

RELATED CORRESPONDENCE

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USNRC
October 1, 1999

'99 OCT -5 P3:13

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

OFFICE OF THE
PUBLIC AFFAIRS
REGULATORY STAFF

In the Matter of)
)
CAROLINA POWER & LIGHT) Docket No. 50-400-LA
COMPANY)
(Shearon Harris Nuclear Power Plant)) ASLBP No. 99-762-02-LA

**APPLICANT'S SECOND SUPPLEMENTAL RESPONSE TO
THE BOARD OF COMMISSIONERS OF ORANGE COUNTY'S
FIRST SET OF DISCOVERY REQUESTS**

Pursuant to 10 C.F.R. § 2.740(e), Applicant Carolina Power & Light Company ("CP&L") files this second supplement to Applicant's responses to the August 5, 1999 "Orange County's First Set of Discovery Requests Directed to the Applicant" ("BCOC's First Discovery Requests"). This second supplement provides additional responses to General Interrogatories 2 and 3 in BCOC's First Discovery Requests.

GENERAL INTERROGATORY NO. 2. For each admitted Orange County contention, give the name, address, profession, employer, area of professional expertise, and educational and scientific experience of each person whom CP&L expects to provide sworn affidavits and declarations in the written filing for the Subpart K proceeding described in the Board's July 29, 1999, Memorandum and Order and the general subject matter on which each person is expected to provide sworn affidavits and declarations for the written filing. For purposes of answering this interrogatory, the educational and scientific experience of expected affiants and declarants may be provided by a resume of the person attached to the response.

APPLICANT'S RESPONSE: The Applicant supplements its response to BCOC's First Discovery Requests by identifying the following additional person whom

the Applicant expects to provide sworn affidavits or declarations in the written filing for the Subpart K proceeding with respect to BCOC's admitted contentions.

Tommy Gilbert
Vendor Auditor
Carolina Power & Light Co.
P.O. Box 165
New Hill, NC 27562-0165
Area of Professional Expertise: Quality Assurance / Quality Control
Educational and Scientific Experience: Over twenty years of quality-related experience at the Harris site.
General Subject Matter: Contention 3.

GENERAL INTERROGATORY NO. 3. For each admitted Orange County contention, identify each expert on whom CP&L intends to rely on in its written filing for the Subpart K proceeding described in the Board's July 29, 1999 Memorandum and Order, the general subject matter on which each expert is expected to provide sworn affidavits and declarations for the written filing, the qualifications of each expert whom CP&L expects to provide sworn affidavits and declarations for the written filing, a list of all publications authored by the expert within the preceding ten years, and a listing of any other cases in which the expert has testified as an expert at a trial, hearing or by deposition within the preceding four years.

APPLICANT'S RESPONSE: The Applicant supplements its response to BCOC's First Discovery Requests by identifying the following persons whom the Applicant expects to rely on as experts in its written filing for the Subpart K proceeding with respect to BCOC's admitted contentions.

George Licina
Associate
Structural Integrity Associates, Inc.
3315 Almaden Expressway, Suite 24
San Jose, California 95118-1557
Area of Professional Expertise: Structural integrity of nuclear power plant materials.
Educational and Scientific Experience: A copy of Mr. Licina's resume is attached to this response.

Publications in the Last Ten Years: Mr. Licina's publications are being reviewed and a list will be provided promptly when completed.
Testifying Experience in the Last Four Years: None.
General Subject Matter: Contention 3.

Richard E. Feigel, Ph.D.
Vice President, Engineering
Hartford Steam Boiler Inspection & Insurance Co.
P.O. Box 5024
One State Street
Hartford, Connecticut 06102
Area of Professional Expertise: Piping construction, welding, inspection and quality assurance.
Educational and Scientific Experience: A copy of Dr. Feigel's resume is attached to this response.
Publications in the Last Ten Years: Dr. Feigel's publications are listed on his resume, which is attached to this response.
Testifying Experience in the last Four Years: None.
General Subject Matter: Contention 3.

