicative of potential health risks.

A summary of the groundwater data for wells downgradient of the SCFA is presented on Table 5. A summary of the surface water data for locations associated with the SCFA is presented in Table 6.

Sherman Spring Sampling was completed at the Sherman Spring surface water location (SP-1) and samples were analyzed for VOCs and total Resource Conservation and Recovery Act (RCRA) 8 metals plus thallium. All validated results were reported as not detected. Validated data is included in Appendix B-2.

Sherman Reservoir Sampling was completed at the Sherman Reservoir surface water location (SW-011) and samples were analyzed for dissolved RCRA 8 metals. This was the first time sampling under the post closure monitoring program. Barium was detected well below applicable criteria. All other results were reported as not detected. Validated data is included in Appendix B-2.

<u>Background Location</u> Background sampling was completed at the location where the Deerfield River enters the Sherman Reservoir (SW-408) and samples were analyzed for dissolved RCRA 8 metals. This was the first time sampling under the post closure monitoring program. All results were reported as not detected. Validated data is included in Appendix B-2.

### 5.0 CONCLUSIONS

Based on the data collected during the March 2009 sampling event, tritium continues to be the only site related radionuclide impacting groundwater and/or surface water at YNPS. Tritium concentrations continue to be stable or decreasing across the site, with the highest concentration reported at MW-107C at an activity of 21,300 pCi/L compared to the MCL of 20,000 pCi/L.

Arsenic was not detected at either MW-101A or MW-111C. In accordance with the Groundwater Monitoring Plan, samples must be collected from the wells until there are two consecutive rounds of data that are below the GW-1 standard of 0.01 milligrams per liter (mg/L). Based on the data presented in Table 4, sampling for arsenic will continue for MW-101A. Monitoring for arsenic at well MW-111C may be discontinued.

### 6.0 RECOMMENDATIONS

The results from the March 2009 groundwater sampling event were consistent with the approved conceptual site model. No additional sampling is warranted at this time. In accordance with the Post Closure Groundwater and Surface Water Monitoring Plan, the next groundwater sampling event is scheduled for March 2010.

As the groundwater monitoring program is progressing, wells that are no longer part of the active network may also be abandoned at this time. This action is recommended to eliminate the conduit for storm water runoff to potentially reach the water table.

Summary of Tritium Analytical Data and Trend Analysis Table 3

### Post Closure Groundwater and Surface Water Monitoring Report Spring 2009 Yankee Nuclear Power Station Rowe, Massachusetts

												_			
Trend	Analysis*	Stable	Stable**	Decrease	Decrease	Decrease	Decrease	Decrease	Stable	Decrease	Decrease	Not Applicable	Stable	Not Applicable	Not Applicable
Mar-09	pCi/L	r	2440	1	831/900	3490	484	21300	8210.	4650	8150	ı	1	·	,
Mar-08	pCi/L	•	1	1590	1850	4710	846	25700	9380	2060 / 5160	0686		1		
Mar-07	pCi/L	392	4000/4210	8580	3100/2930	3440	- /2850	30900	9440	6420	9220		452		
Dec-06	pCi/L	-	581	6530	2850	2900	3010	29100	9310	5700	9210		1100		
May-04	pCi/L	•	ı			4530		39020	10910				890		
Mar-04	pCi/L					4890		8880	5940				210		
Nov-03	pCi/L	1	1			5220		45780	9710			-	ı		
Sep-03	pĊi/L							48000	9150						
Aug-03	pČľL	,	1			4850							ı	·	
	Location	CFW-5	CFW-6	MW-102D	MW-104A	MW-105B	MW-106A	MW-107C	MW-107D	MW-107E	MW-107F	Monroe Dam	Sherman Spring	SW-011	SW-408

\* Trend analysis is based on a concentration change of greater than 15% from the March 2008 Sample Event.

