

Northeast
Utilities System

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January 14, 1997
Docket Nos. 50-245
50-336
50-423
B16153

F. J. Miraglia, Deputy Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3
Submission of Technical Proposal
Proposed Third Party Oversight of Comprehensive Plan
for Reviewing and Dispositioning Safety Concerns Raised by Employees

In our letter dated December 23, 1996¹, Northeast Nuclear Energy Company (NNECO) proposed that the independent, third party function to oversee the implementation of NNECO's comprehensive plan, as required by the NRC's Order dated October 24, 1996 (Order), be fulfilled by a team under the direction of Mr. John W. Beck of Little Harbor Consultants, Inc. (LHC). In that letter we stated that the final detailed proposal from LHC would be available on or before January 10, 1997. In order to further facilitate review of the proposed LHC team by the NRC, a copy of LHC's technical proposal is enclosed as Attachmemnt 1. This proposal further amplifies the information provided in our letter of December 23, 1996.

We continue to believe that the LHC team fully meets the requirements of the Order and is highly qualified based on their experience conducting similar activities. The team is comprised of individuals who have achieved results with employee concerns programs, and who have managed the evaluation and resolution of technical issues and investigations of employee concerns.

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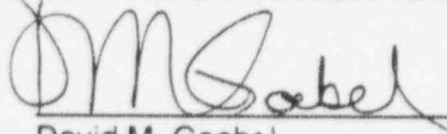
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¹ Northeast Nuclear Energy Company letter, David M. Goebel to F. J. Miraglia, dated December 23, 1996.

If you have any questions, please contact me.

Very truly yours

NORTHEAST NUCLEAR ENERGY COMPANY

A handwritten signature in dark ink, appearing to read "D. M. Goebel", is written over a horizontal line.

David M. Goebel
Vice President, Nuclear Oversight

Attachment 1: Independent Oversight Team for Employee Concerns (IOTEC)
Technical Proposal Submitted by Little Harbor Consultants, Inc.

cc: W. D. Travers, Director, Special Projects Office
H. J. Miller, Region I Administrator
P. F. McKee, Deputy Director of Licensing, Special Projects Office
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S. Dembek, NRC Project Manager, Millstone Unit No. 1
D. G. McDonald, Jr., NRC Project Manager, Millstone Unit No. 2
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Connecticut Nuclear Energy Advisory Council

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Attachment 1

Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3
Independent Oversight Team for Employee Concerns (IOTEC)
Technical Proposal Submitted by Little Harbor Consultants, Inc.

January 1997

Technical Proposal

for

**Northeast Nuclear Energy Company
Independent Oversight Team for Employee Concerns (IOTEC)
Millstone Site**

submitted by

**Little Harbor Consultants, Inc.
44 Nichols Road
Cohasset, Massachusetts 02025**

Introduction:

Little Harbor Consultants, Inc. (LHC) is pleased to submit this proposal to Northeast Nuclear Energy Company (NNECo) to perform the role of the Independent Oversight Team for Employee Concerns (IOTEC) for the Millstone Nuclear Power plants-as required by the NRC Order of October 24, 1996.

LHC has assembled a highly experienced and qualified team to oversee the implementation of the Millstone Employee Concern Program as specified in the NRC Order. The team has the breadth and depth of experience needed to fulfill the requirements of the Order and all team members have met strict independence requirements regarding previous or current relationships with NNECo and the Millstone site. Team members have experience in auditing and evaluating various technical and organizational programs as well as experience in evaluating and implementing Employee Concerns Programs.

This proposal will detail the experience and qualifications of the team members, discuss the proposed structure for the IOTEC and address additional issues included in the NNECo statement of work document. While this proposal addresses the anticipated content of the oversight plan required by the NRC order, it should not be construed as the plan itself. The oversight plan will be developed, in accordance with the order, only after the NRC approves the NNECo nomination of the LHC team.

The commercial terms for this proposal have been provided in a separate letter to NNECo.

Team Members:

We developed essential criteria to use in the evaluation of potential team members in order to assemble the best possible team for this oversight project. First, we outlined the technical areas and management/organizational aspects requiring coverage during the project. Using these criteria we developed a list of candidates based on their management experience and technical expertise which would cover all aspects of the project needs. We then verified the independence of each candidate from any direct, previous involvement with NNECo or any subsidiary. The final selection of the proposed team was made with emphasis on three characteristics which we judged critical to the success of this assignment. First, each team member must possess sound and mature judgmental skills and have a reputation for the highest standards of ethical and professional conduct. Second, each member should have experience in assessing organizational performance. Third, it was essential that each member be willing to make a firm commitment to the project. The proposed team members meet all of the above selection criteria.

Following is a brief description of each member's experience relevant to the IOTEC project. Attachment A contains resumes for all team members.

John W. Beck - Team Leader and Chief Spokesperson. Mr. Beck has participated in assessments of employee concerns programs at three different utilities during the past three years. These assessments involved eight different sites and twelve reactors. One of these engagements extended to the broader issues associated with the nuclear safety culture at three different nuclear plant sites. While a Vice President with Texas Utilities he was Chairman of a third party, independent Senior Review Team which provided policy direction for the Comanche Peak recovery effort. In that capacity he was also responsible for executive management of the Comanche Peak Response Team, a third party, independent organization of engineers and technical experts who implemented policies and programs issued by the Senior Review Team. He was Program Manager for a comprehensive Review of Nuclear Operations Performance at Unicom (previously Commonwealth Edison). Mr. Beck has extensive experience in public speaking and has provided testimony before regulatory agencies.

John M. Griffin - Deputy Team Leader. Mr. Griffin currently serves on the Nuclear Safety Board for Comanche Peak advising senior management on a broad range of issues involving nuclear safety, employee concerns and nuclear operations. Mr. Griffin has led or facilitated several independent assessments, diagnostic evaluations and performance improvement programs for utilities, including those on the NRC "watch list". He has served as a mentor and advisor to senior management in preparing the utility for initial operation of a nuclear plant. He has held positions as Vice President, Nuclear Operations and Senior Vice President of Arkansas Power & Light Co. he has extensive experience in public speaking and appearing in public forums.