Respectfully submitted,



John H. O'Neill, Jr.
William R. Hollaway
SHAW PITTMAN
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Counsel for CAROLINA
POWER & LIGHT
COMPANY

Of Counsel:
Steven Carr
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CAROLINA POWER & LIGHT
COMPANY
411 Fayetteville Street Mall
Post Office Box 1551 - CPB 13A2
Raleigh, North Carolina 27602-1551
(919)546-4161

Dated: October 1, 1999

George Licina
Associate

Education

BS, Metallurgical Engineering, University of Illinois (With High Honors)
Graduate Work, Materials Science, San Jose State University

Professional Associations & Awards

Alpha Sigma Mu - Metallurgy Honorary Society
Tau Beta Pi - Engineering Honorary Society
General Manager's Award - General Electric Company, Advanced Nuclear Systems Technology Operation, 1984
Patent No. 4,166,019 - Electrochemical Oxygen Meter
Patent No. 4,139,421 - Method of Determining Oxygen Content
Patent No. 5,246,560 - Apparatus for Monitoring Biofilm Activity
Patent No. 5,365,521 - Process for Monitoring Biofilm Activity

Professional Experience

1986 - present	Structural Integrity Associates, San Jose, CA Associate
1972 - 1986	General Electric Company, San Jose, CA Senior Engineer

Summary

Mr. Licina's experience at Structural Integrity Associates has dealt primarily with failure analysis and predicting the degradation and environmental compatibility of power plant materials under a variety of operating conditions. These degradation mechanisms include corrosion and environmentally assisted cracking in BWR, PWR, and various raw water environments and embrittlement of pressure vessel steels and high performance alloys. Mr. Licina is a recognized authority on microbiologically influenced corrosion and has authored reference documents on that topic for the Electric Power Research Institute and numerous utilities. Plant-specific activities have included metallurgical and fracture mechanics evaluations of nuclear steam generators, heat exchangers, valve stem cracking, BWR pipe replacement, electrical transmission lines, wind turbines and irradiation embrittlement of reactor pressure vessels, and the use of electrochemical methods for predicting and monitoring corrosion in power plant environments.

G. J. Licina
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Mr. Licina has integrated technical and regulatory requirements into guidelines for field certification of materials in nuclear plants and developed a methodology and approach for nuclear life extension issues.

He has authored more than fifty publications in these technology areas and is the author of two patents involving the determination of oxygen levels in liquid sodium systems and two patents for an on-line method for monitoring biofilm activity in cooling water environments.

At the General Electric Company, Mr. Licina served as lead engineer and program manager on a number of important development programs, including Control Rod Blade Surveillance and Lifetime Evaluation in BWRs, Stress Corrosion Cracking of Cr-Mo Steels, and Carbon Transport Effects on Steels in Liquid Sodium Systems.

Hartford Steam Boiler Inspection & Insurance Co. Engineering Department

Name: Richard E. Feigel, Ph.D.

Title: Vice President, Engineering

Responsibilities: Dr. Feigel is responsible for engineering and corporate quality initiatives in service delivery, training, risk evaluation and loss prevention. He assists internal and external clients in defining and implementing cost effective risk management and engineering programs. In previous positions with Hartford Steam Boiler, he was responsible for worldwide engineering and inspections services.

Degree(s): B.A. Purdue University, 1968 (Philosophy)
M.A. Pennsylvania State University, 1971 (Philosophy)
Ph.D. Pennsylvania State University 1984 (Philosophy)

Expertise: Quality Assurance, ASME Codes & Standards, Risk Assessment

Years with HSB: 22

Previous Experience: Pressure vessel construction, welding, radiography, quality assurance.

Professional Designation(s): Fellow, American Society of Mechanical Engineers

Professional Affiliations: American Society of Mechanical Engineers, Member
American Welding Society, Member
American Society for Quality, Member

Professional Activities: Governor elect, Board of Governors, American Society of Mechanical Engineers
Past Chairman and Senior Vice President ,
ASME Council on Codes and Standards
Chairman, ASME Board on Hearings and Appeals
Past Chairman, ASME Board on Council Operations
Past Vice President, ASME Board on Pressure Technology Codes & Standards
ASME Board on International Standards
Welding Research Council, Board of Directors
Materials Properties Council, Board of Directors
ASME Boiler and Pressure Vessel Code Main Committee
Lead Expert, US Technical Advisory Group, ISO TC 11 - Boilers & Pressure
Vessels
ASME Code for Pressure Piping, Past Chairman
Numerous ASME technical committee memberships

Copyrights, Patents, Papers, Presentations:

“US View of the PED and CEN Standards and Future Development of US Pressure Equipment Standards”, European Committee for Standardization Conference on Pressure Equipment in Europe; Brussels, Belgium, September 10, 1999.