Prepared/Date: MGV 04/13/09 Checked/Date: DEP 04/14/09

\*\* Trend analysis based on historic values

831/900 - shows sample and duplicate sample "." signifies concentration less than minimum detectable activity pCi/L - picocuries per liter

P:/Projects/36/17087152 - 3 Yankee GW Monitoring/4.0\_Deliverables/4.1\_Reports/Yankee Rowe/Annual Report\_Spring 2009/ Table 3\_Site-Wide\_Tritium\_rev11.xdsx

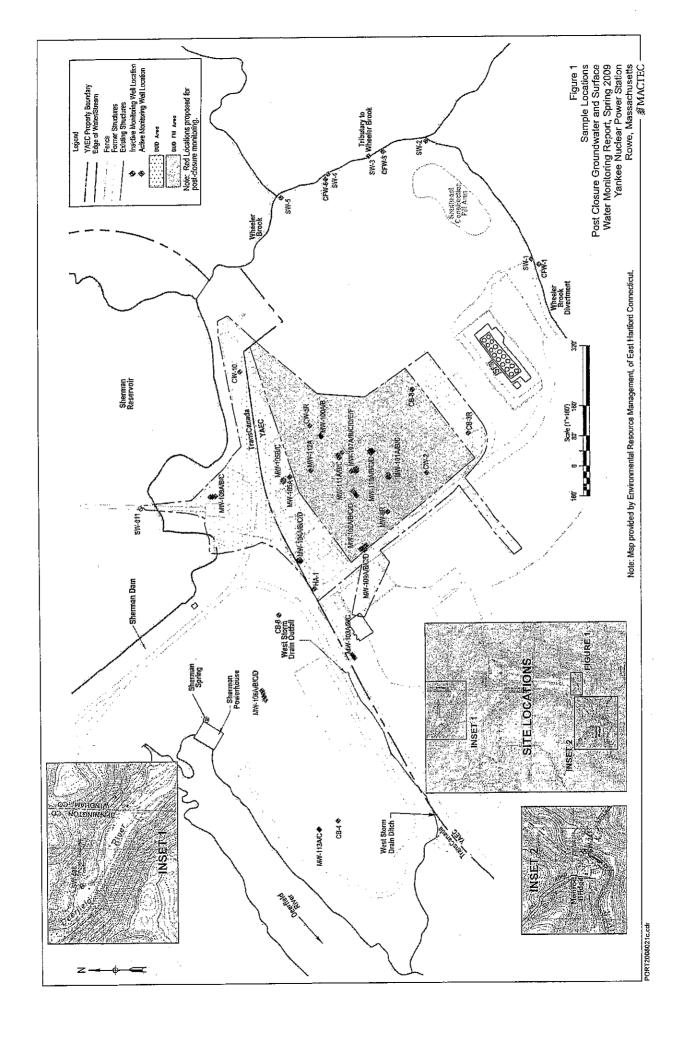


Table 4
Summary of Arsenic Data at Monitoring Wells MW-101A and MW-111C

## Post Closure Groundwater and Surface Water Monitoring Report Spring 2009 Yankee Nuclear Power Station Rowe, Massachusetts

Location	Sample Date	Sample ID	QC Code	Units	Arsenic*
MW-101A		208/MW101A-062806	FS	MG/L	0.0141
	9/14/2006	MW-101A-091406	FS	MG/L	0.0161
	12/14/2006	MW-101A-121406	FS	MG/L	0.012
	3/14/2007	MW-101A-031407	FS	MG/L	0.0092
	3/26/2008	MW-101A	FS	MG/L	0.01 J
	3/10/2009	MW-101A	FS	MG/L	-
MW-111C	4/26/2006	MW-111C-042606	FS	MG/L	0.004
	3/15/2007	MW-111C-031507	FS	MG/L	0.0101
	3/26/2008	MW-111C	FS	MG/L	ı
	3/10/2009	MW-111C	FS	MG/L	•
			,	Prepared/L	Prepared/Date: MGV 04/13/09

Notes:

Checked/Date: DEP 04/14/09

\* GW-1 Standard for Arsenic is 0.01 mg/L (310 CMR 40.0974(2); effective 2/14/2008)

"." indicates analyte not detected.

Bold Italics indicates an exceedance of the GW-1 standard.

