

September 18, 2007

E. Roy Hawkens, Chair
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Anthony J. Baratta
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Paul B. Abramson
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

In the Matter of
AMERGEN ENTERGY COMPANY, LLC
(Oyster Creek Nuclear Generating Station)
Docket No. 50-0219-LR

Dear Administrative Judges:

In accordance with the "Memorandum and Order (Prehearing Conference Call Summary, Case Management Directives, and Final Scheduling Order)" (Apr. 17, 2007) (unpublished), please find enclosed "NRC Staff Proposed Questions For Evidentiary Hearing" (Aug. 24, 2007).

Pursuant to 10 C.F.R. § 2.1207(a)(3)(i), the enclosed questions are being submitted only to the Board at this time. The Staff understands that, consistent § 2.1207(a)(3), the questions will be confidential until propounded by the Board or until issuance of an initial decision, at which time they will be forwarded to the Secretary of the Commission for inclusion in the official record of this proceeding.

In addition, in order to address the Board questions about reasonable assurance in "Memorandum and Order (Hearing Directives)" (Sept. 12, 2007) (unpublished) at 3, the Staff is adding A. Louise Lund and Kamal Manoly to its witness panel. Enclosed are statements of professional qualifications for Ms. Lund and Mr. Manoly.

Sincerely,

/RA/

Mary C. Baty
Counsel for the NRC Staff

Enclosures: 1. NRC Staff Proposed Questions Regarding Surrebuttal Testimony
2. Professional Qualifications of A. Louise Lund
3. Professional Qualifications of Kamal Manoly

cc w/ encl 1, 2, & 3: D. Wolf, Esq.

cc w/ encl 2 & 3 : Suzanne Leta Liou
Donald Silverman, Esq.
Kathryn M. Sutton, Esq.
Raphael P. Kuyler, Esq.
Kevin Kamps
Office of Commission Appellate Adjudication

Richard Webster, Esq.
Alex S. Polonsky, Esq.
J. Bradley Fewell, Esq.
Paul Gunter, Esq.
Office of the Secretary

A. Louise Lund
Statement of Professional Qualifications

CURRENT POSITION

Branch Chief Division of License Renewal
Office of Nuclear Reactor Regulation

EDUCATION

M.S. Materials Science and Engineering
Washington State University - Tri-Cities Campus
Richland, WA 5/94

B.S. Materials Science and Engineering
Washington State University
Pullman, WA 5/91

A.A. Nuclear Medicine Technology
Prince George's Community College
Largo, MD 5/79

EXPERIENCE

11/05 - present US Nuclear Regulatory Commission, Washington, DC
Branch Chief, Division of License Renewal
Office of Nuclear Reactor Regulation

Supervises project managers responsible for coordinating the safety review of license renewal.

10/01 - 10/05 US Nuclear Regulatory Commission, Washington, DC
Section Chief, Steam Generator Integrity and Chem. Eng. Section
Office of Nuclear Reactor Regulation

Supervised materials and chemical engineers performing technical reviews in steam generator integrity and chemical engineering topics.

1/00 - 10/01 US Nuclear Regulatory Commission, Washington, DC
Materials Engineer, Office of Nuclear Reactor Regulation

Performed evaluations of materials engineering-related issues to support licensee implementation of NRC regulations and requirements and to support applications for license renewal.

1/99 - 1/00 US Nuclear Regulatory Commission, Washington, DC
Public Communication Advisor,
Office of the Executive Director for Operations

Acted as representative of the Office of the Executive Director for Operations for agency public communications and plain language issues. In this role,

developed, evaluated, coordinated, reviewed, and monitored progress on communications activities throughout the agency.

12/96 - 1/99 US Nuclear Regulatory Commission, Washington, DC
Materials Engineer, Office of Nuclear Regulatory Research

Responsible for planning, directing, and coordinating external research efforts associated with materials behavior, irradiation effects, fracture mechanics, and structural integrity of a nuclear reactor primary system. Developed standards and regulations associated with the safety-related materials aspects of reactor facilities.

7/92 - 11/96 Pacific Northwest National Laboratory, Richland, WA
Research Scientist, Structural Materials Research Section (1/94 - 11/96)
Research Assistant, Structural Materials Research Section (7/92 - 1/94)

Marketed, planned, organized, directed, and coordinated multi-disciplinary research projects to characterize materials performance using corrosion and metallurgical engineering techniques. Managed projects with funding levels up to \$200K. Directed the activities of technicians, technical specialists, and students working on research projects.