Robert F. Englmeier. Mr. Englmeier is a Registered engineer and a Certified lead Auditor (ANSI N45.2.23). He has served as a Quality Assurance Managing Consultant to the Group Vice President of Nuclear at the South Texas Nuclear Project. During that engagement Mr. Englmeier managed the Nuclear & Quality Concerns Program and coordinated the STP Employee Concerns Program (ECP). He was Chairman of the Employee Concerns Program Oversight Committee and provided senior management with a monthly report regarding the effectiveness of the ECP. This assignment was during a period when the ECP and the project was successfully recovering from a serious decline in performance.

Donald M. Ehat. Dr. Ehat has had many engagements designing and executing culture awareness surveys in both commercial and government settings. This experience, coupled with hands-on involvement in team building, assessing employee morale and human behavior observation will be of critical importance in the task of developing survey and interview instruments to provide insight into the Millstone culture and the effectiveness of the Employee Concerns Program.

Donald P. Irwin. Mr. Irwin is a Partner with Hunton & Williams and has over 25 years of experience in his law practice associated with all aspects of the nuclear industry. Recent years have seen a focus on enforcement issues involving NRC's NRR and OI offices, with representations of both licensees and key employees.

Alan B. Cutter. Mr. Cutter's past technical, managerial and executive responsibilities, his current membership on the Safety & Audit Committee for the Monticello and Prairie Island units and consultation with the Zion Station in support of safety evaluation reviews provide a solid basis for his contribution to this project.

Richard W. Dubiel. Mr. Dubiel has technical and management experience in the fields of health physics, radiation protection and chemistry. He recently performed an assessment involving a significant element of disaffected employees at a nuclear utility. His sensitivity and understanding of all the stakeholders interests contributed to the successful conclusion to that engagement.

Donald R. Ferguson. Dr. Ferguson has served as Project Manager for the resolution of regulatory problems preventing the issuance of the operating license for Comanche Peak and managed the review process for producing investigative reports to be used in the licensing hearings. He has experience in interacting with the NRC staff and management while serving as Program Director of the third party activities at Comanche Peak.

Timothy J. Snyder. Mr. Snyder has participated in several performance evaluations at nuclear plants. He has conducted assessments of engineering organization effectiveness and has performed technical audits and independent technical reviews.

Paul J. Wood. Dr. Wood worked recently with the US Enrichment Corporation to design and manage the resubmittal of their application to the NRC for a certificate of operation. This task involved very complicated and unprecedented regulatory issues. Dr. Wood also has a comprehensive understanding of probabilistic risk assessment techniques used to evaluate the safety significance of technical issues.

Jeffrey J. D. Jeffries. Dr. Jeffries has performed assessment of nuclear safety cultures and has assisted utilities in development of self assessment programs. He has participated in several performance evaluations of nuclear organizations and has served on Nuclear Review Boards for several utilities. As Manager of Nuclear Oversight for Carolina Power & Light Co. he was responsible for the overview of all nuclear activities at three nuclear stations.

The following matrix represents the experience of each team member in the various functional areas of a nuclear power organization.

IOTEC PERSONNEL EXPERIENCE MATRIX

	Management	Operations	Engineering	Maintenance	H/P, Chem, Rad Waste	Employee Concerns Program	Safety Analysis	Regulatory	Legal	Training
Beck	X		X			X	X	X		
Griffin	X	X	X	X				X		X
Irwin						X		X	X	
Cutter	X		X				X	X		X
Ferguson	X		X				X	X		
Englmeier	X					X		X		
Dubiel	X	X			X			X		X
Snyder	X		X					X		
Wood	X		X				X	X		
Ehat						X				
Jeffries	X		X			X	X	X		

Proposed IOTEC Structure:

Attachment B provides the proposed team structure for the IOTEC.

John Beck will serve as the Team Leader and Chief Spokesperson for the IOTEC. He will be assisted by John Griffin as Deputy Team Leader. They will provide the leadership and direction for the team, and have responsibility for the reporting of all findings, recommendations and concerns to the NRC and NNECo as required by the October 24, 1996 Order. They will also have responsibility for all other communications for IOTEC and will work with all interested members of the public with regard to IOTEC activities.

Bob Englmeier will have primary responsibility for the assessment and evaluation of NNECo's Employee Concern Program implementation. Mr. Englmeier will use the services of other members of IOTEC as necessary to carry out his assignment.

Don Irwin will have primary responsibility for auditing and investigating cases of alleged harassment and intimidation and/or discrimination. If necessary he will use the services of trained investigators to conduct independent investigations or evaluate investigations conducted by NNECo. Mr. Irwin will also utilize other members of IOTEC as necessary to complete this activity.

The performance of independent technical reviews to ensure concerns are resolved in a correct and timely fashion, reviewing technical reviews performed by NNECo, and

evaluating the effectiveness of proposed solutions to technical concerns will be performed by either Al Cutter, Dick Dubiel, Don Ferguson, Tim Snyder or Paul Wood depending on the nature of the specific concern. If technical concerns are identified that are outside the expertise of the existing team members, IOTEC will obtain the services of an appropriate expert to address the concern.

Dr. Jeffries will assist IOTEC in the performance of critical self assessment of its activities. Team leaders and members will conduct an on-going review and evaluation of all IOTEC activities. Dr. Jeffries will independently critique IOTEC's conformance with its plan and procedures, and provide suggestions for improvements to the plan and/or how it is being implemented. The results of this critique will be presented in the periodic, public reports to the NRC and NNECo.

Independence:

Attachment C to this proposal contains the certified Statement of Independence for each member of the proposed IOTEC. No member of the team is a former employee of NNECo or currently has direct control or ownership of stock in Northeast Utilities. One member of the team, Paul Wood, provided PRA consulting services to Northeast Utilities Service company in 1985. Dr. Wood will not be involved with any oversight activities that pertain to this previous engagement.