FS - Field Sample

MG/L - milligrams per liter

J - estimated value

QC - Quality Control

### Ory Cask Storage in the U.S. by Utility

Utility	Reactor.			Cask System	Туре	⊮Total⊭ Ass loaded ∷ S	Stored
APS	Palo Verde	PWR	NAC	NAC-UMS	UMS-24	67	160
Constellation	Caivert Cliffs	PWR	TN	NUHOMS	24P	48	11.5
Constellation	Calvert Cliffs	PWR	TN	NUHOMS	32P	15	48
Consumers	Big Rock Point	BWR	BFS/ES	FuelSolutions	W150	8	44
Ct. Yankee	Солп Yankee <sup>1</sup>	PWR	NAC	NAC-MPC	MPC-26	43	1019
DOE	INEEL		TN	NUHOMS	12T	29	17
Dominion	Kewaunee	PWR	TN	NUHOMS	32PT	2	6
Dominion	Millstone	PWR	TN	NUHOMS	32PT	11	35
Dominion	North Anna	PWR	TN	TN Metal Casks	TN-32	27	86
Dominion	North Anna	PWR	TN	NUHOMS	32PTH	7	22
Dominion	Surry	PWR	GNB	Castor	V/21 and X3.3	26	55
Dominion	Surry	PWR	NAC	NAC-I28	NAC-128	2	51
Dominion	Surry	PWR	TN	NUHOMS	32PTH	.9	28
Dominion	Surry	PWR	TN	TN Metal Casks	TN-32	26	83
Dominion	.Surry	PWR	W	MC-10	.MC-10	1	24
Duke	Catawba	PWR	NAC	NAC-UMS	UMS-24	10	240
Duke	McGuire	PWR	NAC	NAC-UMS	UMS-24	28	67
Duke	McGuire	PWR	TN	TN Metal Casks	TN-32	10	320
Duke	Oconee	PWR	TN	NUHOMS	24P	84	2016
Duke	Oconee	PWR	TN	NUHOMS	24PHB	20	480
Energy Northwest	Columbia	BWR	Holtec	HI-STORM	MPC-68	27	1836
Entergy	ANO	PWR	BFS/ES	FuelSolutions	VSC-24	24	570
Entergy	ANO	PWR	Holtec	HI-STORM	MPC-24	18	43
Entergy	ANO	PWR	Holtec	HI-STORM	MPC-32	13	416
Entergy	Fitzpatrick	BWR	Holtec	HI-STORM	MPC-68	14	953
Entergy	Grand Gulf	BWR	Holtec	HI-STORM	MPC-68	10	68
Entergy	Indian Point 1	PWR	Holtec	HI-STORM	MPC-32	5	16
Entergy	Indian Point 2	PWR	Holtec	HI-STORM	MPC-32	6	192
Entergy	Palisades	PWR	BFS/ES	FuelSolutions	VSC-24	18	43
Entergy	Palisades	PWR	TN	NUHOMS	24PTH	7	16
Entergy	Palisades	PWR	TN	NUHOMS	32PT	11	35
Entergy	River Bend	BWR	Holtec	HI-STORM	MPC-68	11	748
	Vermont Yankee		Holtec	HI-STORM	MPC-68	5	341
Entergy Exelon	Dresden	BWR	Holtec	HI-STORM	MPC-68	37	2510
Exelon	Dresden	BWR	Holtec	HI-STAR	MPC-68	4	27
	Limerick	BWR	TN	NUHOMS	61BT	7	42
Exelon	Oyster Creek	BWR	TN	NUHOMS	61BT	16	970
Exeion	Peach Bottom	BWR	TN	TN Metal Casks	TN-68	44	299
Exelon	Quad Cities	BWR	Holtec	HI-STORM	MPC-68	24	163
Exelon		PWR	TN	NUHOMS	24P	3	7
FirstEnergy	Davis-Besse	BWR	TN	NUHOMS	6.1 BT	10	61.
FPL	Duane Arnoid				VSC-24	16	384
FPL	Point Beach	PWR	BFS/ES TN	FuelSolutions NUHOMS	32PT	14	44
FPL	Point Beach	PWR.			32PTH	:6	19:
FPL	St. Lucie	PWR	TN	NUHOMS	32PTH	.6	19
FPL	Seabrook	PWR	TN NAC	NUHOMS		64	143
Maine Yankee	Maine Yankee¹	PWR	NAC	NAC-UMS	UMS-24	10	320
OPPD	Fort Calhoun	PWR	TN	NUHOMS	32PT	34	78
Portland GE	Trojan	PWR	Holtec	TranStor cask	MPC-24E/EF		140
PPL	Susquehanna	BWR	TN	NUHOMS	52B	27	183
PPL	Susquehanna	BWR	TN	NUHOMS	61BT	30	
Progress	Robinson	PWR	TN	NUHOMS	7P	8	5
Progress	Robinson	PWR	TN	NUHOMS	24PTH	8	19:
PS Colorado	Ft. St. Vrain	HTGR		Foster Wheeler	MVDS		146
PSE&G	Hope Creek	BWR	Holtec	HI-STORM	MPC-68	12	81
PG&E	Diablo Canyon	PWR	Holtec	HI-STORM	MPC-32	6	19
PG&E	Humboldt Bay	BWR	Holtec	HI-STAR	MPC-80	5	39
SMUD	Rancho Seco1	PWR	TN	NUHOMS	24PT	22	49
Southern Cal Edison	SONGS 11.2	PWR	TN	NUHOMS	24PT1	18	39
Southern Cal Edison		PWR	TN	NUHOMS	24PT4	15	36
Southern Nuclear	Farley	PWR	Holtec	HI-STORM	MPC-32	10	32
Southern Nuclear	Hatch	BWR	Holtec	HI-STORM	MPC-68	37	251
Southern Nuclear	Hatch	BWR	Holtec	HI-STAR	MPC-68	3	20
TVA	Browns Ferry	BWR	Holtec	HI-STORM	MPC-68	10	68
TVA	Sequoyah	PWR	Holtec	HI-STORM	MPC-32	20	64
Xcel Energy	Prairie Island	PWR	TN	TN Metal Casks	TN-40	25	100
~ *	Monticello	BWR	TN	NUHOMS	61BT	10	61
Xcel Energy YAEC	Yankee Rowe <sup>2</sup>	PWR	NAC	NAC-MPC	MPC-36	16	53
ACI.	INTROC LOWG.	1 444/	e shuttered	1110 1111 0	.76 0 00	21219	

