RAS - M-2

DOCKETED
USNRC

March 6, 2008 (1:57pm)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

March 6, 2008

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	
Entergy Nuclear Vermont Yankee, LLC	)	Docket No. 50-271-LR
and Entergy Nuclear Operations, Inc.	)	ASLBP No. 06-849-03-LR
	)	
(Vermont Yankee Nuclear Power Station)	)	

ENTERGY'S FINAL LIST OF WITNESSES

Pursuant to Section II.1.C of the Atomic Safety and Licensing Board's Board Initial Scheduling Order (Nov. 17, 2006), Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. ("Entergy") hereby provide their final list of witnesses, as follows.

New England Coalition Contention 2A (adequacy of analytical methods employed in Entergy's calculations of environmentally assisted fatigue):

Gary L. Stevens, P.E.

Lead Product Manager for BWR Fatigue Management Program Development

Structural Integrity Associates
6855 South Havana Street, Suite 350
Centennial, CO 80112
303-792-0077

James C. Fitzpatrick

Former (as of March 10, 2008) Senior Lead Engineer, Design Engineering
Vermont Yankee Nuclear Power Station

AREVA NP
400 Donald Lynch Blvd.
Marlborough, MA 01752
978-568-2805

Template - Secy-043

Secy-02

Mr. Stevens is an expert in the application of finite element analysis, fracture mechanics, and structural and fatigue analyses for nuclear components. He has extensive experience in the application of American Society of Mechanical Engineers ("ASME") Code Sections III and XI methodology to fatigue analyses of reactor vessels and internals components. He was the Chairman of former ASME Section XI Task Group on Operating Plant Fatigue Assessments, is the Secretary of the ASME Section XI Working Group on Operating Plant Criteria, is the Secretary of the ASME Section XI Subgroup on Evaluation Standards, and is a member of the ASME Section XI Subcommittee on Nuclear Inservice Inspection. In his testimony, Mr. Stevens will describe the methodology and results of the calculations and analyses of environmentally assisted fatigue of components at VY performed under his supervision. He will testify that the results of these calculations and analyses demonstrate that the fatigue usage factors, including environmental effects, for all critical components and locations analyzed, remain within the allowable value of 1.0 established by Section III of the ASME Code the for the entire twenty years of VY extended operation.

Mr. Fitzpatrick has thirty years of experience in the design, construction, and modification of nuclear power plant structures, piping systems, pressure vessels, and in the seismic evaluation of mechanical and electrical equipment. At VY, he has been responsible for the development and implementation of plant design changes, inspection programs, equipment specifications, installation support, outage support, and operability evaluations of degraded components. Mr. Fitzpatrick will testify on Entergy's plan to predict and manage the effects of fatigue on critical reactor components during the twenty-year period following renewal of the VY operating license and will describe how the VY's operating history, its current operating

conditions, and other relevant parameters were duly incorporated as inputs to the environmentally assisted fatigue calculations.

New England Coalition Contention 3 (steam dryer):

John R. Hoffman

Former Project Manager for the VY License Renewal Project

P.O. Box 377
24 Christine Overlook
Conway, NH 03818
408-978-8200

Larry D. Lukens

Former Supervisor, Code Programs
Vermont Yankee Nuclear Power Station

119 Flint Ct.
Bellefonte, PA 16823
814-353-0186

Mr. Hoffman has over 37 years of nuclear power engineering experience and was associated with the Vermont Yankee Nuclear Power Station from 1971 until his retirement in September 2006. He had, among other responsibilities, that of Project Manager for the License Renewal Project at VY. In that capacity, Mr. Hoffman was responsible for overseeing the development of the proposed program to manage the aging of the VY steam dryer during the extended license operating period. Mr. Hoffman's testimony will summarize the dryer monitoring and inspection program that has been implemented at VY since the plant uprate was accomplished and describe Entergy's proposed steam dryer aging management program for the period of extended plant operations, including continuous monitoring of plant parameters indicative of significant steam dryer cracking, assessment of the monitoring data and evaluation of the significance of the data by several levels of qualified personnel. Mr. Hoffman will also demonstrate that there is no need to provide a means to estimate and predict stress loads on the

dryer during operation for comparison to established fatigue limits because the monitoring program, supplemented by the periodic dryer inspections during refueling outages, is sufficient to diagnose whether significant dryer cracking has occurred before such cracking results in dryer failure.

Mr. Lukens has over 38 years of nuclear power experience and was associated with the Vermont Yankee Nuclear Power Station from 2002 until his retirement in July 2007. At VY he had, among other responsibilities, that of Supervisor, Code Programs and in that capacity he was responsible for ensuring the completion and evaluation of the steam dryer inspections, as well as other Code-required tests and inspections. Mr. Lukens will summarize the steam dryer inspections that have been conducted to date at VY and their results, and will describe the dryer inspections to be performed during the period of plant operations after renewal of the VY license. He will describe how the most recent steam dryer inspections show that the strengthening modifications made to the dryer in 2004 in anticipation of uprate operations are performing as expected and will explain how the fact that the VY steam dryer showed no evidence of fatigue induced cracks after one year of EPU operation indicates that continued routine inspection of the steam dryer during the period of extended operation will provide reasonable assurance of continued steam dryer integrity.