While they do not constitute direct involvement of a team member with NNECo, there are two other circumstances that we want to identify. The firm which employs Richard Dubiel currently has another employee working at the Connecticut Yankee Nuclear Plant as an auditor. This individual reports to another person in Mr. Dubiel's company, and Mr. Dubiel has no contact with nor responsibility for the individual's work, nor will he during the course of this engagement.

An employee in Mr. Griffin's company performed an evaluation of the Work Control Process at Millstone Unit 1 earlier this year. Mr. Griffin was not directly involved in this evaluation nor will he be involved in any technical evaluations related to work control during the course of this engagement. The previously involved employee will not be associated with any IOTEC activities.

We have proposed contract language to prohibit the pursuit of business at any NEU site by any member of the team or by any employee or officer of a team member's company for the duration of the project.

Plan and Procedures:

Upon nomination by NNECo of the Little Harbor Consultants team to the NRC, LHC will begin the preparation of the detailed oversight plan and procedures for IOTEC. Preparation of the oversight plan will include solicitation of input from members of the public known to be interested in the project. This plan will be completed and ready for submittal to the NRC within 30 days following acceptance of the Little Harbor Consultants team by the NRC.

The plan will delineate the protocols to be used by the Team in communicating with the NRC, NNECo and other interested stakeholders. It will specify that a report be made to the NRC and NNECo on at least a quarterly basis. The report will address oversight activities, including any findings and recommendations. It is assumed that this report will be delivered in a public meeting at a location convenient to the Millstone site. There will be an opportunity for members of the public to participate in a question and answer session following the report.

The oversight plan will provide for an initial assessment of the NNECo comprehensive improvement plan which is required by the NRC order of October 24, 1996. This will be one of the first major task activities undertaken, and will be followed by a continual monitoring of NNECo's implementation of the comprehensive improvement plan. The continual monitoring will include, at a minimum, the following tasks:

- Observation and monitoring of all NNECo activities relevant to the establishment and maintenance of a robust nuclear safety culture at the Millstone site - This task will include a series of structured interviews with employees and employee groups. There will also be surveys of larger employee populations. These methods will be used to establish an initial baseline of employee attitudes and feelings about nuclear safety, their opinions as to the roles they and their management play with regard to nuclear safety at the Millstone site in particular, and what their specific responsibilities are with respect to nuclear safety. The interviews will be evaluated and surveys designed to determine, among other characteristics, whether there are any discernible differences in employee attitudes among the different units at the Millstone site. The employee's perception of how supportive their management is with respect to reporting concerns and assuring timely resolution of the concerns is of primary interest, as well as their perception of management's attitude and practices regarding intimidation, harassment or discrimination.
- Technical reviews of issues arising from employee concerns - These reviews will be done three different ways. First, a representative sample of historical issues that have been closed by NNECo will be evaluated by the LHC team. The evaluations will examine the closed NNECo investigations for their

accuracy, completeness and particularly the adequacy of root cause determinations and appropriateness of corrective actions for the identified root cause(s). The implementation of the corrective actions will also be evaluated to determine whether they have been effective in achieving the desired end result. Second, the team will do a fully independent technical evaluation of some issues emanating from employee concerns, and a comparison will be made with the results of NNECo evaluations of the same issues. Third, the team will perform comprehensive audits of on-going NNECo evaluations.

- The LHC team examination of the Millstone site NNECo Employee Concerns Program and how it processes employee concerns - This examination will consider all facets of the program's organization, processes and procedures with respect to timeliness and thoroughness of investigation and resolution of concerns, providing feedback to concerned employees, and maintenance of confidentiality of employees identity. For completeness this examination will compare current practices at Millstone with those previously used, as well as current comparisons with other industry employee concerns programs which have an established and recognized reputation for effectiveness.
- Auditing and investigation of cases involving intimidation, harassment or discrimination - This will include selected historical reviews and any ongoing cases which may involve intimidation, harassment or discrimination.

The plan will include procedures which will address the following topics:

- Communications protocols with all the stakeholders
- Addition of team members following NRC approval of the initial LHC team - This procedure will specify the criteria to be satisfied prior to use of additional personnel in oversight activities and the NRC notification requirements should any additional expertise or personnel be needed.
- Concurrent reporting of oversight activities, findings, and recommendations to the NRC and NNECo
- Acceptance by the LHC team of allegations from others and forwarding of the allegations to the NRC - This procedure will contain provisions to receive allegations of safety concerns, encourage the allegor to bring the concern to the attention of NNECo, or in the case of reluctance to do so, to encourage the allegor to contact the NRC. In the event the allegor chooses not to report the safety concern to either NNECo or the NRC, the LHC team will forward the allegation directly to the NRC. Procedures will be in place to protect the identity of any such allegor and limit disclosure of the allegor's identity to those with a need to know. Such procedures will, however, require that the

identity of any allegor or any information related to the allegations be provided to the NRC. This requirement will be made clear to anyone who approaches any team member with potential concerns.

Commitment:

LHC has a firm commitment from each member of the team to support this effort. Mr. Beck and/or Mr. Griffin will provide full time leadership presence at the Millstone site for the duration of the oversight activities.

Community Outreach:

The LHC team intends to seek input and insight from members of the community known to be interested in issues related to this oversight activity. This will be done in the early phases of developing the detailed project plan and procedures. Continuing communication among the team leaders and interested members of the community will be encouraged.

Closure:

Each of the potential areas of oversight and investigation to be covered in this engagement has both objective and subjective characteristics. In the case of objective characteristics, such as a technical or engineering evaluation of a concern, the quality of work done by NNECo is a relatively straight-forward measurement. The same could be said of the mechanics associated with the Employee Concerns Program, in that certain elements have been shown at other sites to be consistently effective while others have not. Therefore, evaluating the ECP from a mechanistic, functional perspective should not require very much subjective judgment. On the other hand, the task of evaluating the state of the overall nuclear safety culture at the Millstone site has many subjective elements to be considered, and thus will likely require a repeated combination of structured interviews and surveys in order to establish a baseline and trends. Previous work done by NNECo in this regard will be factored into our effort to the extent it is consistent and reliable.