. 

## YAEC SPENT FUEL STORAGE ADVISORY COMMITTEE MEETING - October 22, 2009 NUCLEAR WASTE ISSUE UPDATE

# Federal Nuclear Waste Management Program Update

of the fuel cycle. We were told last month by the DOE OCRWM Director that there would be an announcement about the BRC in the fall. We don't know at this point whether the Blue Ribbon Commission will be a presidential commission or a commission organized under the Federal Advisory Committee Act. A commission under FACA would be established and DOE Program: The Obama administration remains opposed to the Yucca Mountain repository program and plans to establish a "blue-ribbon commission" to determine alternative solutions for the management of nuclear waste and closing the back end governed by rules requiring public comment and inclusiveness.

reply, Secretary Chu responded stating, "I agree with your suggestion for such an expert to be included on the panel." The Kennedy/Kerry letter also urged that the Commission recognize that there are special circumstances at the sites of permanently shut down reactors and that consolidating that material for long-term management merits priority attention. (copies of the This summer, the late Senator Kennedy and Senator Kerry sent a letter to Secretary Chu urging him to appoint someone with expertise in spent fuel management at decommissioned nuclear plants to the proposed Blue Ribbon Commission. In his August letters are attached). Yucca Mountain License Application: The Yucca Mountain license application process continues to proceed and indications are that the review process between the DOE and NRC is going well. The funding levels proposed by the administration for FY 2010 were said by the DOE and NRC to be sufficient for the review process to continue into next year; however, concern has been raised that the review will slow down because NRC did not receive more than the \$29 million requested by the Administration in its FY 2010 budget