2/80 - 7/92 Various Commercial Nuclear Power Plants
Health Physics Contractor/Consultant

Provided health physics support, wrote procedures, and trained utility and contract personnel during maintenance outages and reactor start-up operations in sixteen commercial nuclear power plants. Supervised utility and contract personnel during some contract assignments.

'79 - '80 Arlington Hospital, Arlington, VA
Registered Nuclear Medicine Technologist

Performed diagnostic nuclear medicine tests, and administered iodine therapy as directed.

PUBLICATIONS

Lund, A.L. et al., "Welding as a Repair Option for BWR In-Vessel Components," 9th International Conference on Environmental Degradation of Materials in Nuclear Power Systems, August 1 - 5, 1999.

Carpenter, C.E., Jr., and A.L. Lund, "BWR Internals Cracking Issues," Paper #438, CORROSION/99 Conference Paper, San Antonio, TX, March, 1999.

Lund, A.L., et al., "The Effect of the Displacement Control Routine on the Elongation to Failure and Failure Morphologies in Superplastic AA-5083," Automotive Alloys, ASM International, Dr. Subodh Das, ed., February, 1997.

Lund, A.L., "Feasibility of Underwater Welding in Highly Irradiated In-Vessel Components of Boiling-Water Reactors," NUREG-1616, November 1997.

Lund, A.L., et al., "Corrosion Assessment of High-Strength Materials Used in a Void Fraction Instrument for Hanford Waste Tanks." Paper #96113. CORROSION/96 Conference Paper, Denver, CO, March 24 - 29, 1996.

Lund, A.L. and M.J. Danielson, "Sludge Washing Materials Study Update: The Materials Performance of Carbon Steel in Very Dilute Waste Environments," Paper #96115, CORROSION/96 Conference Paper, Denver, Colorado, March 24 - 29, 1996.

Lund, A.L. and M.J. Danielson, "Pretreatment Applied Engineering, Corrosion Assessment for Tank Materials: 1995 Final Report," PNNL-11219, June 1996.

Johnson, A.B. Jr., A.L. Lund, and S.P. Pednekar, "Estimates of Durability of TMI-2 Core Debris Canisters and Cask Liners," PNL-9457, April 1994.

Kamal Manoly
Statement of Professional Qualifications

CURRENT POSITION

Chief, Mechanical and Civil Engineering Branch (EMCB)
Division of Engineering
Office of Nuclear Reactor Regulation, NRC

EDUCATION

- B.S. Civil Engineering, Structural Major, Ain Shams University, Cairo, Egypt, 1968
- M.S. Civil Engineering, Structural Major, Villanova University, PA, 1972
- M.S. Applied Solid Mechanics, Drexel University, PA, 1978

SUMMARY

Over thirty eight (38) years of experience in structural analysis, design, and engineering mechanics. Three (3) years of experience in the structural design of industrial and commercial facilities, and highway bridges. Eleven (11) years of experience in the analysis and design of nuclear power plant structures, containments, pressure boundary components, and seismic qualification of mechanical and electrical equipment. Twenty four (24) years of experience in nuclear regulatory inspection, review and evaluation, and development of standards for nuclear mechanical components.

EXPERIENCE

US Nuclear Regulatory Commission, August 1983 - Present

- Conducted routine and specialized inspections of nuclear power plants under construction and nuclear power plants in operation in Region-1.
- Participated in numerous team inspections prior to granting of operating license to several nuclear power plants in Region-1.
- Conducted several special inspections, and participated in extensive design audits for resolution of allegations involving Seabrook, Millstone-3, and Diablo Canyon nuclear plants prior to granting of operating licenses.
- Selected and performed the function of a technical assistant to the Director of the Division of Engineering in NRR for four years.
- Selected as a Section Chief in the Mechanical Branch of the Division of Engineering in NRR, and later as a Branch Chief of the Mechanical and Civil Engineering branch (EMCB) in NRR.
- Supervised the review of license renewal applications in the structural and metal fatigue areas, and the review of power uprate amendment requests, and three early site permits.

- Developed several Generic Communications and guidance documents related to qualifications for nuclear power plant equipment, and structural adequacy of mechanical components.
- Provided technical support to regional offices in resolving a variety of structural and mechanical findings.
- Supported the update of the Standard Review Plan and Regulatory Guides within the scope of responsibility of EMCB.
- Represented and continue to function as NRC representative on various American Society of Mechanical Engineers (ASME), Section III, Working Groups: Subgroup on Design, Subcommittee on Nuclear Power, and Main Committee on Qualification of Active Mechanical Equipment in Nuclear Power Plants.