The Little Harbor Consultants team will provide all the stakeholders with a balanced and fair opinion predicated on all the factors, subjective and objective. These factors will provide the basis for measuring the overall effectiveness of NNECo's implementation of their comprehensive plan for bettering their Employee Concerns Program and associated activities.

As NNECo implements their improvement program, the oversight activities parallel the NNECo effort, and the NRC performs its regulatory functions, a desired objective will be to reach a point of no substantive debate with any stakeholder about the effectiveness of the NNECo Employee Concerns Program. This should be a clear indication that the

improvement program has achieved its overall goal, a vigorous and healthy nuclear safety culture at the Millstone site.

Office and Equipment Requirements:

In order to support IOTEC activities the team will require office space, telephones (a separate line for an administrative person, and each desk in the two-man offices and the interview room, a total of six lines, all with outside call-in and out capability) and standard office furniture suitable to the space allocated.

The office space should be located inside the protected area at Millstone in order to allow ease of interaction between team members and employees. The office space should consist of two, two person enclosed offices, an open administrative space, an enclosed interview room and the privilege of scheduling the use of a conference room as needed.

LHC will provide the computer equipment necessary to support the project, however NNECo will be asked to provide an HP 4-Plus (or higher capacity) laser printer and connections from the printer to access three desk-top PC's, one in the administrative area and one in each of the two-man offices. The computer equipment will be independent of any Millstone or NNECo network. It is also requested that a separate, NNECo PC linked to the site LAN be provided in the administrative area.

Attachment A
IOTEC Resumes

John W. Beck

Mr. Beck has over thirty years of experience in the electric utility field. He specializes in consulting with executive management to develop and implement licensing, productivity and financial performance strategies. Mr. Beck's consulting experience is supported by over twenty years of direct utility experience including positions at levels up to Executive Vice President and Chief Operating Officer.

Education

B.S. in Engineering Physics, University of Tulsa (1964)

M.S. in Mechanical Engineering, Northeastern University (1970)

Experience

Present President, Little Harbor Consultants, Inc. His firm has emphasized productivity and financial performance strategies for its client base. The more recent clients include Nebraska Public Power district, ComEd, Pennsylvania Power & Light, Carolina Power & Light, South Texas Nuclear Project, New York Power Authority, Martin-Marietta Utility Services and the US Enrichment Corporation. He is currently serving as an independent, expert advisor to the owner's Management Committee for the South Texas Nuclear Project.

1991-1992 Senior Vice President, Tenera, L.P. Mr. Beck provided consulting services focused on integrating licensing strategy and organizational effectiveness to achieve higher productivity. His appearances before rate-making bodies coupled with his executive management experience provided a particularly effective perspective given the challenges utilities face in the increasingly competitive market place. During his tenure with Tenera, Mr. Beck was the project manager for a comprehensive review of nuclear operations for the Commonwealth Edison nuclear program. That review provided the basis for a fundamental change in the management strategies for the twelve reactors in the Commonwealth system. He also provided strategic management reviews for TVA management at the Watt's Bar nuclear plant and consulted frequently with EG&G management at the Rocky Flats DOE facility.

1984-1991 Vice President, Texas Utilities Mr. Beck had executive management responsibility for licensing, quality assurance/quality control, nuclear fuel management and reactor engineering. He also had the additional assignment of serving as Chairman of the Senior Review Team which set policy for the Comanche Peak Response Team, the third party organization responsible for assuring Texas Utility management of Comanche Peak licensability. He served as Chairman of the Comanche Peak Owner's Committee, the contractual, governing body for Comanche Peak affairs insofar as the minority owners were concerned. He was principal spokesman for Comanche Peak matters with the media and financial community. He also was a principal witness in the prudence phase of the Comanche Peak rate case before the State of Texas Public Utilities Commission. His testimony was in the areas of nuclear fuel, licensing management and quality assurance and quality control.

1980-1984 Vice President, TERA Corporation Mr. Beck was responsible for the Dallas office of TERA and a Senior Vice President of TENERA, the nuclear business subsidiary of TERA. He was the executive sponsor for the Midland Independent Design Review.

John W. Beck (Page 2)

1977-1980 Executive Vice President, Vermont Yankee Nuclear Power Corporation Mr. Beck served as Chief Operating Officer for Vermont Yankee, a single unit generator of nuclear electricity for its New England owners. He was directly responsible to the CEO and Chairman of the Board for all aspects of Vermont Yankee's operation, technical and financial support.

1967-1977 Director of Engineering, Yankee Atomic Electric Company Mr. Beck served in a number of technical and management positions, culminating as Director of Engineering for the Nuclear Services Division of YAEC. He was responsible for all engineering, research, fuel management and computer related support for the Yankee Row, Vermont Yankee and Maine Yankee operating plants as well as the Seabrook construction project.

1964-1967 Scientist, Bettis Atomic Power Laboratory, Westinghouse Electric Corporation Mr. Beck worked as an experimental physicist in the design of nuclear reactor cores.

Professional Affiliations

American Nuclear society

Chairman, Engineering and Operations Task Force, EPRI (1974-1980)

Nuclear Divisional Committee, EPRI (1976-1980)

John M. Griffin

Mr. Griffin has twenty nine years of experience which include senior executive management of an electric utility, responsibility for the operation of a nuclear power station, executive consulting and management of a large consulting company. He has been a leader in improving operational efficiency through innovation and the application of financial and management concepts and advanced information management tools.

Education

BS U.S. Naval Academy

Experience

1996-Present *President, The Kestrel Group, Inc.* Responsible for the startup and management of a Management and Technical Consulting Company whose focus is Asset Management and Operational Improvement. Mr. Griffin serves on the Nuclear Safety Board of an electric utility, advising senior management on a broad range of issues involving nuclear safety, employee concerns and operation of a nuclear power station.

1994-1996 *President, United Energy Services Corp.* Responsible for the overall management of a large Management and Technical Consulting company providing services to US and foreign electric utilities, US Department of Energy and process industries. In addition, Mr. Griffin provided expert advice to the Boards of Directors of US electric utility companies involved in mergers and acquisitions.