“Globalization of Codes and Standards”, Plenary Session address, 1999 ASME Pressure Vessel and Piping Conference, Boston MA, August 2, 1999.

“ASME and International Codes and Standards”, 9^e Journées D'étude sur la Technologie des Appareils a Pression, Paris, France; October 29, 1998.

Keynote Address, Pressure Vessel Research Council Workshop on Rerating, Examination and Advanced Analysis of Pressure Equipment, Houston TX, October 14, 1998.

“ASME’s Perspective on Global Partnering”, ABMA Industrial Boilers Technology Conference, Dallas TX, September 29, 1998.

“Issues for Ensuring US Technology in International Standards”, NIST/ANSI Summit on International Standards, Washington DC, September 23, 1998.

“Competitive Aspects of Codes and Standards”, American Boiler Manufacturers Association Annual Meeting, June 23, 1998; Lake Tahoe, California.

“ASME Codes in International Markets”, International Gas Turbine Institute Conference, June 2-3, 1998; Stockholm, Sweden.

“The Challenge of International Standards”, American Petroleum Institute Refinery Division, April 26, 1998; San Francisco, CA.

“Perspectives on Codes & Standards in a Changing World”, Korea Electric Power Industry Code Workshop, Seoul, Korea; November 11, 1997

‘Using Voluntary Standards in the Federal Government’, US Department of Commerce, September 8, 1997, Washington DC; panel moderator.

“Overpressure Protection for Pressure Vessels by System Design and ASME Code Case 2211”, ASME Pressure Vessel and Piping Conference, Orlando, Florida; July 28, 1997, coauthored with G.G. Karcher and F.N. Nazario.

“Future Trends in Pressure Vessel Technology - The US Perspective”, Eighth International Conference on Pressure Vessel Technology, Montreal, Quebec, Canada; July 25, 1996

“ASME Accreditation - An Overview”, European Pressure Vessel Congress '96, Mannheim, Germany; June 14, 1996

“The Evolving International Climate in Regulations and Codes”, Second International Symposium on the Mechanical Integrity of Process Piping, Houston Tx.; February 1, 1996

“Insurance Risk Assessment and Loss Prevention Strategies”, II. Magyar Muszaki Biztonságtechnikai Konferencia, Esztergom-Kertváros, Hungary; April 26, 1995.

"ASME Nuclear Codes and Standards: Recent Technical Initiatives", 10th Korea Atomic Industrial Forum/Korea Nuclear Society Conference, Seoul, Korea; April 7, 1995.

"Helping to Reduce Turbomachinery Losses Through Advanced Technology and On-Line Expertise", U.S.-Korea Electric Power Generation Seminar Mission, Seoul, Korea; October 25, 1994.

"ASME Shop Inspection/Inspection Agency Accreditation", XVI International Congress and Exposition of Boilers and Pressure Vessels; Leon, Guanajuato, Mexico; October 28, 1993.

"The Critical Role of Technical Standards and Quality Assurance in Nuclear Power Plant Construction", 2nd Annual Conference on U.S.-Eastern Europe-Former Soviet Union Electric Power Technologies; Budapest, Hungary; September 21, 1993.

"New Technology and The Insurance Industry", 62nd General Meeting of the National Board of Boiler and Pressure Vessel Inspectors, San Diego, CA, May 4, 1993.

"Issues in Plant Reliability", Electric Power Technologies Seminar, Taipei, Taiwan, ROC; April, 7, 1993.

"Quality Assuring Measures for Pressure Vessels in the USA", Seventh International Conference of Pressure Vessel Technology, Dusseldorf, Germany; June 1, 1992.

"The Role of Quality Assurance in the Design and Fabrication of Advanced Light Water Reactor Systems", International Symposium on Pressure Vessel Technology and Nuclear Codes and Standards; Seoul, Korea, April 20, 1989.

September 27, 1999

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

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CAROLINA POWER & LIGHT) Docket No. 50-400-LA
COMPANY)
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OFFICE
OF THE
SECRETARY

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "Applicant's Second Supplemental Response to the Board of Commissioners of Orange County's First Set of Discovery Requests," dated October 1, 1999, was served on the persons listed below by U.S. mail, first class, postage prepaid, and by electronic mail transmission, this 1st day of October, 1999.

G. Paul Bollwerk, III, Esq., Chairman
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Attention: Rulemakings and Adjudications
Staff
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(Original and two copies)

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