Target Technology Ltd., Malvern, PA, October 1979 - August 1983

Joined Target in the capacity of Consulting Structural Engineer. Named Manager of Structural Engineering Department in May, 1980.

- Appointed Project Engineer for the following activities:
 - Seismic interaction review of Dresden 2 Nuclear Power Station in conjunction with the NRC's Systematic Evaluation Program (SEP) for Commonwealth Edison Company.
 - High Energy Line Break Evaluation inside Containment for Dresden Station.
 - Consulting Engineering Services Contract with Port Authority of the State of N.Y. for modification inside reactor for James A. Fitzpatrick Nuclear Power Plant. Modifications included piping, conduits, tubing and related supports.
- Appointed head of the engineering staff responsible for the development of "Automated Design of Pipe Supports," a library of the most commonly used configurations of pipe supports, for use by design engineers utilizing a desk top personal computer.
- Held Supervisory responsibilities for the following activities:
 - Seismic qualification of the Drive Train assemblies for Seabrook Station Units 1 & 2
 - Evaluation of component cooling water heat exchangers for Florida Power & Light Turkey Point Plant, Units 3 & 4.
 - Review of design verification and stability analysis of fiberglass fanstacks for ceramic cooling towers.
 - Review of pipe support re-evaluation on the James A Fitzpatrick NPP in accordance with NRC, IE Bulletins 79-14 and 79-02.
- Participated in planning and instruction of lecture series on Pipe Support Design for the Philadelphia Electric Company.
- Prepared bids and related cost estimate, schedule development, and projection of manpower needs for new business.

Stone & Webster Engineering Corporation, Cherry Hill, NJ, October 1973 - October 1979

Joined as Structural Mechanics Engineer on Gulf States (BWR) nuclear power plant design project in Louisiana. Later named as task engineer with additional supervisory function.

Responsibilities included participation in the following:

- Analysis and design of the turbine support pedestal.
- Analysis and design of structures in the reactor building: mat foundation, pressure vessel support, containment vessel stiffening system, and shield structure dome.
- Seismic analysis of reactor, fuel, and turbine structures.
- Establishment of procedures and writing of specifications for the conduction of the structural acceptance test for the reactor's drywell concrete structure and the steel containment vessel.

Supervisory responsibilities included:

- Review of final analysis and design calculations prior to audit.
- Supervision of new engineering graduates in the Career Development Program.

United Engineer and Constructors Inc., Philadelphia, PA, November 1972 - October 1973

Joined as a Structural Design Engineer in the Power Division on the Washington Public Power Supply System Nuclear Power Plant design project in Washington state. Responsibilities included:

- Layout, analysis and design of the General Service Building.
- Static and seismic analysis on the intake structure.
- Feasibility study of the excavation required to prepare the plant site for construction.

John G. Reutter Associates, Camden, NJ, August 1970 - November 1972

Appointed as a Structural engineer on several projects. Responsibilities included:

- Structural analysis and design of several highway bridges in New Jersey.
- Structural design and verification of various sewage treatment plants in southern New Jersey.
- Structural design of pumping stations for sewage treatment plants.

Urban Engineers Inc., Philadelphia, PA, October 1969 - August 1970

Appointed as Structural Design Engineer. Responsibilities included the following projects:

- Structural design, quantity calculation, and cost estimate of expansion and modernization of the Philadelphia International Airport.
- Design of a library for Cheyney State College in Pennsylvania.
- Verification of design calculations for Temple University hospital buildings in Philadelphia.

Contracting Engineering Office "ARCTIC", Cairo, Egypt, December 1968 - September 1969

After graduation, was hired in an architectural contracting firm with responsibility for structural design and supervision of construction of public buildings.

REGISTRATION

Former Professional Engineer in the State of Pennsylvania.

PROFESSIONAL SOCIETIES

During employment at the NRC, served on the American Society of Mechanical Engineers (ASME), Section III, Working Groups on Piping Design and Vessels. Currently, represent the NRC on ASME, Section III, Subgroup Design, and Subcommittee on Nuclear Power. Also represent the NRC on ASME Main Committee for Qualification of Active Mechanical Equipment Used in Nuclear Power Plants.