1988 - 1994 *Senior Vice President, TENERA, L.P.* Responsible for TENERA's consulting services to the utility industry. Projects included development of comprehensive utility business plans, diagnostic evaluations and efficiency studies of several nuclear organizations, developing performance improvement programs for utilities with plants on the NRC's watch list, serving as a member and advisor to senior utility management in preparing the utility for initial operation of a nuclear power plant, and serving on the nuclear review board of the utility.

1978 - 1988 *Senior Vice President, Generation Transmission and Engineering, Arkansas Power and Light Company.* Responsible for AP&L's production and transmission facilities, including the two nuclear units at Arkansas Nuclear One, four coal units, fifteen gas units, and two hydro facilities and for the operation and maintenance of the high voltage transmission system. Also managed the engineering resources of the utility which provided design and modification services to all power plants and the transmission system.

1978 - 1988 (cont.) As *Senior Vice President, Energy Supply*, was responsible for all of AP&L's generating facilities and support organizations, including nuclear, coal, gas, and hydro facilities. While *Vice President, Nuclear Operations*, was responsible for overall management related to the safe and efficient operation of AP&L's nuclear generation facilities.

1976 - 1978 *Assistant Manager, Nuclear Operations, New York Power Authority*. Supervised and provided direction of the corporate staff responsible for providing support for two nuclear sites in the areas of operations, maintenance, performance, radiological controls, training, and in-service inspection.

1973-1976 *Start-up Manager, Caroline Power and Light Company*. Responsible for the start-up and test program for the startup and testing of the Brunswick Steam Electric Station.

1967 - 1973 *Officer, U.S. Navy. Navy Nuclear Submarine Program. Qualified Chief Engineer.*

Professional Affiliations

INPO National Nuclear Accrediting Board
American Nuclear Society - Board of Directors
NUMARC Steering Committee (1985 - 1987)

Robert F. Englmeier

Mr. Englmeier has thirty-six years combined experience in the nuclear and commercial industries. He is a lead auditor certified to ANSI N45.2.23, has served on several QA/QC committees at the national level and is registered professional engineer. He has a strong working knowledge of nuclear industry codes and standards and is intimately familiar with numerous manufacturing processes. Mr. Englmeier has an extensive knowledge of systems engineering for commercial nuclear power plants with nineteen years experience in the electric power generation industry.

Education

B.S. in Mechanical Engineering, Virginia Polytechnic Institute
MBA, University of Miami

Additional Training

Vertical Slice Auditor Training
Performance Based Audit Training
Nuclear Systems Training Course
Nuclear Power Plant Simulator Course
Fitness for Duty Seminar
Manufacturing Training Program, General Electric Co.
Manufacturing Problems Analysis, General Electric Co.
Flight Training, USAF
Kepner/Tregoe Problem Analysis Course
Numerous other management and job-related courses

Registrations/Certifications

Lead Auditor ANSI N45.2.23
Registered Professional Engineer, California

Professional Memberships

American Society for Mechanical Engineers
American Nuclear Society

Experience

February 1994 - October 1995 *Managing Consultant, Horace Cofer Associates, Inc.* Mr. Englmeier was assigned to Houston Lighting and Power Company's South Texas Nuclear Project. He managed the South Texas Project Nuclear & Quality Concerns Program (NSQP) and coordinated the overall STP Employee Concern Program (ECP) which consists of a collective set of sub programs which supplements the line management process by providing avenues for employees to express concerns and specify how these concerns should be resolved.

Specific responsibilities include:

- Manage HL&P employees in the NSQP
- Act as Chairman of the ECP Oversight Committee
- Evaluate and resolve concerns brought to NSQP
- Provide monthly reports to Senior Management regarding the effectiveness of the ECP. This activity includes the collection and analysis of information.

Robert F. Englmeier (Page 2)

- Coordinate the development of ECP promotional, communications, and training material
- Recommend issues for consideration by other related review bodies such as the Site Management Team, Nuclear Safety Review Board, etc.

1974 - 1993 Site Quality Manager, Florida Power & Light Company. Mr. Englmeier worked on St. Lucie Nuclear Plant for three and one-half years. He was responsible for all QA/QC functions (i.e., audits, QC inspections (including receipt inspection), surveillances, trending, trend analysis, budget development, and adherence, corrective action follow-up, M&TE calibration, and Nondestructive Examinations including Radiography. He had daily contact and interface with NRC, Site VP and other Plant Departments (e.g., Maintenance, Design & Procurement Engineering, Materials Management, Health Physics, Training, etc.)

Manager, QA Services, Florida Power & Light Company. Mr. Englmeier worked at the Juno Beach office for seven years and was responsible for FPL QA Program development and maintenance, vendor audits and surveillances, Approved Suppliers' List, and internal audits of FPL Nuclear support organizations.

Manager, PDRT, Florida Power & Light Company. Mr. Englmeier worked on the Turkey Point Nuclear Plant for one year and was responsible for special project assignment tasked to upgrade the systematic cataloging of spare parts for the Turkey Point Plant by designing and implementing a system that would facilitate stocking of the minimum spare parts while maximizing the parts availability for all systems in a two unit station.

Manager, QA Procurement, Florida Power & Light Company. Mr. Englmeier worked in the General Office in Miami for five and one-half years and was responsible for vendor audits and surveillances in addition to Approved Suppliers' List.

Senior QA Engineer, Florida Power & Light Company. Mr. Englmeier worked in the General Office in Miami for two years and was responsible for performing vendor audits and nuclear fuel fabrication surveillances.

1958 - 1974 Manager Shop Operations, General Electric Company. Mr. Englmeier was responsible for shop management's manufacturing of all contributing area parts for the Mobile Radio Department. Areas included sheetmetal fabrication, aluminum die casting, printed wire board fabrication, machined parts, painting and plating, welding, coil winding, wire processing, harness making, and various assembly operations. He was in this position for three years.