New England Coalition Contention 4 (flow accelerated corrosion):

Jeffrey S. Horowitz

Independent Consultant
3331 Avenida Sierra
Escondido, CA 92029
760-747-8714

James C. Fitzpatrick

Former (as of March 10, 2008) Senior Lead Engineer, Design Engineering
Vermont Yankee Nuclear Power Station

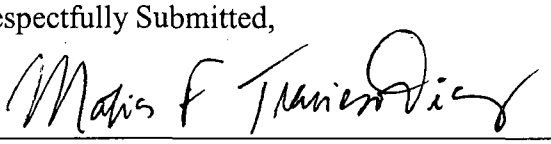
AREVA NP
400 Donald Lynch Blvd.
Marlborough, MA 01752
978-568-2805

Dr. Horowitz has over 35 years of experience in the field of nuclear energy and related disciplines and has specialized for the last 22 years in flow-accelerated corrosion ("FAC") and nuclear safety analysis. An internationally recognized expert on FAC issues, he is the author of several computer code widely used to predict the most likely locations for FAC damage to occur in nuclear reactors. Among the codes he has authored is CHECWORKS, currently used in facilities around the world (including VY) as an aid in identifying plant locations where FAC inspections should be conducted. Dr. Horowitz will testify on the methodology, assumptions and data used in performing CHECWORKS evaluations, describe the industry experience with FAC and the use of CHECWORKS, and will explain why the data accumulated on VY's operations at uprate levels by the time the period of extended operation begins will be sufficient to permit accurate FAC predictions. He will also describe the audit he performed in April 2007 of the FAC program at VY and the bases for his conclusions that the program appropriately implements the recommendations of the Electric Power Research Institute and provides reasonable assurance that effects of aging will be managed such that applicable components will continue to perform their intended functions consistent with the current licensing basis for the period of extended operation.

Mr. Fitzpatrick, whose experience and credentials are described above, has been involved with FAC issues since 1987 and was responsible for the development of the FAC program for VY in 1990 and its implementation since that time. In his testimony, Mr. Fitzpatrick will describe the program that VY proposes to implement to control FAC during the period following

license renewal, including the criteria used for selecting the components and locations to be inspected for FAC during refueling outages. He will also summarize the most important actions taken at VY to minimize potential effects of FAC and explain why the FAC program to be implemented at VY after license renewal will be adequate to assure the physical integrity of plant components.

Respectfully Submitted,



David R. Lewis
Matias F. Travieso-Diaz
PILLSBURY WINTHROP SHAW PITTMAN LLP
2300 N Street, N.W.
Washington, DC 20037-1128
Tel. (202) 663-8000

Counsel for Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.

Dated: March 6, 2008

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	
Entergy Nuclear Vermont Yankee, LLC	)	Docket No. 50-271-LR
and Entergy Nuclear Operations, Inc.	)	ASLBP No. 06-849-03-LR
	)	
(Vermont Yankee Nuclear Power Station)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "Entergy's Final List of Witnesses" dated March 6, 2008, were served on the persons listed below by deposit in the U.S. Mail, first class, postage prepaid, and where indicated by an asterisk by electronic mail, this 6th day of March, 2008.

*Administrative Judge
Alex S. Karlin, Esq., Chairman
Atomic Safety and Licensing Board
Mail Stop T-3 F23
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
ask2@nrc.gov

*Administrative Judge
Dr. Richard E. Wardwell
Atomic Safety and Licensing Board
Mail Stop T-3 F23
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
rew@nrc.gov

*Administrative Judge
Dr. Thomas S. Elleman
Atomic Safety and Licensing Board
5207 Creedmoor Road, #101,
Raleigh, NC 27612.
tse@nrc.gov; elleman@eos.ncsu.edu

*Secretary
Att'n: Rulemakings and Adjudications Staff
Mail Stop O-16 C1
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
secy@nrc.gov, hearingdocket@nrc.gov

Office of Commission Appellate Adjudication
Mail Stop O-16 C1
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Atomic Safety and Licensing Board
Mail Stop T-3 F23
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

*Lloyd Subin, Esq.
*Mary Baty, Esq.
Office of the General Counsel
Mail Stop O-15 D21
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
LBS3@nrc.gov; mcb1@nrc.gov

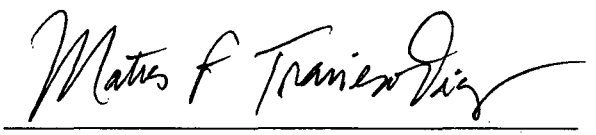
*Sarah Hofmann, Esq.
Director of Public Advocacy
Department of Public Service
112 State Street – Drawer 20
Montpelier, VT 05620-2601
Sarah.hofmann@state.vt.us

*Anthony Z. Roisman, Esq.
National Legal Scholars Law Firm
84 East Thetford Road
Lyme, NH 03768
aroisman@nationallegalscholars.com

*Ronald A. Shems, Esq.
*Karen Tyler, Esq.
Shems, Dunkiel, Kassel & Saunders, PLLC
9 College Street
Burlington, VT 05401
rshems@sdkslaw.com
ktyler@sdkslaw.com

*Peter L. Roth, Esq.
Office of the New Hampshire Attorney General
33 Capitol Street
Concord, NH 03301
Peter.roth@doj.nh.gov

*Marcia Carpenter, Esq.
Atomic Safety and Licensing Board Panel
Mail Stop T-3 F23
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
mxc7@nrc.gov



Matias F. Travieso-Diaz