# Congressional Appropriations and Legislation Update

Water Development Appropriations bill adopting the Administration's proposed funding request for the nuclear waste program at \$196.8 million. This includes \$5 million to fund the yet-to-be-determined nuclear waste Blue Ribbon Commission. This Appropriations: In early October, a conference committee of the House and Senate FY reported out the FY-2010 Energy and funding level is considered the minimum necessary for the DOE and NRC to continue the Yucca Mountain license application Congressman Olver (a member of the House Energy and Water Development Committee), was successful in including the following language in the House Bill Report: "the Committee directs that the proposed Blue Ribbon Commission shall include an appropriate level of representation of decommissioned reactor sites to ensure their interests are considered in the formulation of a national nuclear waste policy." Additionally, last month, Connecticut Senators Lieberman and Dodd sent a This was reinforced by calls to the House and Senate Committees by staff from Congressman Olver's office as well as other New England delegation members. Unfortunately, none of the House report (or the Senate report) language was adopted in the letter (copy attached) to the Senate Committee Chair and Ranking Member urging that the House report language be adopted. conference committee bill. This means that the DOE Secretary has complete discretion regarding the establishment of the BRC scope and membership.

- FY 2011 Budget: The Obama administration's budget proposal for fiscal 2011 is expected to fund the continuation of the Blue Ribbon Commission and will also tell us whether they intend to continue with the Yucca Mountain licensing review process or not. This summer, Senate Majority Leader Reid announced that President Obama and DOE Secretary Chu have agreed to only request funding for the termination of the Yucca Mountain License Application in FY 2011 (which begins October 1, 2010). No one from the Administration has refuted his statement, so it is quite possible that the only funding requested for Yucca Mountain will be to close and remediate the site. I'd note that Senator Reid is up for re-election in November 2010.
- reactor sites as the administration examines the next steps in the nation's spent fuel management program and that someone with decommissioned plant spent fuel storage knowledge be appointed to the BRC. Yankee will also continue its efforts to expedite the removal of the fuel from the site with the Nuclear Waste Strategy Coalition; the Nuclear Energy Institute; the highlighting the shutdown reactor spent fuel storage issues and requesting priority attention to the needs of the shutdown England Governors Conference and the New England Council (letter attached) on communications to the administration Additional Yankee Efforts: Yankee continues to work with the Decommissioning Plant Coalition, as well as the New National Association of Regulatory and Utility Commissioners; and other organizations as well.

## **DOE Lawsuit Status**

### Phase I Cases

Yankee was awarded \$32.9 million in damages through 2001 in the 2006 U.S. Court of Federal Claims decision in the Yankee Companies' litigation with the federal government over its failure to remove the spent nuclear fuel. The decision was appealed by DOE. In 2008 a U.S. Federal Court of Appeals panel vacated the Court of Federal Claims decision and remanded the case back to the Claims court. A key finding of the appeals panel was that they agreed that the damages awarded had not been calculated properly by the Claims court.

13. The Yankees' rebuttal is due on or before November 6. A date for final argument could be set for late November or early The trial on the remand cases was held in Washington, DC this summer. Following the trial, the Judge issued a scheduling order for post-trial briefs. The Yankees initial brief was filed September 15. The Government's response was filed on schedule October arguing that they should be recoverable now based on the appellate court's decision associated with the DOE's spent fuel December. Also, in the remanded cases, the Yankees included damage claims that they had tried to recover the first time around. acceptance rate. In the remand case, Yankee is seeking \$53.9 million in damages. In his pre-trial order, the Claims Court Judge stated that he did not believe the scope of the remand allowed him to reconsider these renewed damages claims. However, he acknowledged his interpretation could be in error and that the companies could include offers of proof for these renewed damages claims. This preserves the opportunity for Yankee to pursue the claims on appeal should the Judge not award them.

### Phase II Cases

Yankee's claim in this case seeks \$86 million in damages for this time period. The Judge has not issued any rulings in the case to date. The Yankees and the government have been in discussions regarding a discovery schedule. We are hopeful that once the In December 13, 2007 the Yankee Companies filed a second round of damages claims in the U.S. Court of Federal Claims. remanded Phase I cases are decided, the Phase II cases will be positioned to move to trial quickly.