Unit Manager of Shop Operations, General Electric Company. Mr. Englmeier was responsible for manufacturing of sheetmetal parts, plating and painting, printed wire board fabrication, and various assembly operations. Performed plant layout, manufacturing equipment development and purchase, introduction of new products into production, and troubleshooting of manufacturing problems. He held this position for five years.

Manufacturing Engineer, General Electric Company. He held this position for eight years.

1955-1958 Pilot, U.S. Air Force. Pilot for three years.

Donald P. Irwin

Education and Background

U.S. Navy: Active Duty (1965-1967), Reserve Duty (1967-1971). Commissioned Officer, highest rank attained: Lieutenant, USNR.

A.B., *cum laude*, Princeton University, Woodrow Wilson School of Public and International Affairs (1965).

M.A. in Political Science, J.D., Yale University (1971)

Practice Areas

Partner in the Administrative Law Group and member of its Energy and Telecommunications Team Practice has focused principally on nuclear energy, dealing for over 25 years with the gamut of licensees' general regulatory issues involving the NRC and other agencies, and related litigation. In the past several years, focus has been on enforcement issues involving NRC's NRR and OI offices, with representations of both licensees and key employees.

Licensing work has included construction permit and operating license proceedings, and related litigation, for Virginia Power, Philadelphia Electric Company, Delmarva Power & Light Company, Long Island Lighting Company, Consumers Power. Principal Counsel for LILCO in the NRC proceedings involving the Shoreham reactor. Rulemaking work on numerous NRC proceedings for groups of utilities.

Enforcement/investigation-related work has involved representations of both licensees and individuals. Scope of work has included internal investigations, responses to NRC enforcement actions and representations in OI investigations. Because of the frequently non-public-record nature of the work, specific cases are not listed here, though they can be discussed on request.

Other practice areas of note:

Superfund/solid waste issues for electric utility and industrial clients.

Work on IPP/cogeneration issues in United States and in Pakistan

Technology transfer issues involving Russian government entities, primarily NIMATOM and ENERGOMASH

Product Liability litigation, specifically smoking and health litigation representing Philip Morris

Other Activities

Adjunct professor of environmental law, William & Mary Law School, 1979-1981

Board of Directors, The Daily Planet (Richmond VA), 1991-present

Vestry, Grace and Holy Trinity Church (Richmond, VA), 1992- present

Board of Directors, Richmond Printmaking Workshop, 1986-1990

Board of Directors, Richmond Symphony, 1980-1984

Publications

"The Fuel Use Act and DOE's Regulations: A Utility Perspective" (Part of Symposium on the Power plant and Industrial Fuel Use Act of 1980), 29 Kan. L. Rev. 143 (Spring 1981) (co-authored with K. Dennis Sisk).

Recent Speeches

Speaker: "The Politics of the Environment: What Lies Ahead in Regulation?" (Environmental Restoration Conference, Washington, D.C., April 2, 1992)

Speaker: "Nuclear Provisions of the Energy Policy Act to 1992" (Energy Policy Act Seminar, Washington, D.C., October 29-30, 1992)

Personal

Married to Stoner Winslett

Donald M. Ehat, Ed.D

Extensive experience in the field of organization effectiveness responsible for a wide range of results oriented organization and management development strategies to produce more efficient and productive work teams and leaders. Experienced in Total Quality, Team Building, Culture Change, Vision Setting, development and use of various diagnostic data gatherers and feedback approaches for identifying roadblocks to greater productivity. Effective in coaching and counseling role with executives on issues of performance, career planning and organizational congruence.

Education

B.S., State University of New York, Buffalo, NY
M.R.E. Fuller Theological Seminary, Pasadena, CA
Ed.D., Boston University, Boston, MA

Specialized Training

Institute for Advanced Pastoral Studies, Bloomfield Hills, MI
Boston University Human Relations Center, Trainer Development Program, Osgood Hill, MA
Indiana University, Advanced Seminar in Adult Education
University of Pittsburgh, Adult Curriculum Development
Boston University, Fellow, Boston University Human Relations Center

Skills

Unusually intuitive in perceiving how to help an organization implement both strategic and operating plans. Able to diagnose and rapidly design tools and approaches congruent with both the existing culture and required goals.

Areas of Achievement

Organizational Effectiveness As an external consultant to utilities service firms, hospital systems and government agencies, designed, implemented and facilitated organizational and individual development efforts. Initiated climate surveys to improve quality of work life and support non-union management approach. Utilized strategies which focused on role and authority clarification, conflict resolution and mutual goal setting. Helped design and implement career development, project management, organizational and manpower planning/reengineering and diversity training.

Management and Leadership Development Both as an internal and external consultant, designed and implemented workshops to enhance management and supervisory performance, highlighting the difference between the control of management skills and the empowerment of leadership.

Culture Change and Empowerment As an external consultant to both private industry and government, used Culture Awareness Surveys to design extensive behavioral change workshops for over 1000 technical and operations personnel resulting in a higher level of employee initiative and ownership.

Whole Brain Training As a consulting resource to private industry in the U.S., Canada and Asia, taught Whole Brain Thinking as a building block to liberating managers and workers from old paradigm thinking and behavior.

Team Building/Partnering Was the lead consultant in the design and implementation of a pervasive team building effort impacting over 4000 construction site personnel representing an owner and 5 highly competitive Architect/Engineering firms, resulting in the timely completion, on budget of Unit II of a nuclear power generating station. Unit I was billions over budget and years in licensing.

Total Quality/Continuous Improvement While facilitating a Continuous Improvement Culture between a government agency and its industry partners, developed custom TQ training programs and processes.

The Learning Organization As a degreed adult educator when providing training, placed priority on the resources of participants thus modeling the use of authority in a Learning Organization. Consistently created learning environments which have provided a model of the necessary balance.

Experience

Present Executive Consultant Independent Practice

1991 to 1994 Senior Consultant, Stone & Webster Engineering Corp. Provided Team Building and Total Quality services for TVA Bellefonte, Browns Ferry and other Stone & Webster clients.

1989 to 1991 Senior Vice President, The Bentham Group. Primary designer and lead facilitator in the development and execution of a total culture change of a nuclear engineering organization, moving from a construction to an operating environment.

1987 to 1989 Executive Consultant, TENERA, LP. Risk Management Services Group, Washington, DC. (Formerly Senior Management Consultant in Risk Control Services of IT Corporation, which was acquired by TENERA, by TENERA, LP in October 1984)

1983 to 1987 Founding Partner, Delian Corporation Management consulting firm

Graduate Level Teaching

George Washington University, School of Education, Graduate Division

George Washington University, School of Business, Graduate Division

Catholic University of America, School of Religious Studies

Georgetown University, School of Nursing

University of Maryland, College of Library and Information Sciences

Central Michigan University, Institute for Personal and Professional Development

Citizenship

I am a U.S. citizen and have held (and am still eligible) for security clearances from DOE, DOD, USIA, Peace Corp, NRC, et al.

Mr. Alan B. Cutter, P.E.

Education

B.S. in Chemical Engineering, University of Rochester (1956)

M.S. in Nuclear Science and Engineering, Carnegie-Mellon University (1972)

Tuck Executive Program, Dartmouth College, Amos Tuck School of Business (1976)

Registrations

Professional Engineer, North Carolina (1981)

Professional Engineer, Pennsylvania (1995)

Experience

Present *Self Employed* serving as a member of the off-site Safety Audit Committee for Monticello and Prairie Island units; providing consultation to Zion Station in support of safety evaluation review.

1991-1996 Senior Management Consultant, NUS Corporation Mr. Cutter provided consulting service at a senior level to electric utilities, government agencies, and support organization. Was a member of the off-site Safety Audit Committee for Monticello and Prairie Island units; provided strategic and performance assessments and licensing, organization and legal support on issues and projects. Was Project Manager for NUS contract supporting Department of Energy sponsored efforts for near-term safety improvements on nuclear plants in the former Soviet Union, and for a regulatory development project for the Korea Institute of Nuclear Safety. Specific recent tasks included providing "on-line" review and comment resolution for USEC certification application submittals, with emphasis on programs in support of conduct of operation (maintenance, training, configuration management, human factors, procedures, audits,) and the quality assurance plan; preparing recommendations for performance measures for the gaseous diffusion plants (GDP); on-site assessments of readiness for NRC certification at the GDP; and assisting U.S. Enrichment Corporation in developing oversight processes (off-site review activity) for enrichment facilities. Provided on-site leadership of a safety and licensing audit of a Russian designed nuclear plant under construction in eastern Europe against Western-oriented licensing criteria; assessment and consultation in organizational, technical and project management functions for an eastern European nuclear utility; management level participation in programmatic quality assurance audits and/or management assessments (including design change and configuration management programs) for several U.S. utilities; development and analysis of positions in support of DOE programmatic environmental impact statement preparation; and analysis of U.S. regulatory positions and international safety criteria relative to advanced reactors for assisting in development of a structured nuclear regulatory program for Korea.

1980-1991 Vice President, Nuclear Engineering, and Nuclear Engineering & Licensing, Carolina Power & Light Mr. Cutter completed the design and obtained the operating license for the Shearon Harris nuclear plant. Developed the strategy for, and directed the transition of engineering and design activity and control from the Architect-Engineer to the utility organization. Developed a full service central engineering organization providing operational support, and design and engineering for modifications for four nuclear units. Mr. Cutter established the standards for engineering configuration control and implemented the programs required to assure consistent

Mr. Alan B. Cutter, P.E. (Page 2)

management of the design baseline at each unit, including procedures and practices to control plant design changes from a configuration and safety perspective. He developed standard plant modification programs to control the change processes, and assure the implementation of physical changes in procedures, training, supporting computer systems, and regulatory baseline.

Major accomplishments in addition to the Shearon Harris unit included engineering for replacement of the steam generators and major upgrade of the secondary systems at the H.B. Robinson PWR unit; major modifications to the torus and off-gas processing systems at the two Brunswick BWR units; implementation of the post Three Mile Island modifications at all four units; development and implementation of responses to key regulatory programs, such as Appendix R (fire protection), Station Blackout and Equipment Qualification, including the associated configuration control requirements. Developed the criteria, established the organization and implemented the design basis reconstitution project for the H. B. Robinson plant, one of the first voluntary major programs in the industry to validate the physical, functional, and safety design basis of key electrical, structural and mechanical systems. Was responsible for design, licensing, fabrication, and loading of a dry spent nuclear fuel storage system demonstration project at H. B. Robinson in cooperation with EPRI and DOE.

As Vice President, Nuclear Services Department (1989-1990), Mr. Cutter provided nuclear support services to four operating nuclear units and to the Nuclear Engineering Department. Services included Corporate Nuclear Safety and Licensing activities, procurement of nuclear fuel, and management of spent nuclear fuel. Was responsible for developing and implementing programs for evaluating and promoting nuclear safety, and regulatory relations and compliance. Initiated and conducted a successful spent fuel shipping program. Implemented the corporate programs for radiological protection and emergency preparedness. Developed, managed, and achieved accreditation for technical and operating training programs. Developed and coordinated standardized processes and programs to ensure consistency and effectiveness in Nuclear Generation group activities. Provided qualified craft and support labor to supplement nuclear plant resources. The activities of the department included development of numerous programs requiring matching and controlling the physical and design configuration of the nuclear units to processes, procedures, computer programs and information data bases. Examples include the development of the probabilistic risk assessment models and analyses for four units at three stations, upgrading and maintaining full fidelity training simulators at all three nuclear stations, maintaining and amending accredited training programs for licensed operators and technical staff, establishing standardized processes for performing safety reviews (10CFR 50.59/ NSAC 125) for physical and procedural changes, and standardizing the procedures for commercial grade procurement and dedication.