### United States Senate

WASHINGTON, DC 20510

July 10, 2009

The Honorable Steven Chu Secretary Department of Energy Washington, D.C. 20585

Dear Secretary Chu:

We're writing to respectfully request that the forthcoming Blue Ribbon Commission on spent nuclear fuel recommend alternative strategies to Yucca Mountain for managing the nation's civilian spent nuclear fuel at permanently shut-down, single-unit nuclear plants, including the Yankee Rowe facility in Massachusetts. We also urge you to appoint a Commissioner who has expertise with spent fuel management at decommissioned nuclear plants.

The Commission should recognize that there are special circumstances at the sites of permanently shut down reactors and that consolidating this material for long-term management merits priority attention. These sites cannot be considered for a wider range of productive uses as long as the spent fuel remains, and the result is a significant loss to the local communities. Additionally, ratepayers continue to be charged millions of dollars for interim storage at these sites. It is estimated, for example, that Massachusetts ratepayers are charged more than \$10 million annually for storage at Yankee Rowe and the two other decommissioned single-unit nuclear reactors in New England.

We commend the Administration for its recognition of the urgent need to propose alternative storage options to Yucca Mountain for spent nuclear fuel, and we hope that the special circumstances of decommissioned sites will receive full consideration. Selecting a Commissioner with special expertise on these sites will enable the panel to address the longstanding and unique challenges posed by spent fuel storage at these sites.

With respect and appreciation, and we thank you for considering this request.

Sincerely,

John F. Kerry



### The Secretary of Energy Washington, D.C. 20585

August 4, 2009

The Honorable Edward M. Kennedy United States Senate Washington, D.C. 20510

Dear Senator Kennedy:

Thank you for your July 10, 2009, letter requesting that the "blue-ribbon" panel that the Administration intends to convene consider strategies for disposing of spent nuclear fuel at permanently shut-down, single-unit plants like Yankee Rowe, and that we include a member with expertise in spent-fuel management at decommissioned plants. I agree with your suggestion for such an expert to be included on the panel.

We are working to form the panel as quickly as possible to review options to manage spent nuclear fuel and high-level radioactive waste, including waste from decommissioned facilities, and resolve this challenging issue. In the months ahead, I look forward to working closely with you and other members of Congress as we address this critical issue. Thank you for your leadership on the matter of spent fuel management.

If you have any questions, please contact me or Ms. Betty A. Nolan, Senior Advisor, Office of Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely,

Steven Chu

March

JOSEPH I. LIEBERMAN

COMMITTEES:
ARMED SERVICES
HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS
SMALL BUSINESS

### United States Senate

WASHINGTON, DC 20510-0703

Serate Office Burling Washington, DC 20510 (202) 234-4047

STATE DESCE

One Constitution Peaza 7th Febb Hamford, CT 06103 860-549-8463 Toll Free: 1-800-225-6603

HOME PAGE: http://inhorman.senate.gov

September 14, 2009

Senator Byron Dorgan, Chairman Committee on Appropriations Subcommittee on Energy and Water Development The Capitol, S-128

Senator Robert Bennett, Ranking Member Committee on Appropriations Subcommittee on Energy and Water Development The Capitol, S-128

Dear Chairman Dorgan and Ranking Member Bennett:

As you finalize the Energy and Water Appropriations Act of 2010, we urge that any language pertaining to the proposed Blue Ribbon Commission on nuclear reactor sites remain mindful of the special circumstances confronting decommissioned nuclear reactor sites. We think it is essential that national nuclear waste policy consider the storage issues surrounding their unique situation.

Specifically, we ask that you consider including House report language requiring the proposed Commission to include representation from decommissioned reactor sites. The provision is on page 121 of House Report 111-203: ["Additionally, the Committee directs that the proposed Blue Ribbon Commission shall include an appropriate level of representation of decommissioned reactor sites to ensure their interests are considered in the formulation of a national nuclear waste policy."]

A number of independent reviews of our nation's civilian nuclear energy and disposal programs have consistently recognized that the removal of the nuclear waste material from decommissioned reactor sites needs urgent attention. We believe the Commission should recognize that permanently shutdown single-unit reactor sites, such as the Connecticut Yankee facility in our state, face a unique set of circumstances with regard to waste management and acknowledge that these sites merit distinct treatment for that reason. Once sites like Connecticut Yankee are decommissioned, spent fuel and high-level waste are still stored there. As a result, they cannot be considered for a full range of subsequent productive uses.

As the Blue Ribbon Commission examines the next steps in our nation's spent fuel management program, it is vitally important that single-unit decommissioned sites such as Connecticut Yankee are assured full consideration by the Commission.

We thank you for your consideration of this important request.

Sincerely,

√oseph I. Lieberman

UNTIED STATES SENATOR

Christopher J. Dodd

UNITED STATES SENATOR



October 13, 2009

Dear Secretary Chu,

I am writing to you on behalf of The New England Council, the oldest regional business organization in the country, to respectfully urge you to include an expert on the challenges facing decommissioned nuclear power plants on any Blue Ribbon Commission forging a strategy on the future of nuclear waste storage.

For years The New England Council has been a strong supporter of the development of the Yucca Mountain nuclear waste repository. As you know well, the National Academy of Sciences has issued numerous studies on the scientific soundness of the facility, and it has been recognized on numerous occasions as the best way for the federal government to fulfill its obligations under the Nuclear Waste Act of 1982. However, we recognize and respect the Administration's decision to explore other long-term solutions, and are optimistic the creation of a high-level Commission will lead to effective options for consideration.

As you work to create the Commission, we respectfully recommend that the Administration include on any panel the expertise and experience of someone intimately familiar with the challenges and day-to-day management of decommissioned plants, especially the three sites located in New England. We are heartened at your August 4 reply to the Massachusetts Senate delegation stating that you are in agreement with the suggestion that "such an expert" should be included on the panel.

We are also hopeful the Administration chooses to develop and operate the panel consistent with the creation of other federal advisory committees. It is critical that the energy community, ratepayer advocates, and other stakeholders are represented on the committee or at the very least have an opportunity to participate in an open and transparent process.

The safe long-term management of nuclear waste should be an important part of any energy strategy developed by the federal government. We hope in the short-term the Administration recognizes the challenges faced by the decommissioned nuclear plant sites in New England that are serving as de facto interim nuclear waste storage facilities and that the Blue Ribbon Commission is instructed to specifically develop recommendations for timely removal of the radioactive material stranded at these sites.

Thank you for your time. If you have any questions, please do not hesitate to call me or Jeff Turcotte of the Council's Washington, DC office at (202) 547-0048.

Very Truly Yours,

James T. Brett President & CEO

·				
a.				
			<u>.</u>	
	-			
			,	
	•			
		,		

Yankee Rowe CAB Update
October 2009
Elaine Richardson, Vice President
Vita Nuova, LLC

At the April 2009 CAB meeting, Vita Nuova explained that Yankee Atomic Electric Company had initiated an Expression of Interest process to identify experienced, financially sound, and capable organizations interested in the future ownership of all or a portion of the Yankee Rowe property.

In March, we received a number of interesting and diverse expressions of interest from a variety of organizations representing the non-profit, for-profit and governmental sectors. Throughout the spring and summer, we exchanged additional information about the property with the interested parties and conducted interviews with a number of the parties.

Vita Nuova, on behalf of Yankee Atomic, requested that interested parties submit a supplemental expression of interest by September 10. This submittal addressed additional details about the potential future ownership of the property. Some interested parties chose to drop out at this stage, however we did receive a number of submittals from all sectors of the market.

Vita Nuova is reviewing the submittals and where appropriate conducting follow-up discussions. Vita Nuova will be making a recommendation to Yankee Atomic regarding their potential options for moving forward. Yankee has made no decisions regarding the future disposition of the property and there is no time table established for completing this process.

We will continue to keep you informed of developments as we move through the property disposition process.