As Vice President/Director Special Nuclear Projects (1990-1991), developed strategy for company involvement in current industry issues, advised nuclear management on activities impacting the company, and facilitated alignment between company plans and practices and industry development. Served on industry groups developing and implementing policies and practices with substantial potential for impact on nuclear operations, including major contribution to the development of NUMARC guidance for configuration management through design basis reconstitution.

Mr. Alan B. Cutter, P.E. (Page 3)

Mr. Cutter participated in industry technical issue and NUMARC working groups and the NUMARC Issues Management Committee. Was a member of the executive committee for the Edison Electric Institute Steering Committee on high and low level waste (EEI/UWASTE). Served on and chaired the EPRI Nuclear Power Division Advisory Committee, and was a member of the EPRI Research Advisory Committee.

1967-1980 Manager, Project Operations Mr. Cutter provided central control and standardized support to full-scope turnkey power plant projects, both fossil and nuclear, in the international market. Developed and negotiated contracts for construction contractors and architect engineers. Provided executive interface with NSSS equipment supplier and A/E for problem resolution and recovery. Provided generic technical solutions to plant problems, and provided engineering in support of modifications to operating units.

As Program Manager of Project Manager, provided planning, scheduling, cost management, direction of major contractors, procurement oversight, technical problem resolution, and engineering interface direction of the Kewaunee and Prairie Island nuclear generating plants, the Fast Flux Test Facility, and the Clinch River Breeder Reactor Program.

1956-1967 Chief Engineer, SIW Prototype Reactor, U.S. Navy Mr. Cutter directed the operating staff in training, operation, maintenance, and overhaul activities, and was responsible for the operator qualification program. Conducted reactor system chemical decontamination program, major plant systems renovation and upgrade, and system testing and recovery program after major modifications. Served aboard nuclear submarine during shipyard construction, pre-operational testing, and subsequent fleet operations with responsibility for main propulsion, power generation, reactor plant, and associated systems. Qualified as Engineering Officer of the Watch on two prototype reactors and one operating submarine reactor (SRO equivalent). Retired as Captain, U.S. Naval Reserve.

Memberships

American Nuclear Society
Tau Beta Pi

Richard W. Dubiel, CHP

Summary

More than twenty-four years experience in applied Health Physics, decontamination and decommissioning, chemistry, radiochemistry environmental monitoring and radioactive waste management program development and implementation. Familiar with rules and regulations of the Nuclear Regulatory Commission and the Department of Energy. Project manager for decontamination and decommissioning activities at several Department of Energy and Department of Defense facilities. Has had various Health Physics and Chemistry program responsibilities during the licensing and start-up of four commercial power reactors and nine commercial reactor refueling outages. Had primary responsibility for all off-site and on-site personnel radiological safety and environment monitoring during the reactor accident at Three Mile Island. Health Physicist responsible for initial identification and measurements of the highest radon levels recorded in a private residence in the state of Pennsylvania. Involved in the development of radon mitigation technology for private residence and the implementation of radon monitoring and mitigation at an industrial facility. Performed program reviews to assess the management and technical adequacy of operational Radiation Protection programs. Has provided over four years of professional consulting services in the areas of Radiological Safety and Emergency preparedness, including expert testimony in licensing hearings and government investigative hearings.

Experience

May 1996 to Present *Vice President, Millennium Services, Inc. Atlanta, GA.* Responsible for the start up of a consulting and field services company focused on radiological safety program issues and remediation projects. Provides consulting services to commercial nuclear power plants, Department of Energy and Department of Defense facilities and radioactive, source and special nuclear material licensees with emphasis on program management, assessments and staff re-engineering processes. Provides project management for remediation projects including health and safety, characterization, decontamination, remediation and final surveys. Principle contact with clients for both technical and contractual matters.

June 1993 to May 1996 *Senior Program Manager, Applied Radiological Control, Inc. Atlanta, GA.* Responsible for marketing, sales and operational aspects of specialty Health Physics and decontamination services to the Department of Energy, Department of Defense, commercial nuclear and private industries. Projects have included the development and implementation of characterization plans, and decontamination and decommissioning plans for DOE facilities and private companies with facilities on the Site Decommissioning Management Plan. Directs the efforts associated with the development of advanced decontamination methods and applications. Provides direct consulting services as a Certified Health Physicist, including program assessments and corrective action recommendations to clients, including commercial nuclear and DOE facilities, By-Product Material and Source Material Licensees. Provided support as and expert witness during licensing hearings for a proposed Uranium Enrichment Facility.

November 1987 to June 1993 *Superintendent of Services, Philadelphia Electric Company Limerick Generating Station Pottstown, PA.* Overall responsibility for the development and implementation of the Health Physics, Chemistry, and Radioactive Waste Programs for a two unit Boiling Water Reactor (BWR) site. Responsible for all radiological and non-radiological monitoring programs in support of federal and state requirements. Managed an organization of

over 150 full-time employees with an annual budget of over \$20 million. Included in the period was the Licensing and start-up of Limerick Unit 2, and 5 individual unit refueling outages. Achieved industry records for low radiation exposure for both single BWR units and for two BWR sites. Received high rating (#1) by the Nuclear Regulatory Commission in their Systematic Assessment of Licensee Performance (SALP) evaluation in Radiological Controls for every assessment period. Established Chemistry Control Program for feedwater copper (associated with fuel failures) that achieved the lowest levels of any BWR with Brass condensers and powdered resin demineralizers. Served as a member of the Plant Operations Review Committee. Manager assigned to a nuclear group staff re-engineering study that resulted in recommendations that have eliminated 19% of the positions within the group and a result in O&M savings of over \$30 million annually.

January, 1984 to November, 1987 *Radiation Protection Manager, Philadelphia Electric Company Limerick Generating Station Pottstown, PA.* Overall responsibility for the development and implementation of the Health Physics program at the station. Included in the period was the licensing and start-up of Limerick Unit 1 and the first refueling outage. Provided management and technical direction to the Health Physics staff in the areas of dosimetry and bioassay, respiratory protection ALARA program implementation, radioactive waste packaging, classification and shipping, radioactive effluent monitoring, radiation monitoring instrument calibration and use. Directed the development of the Health Physics technician training program and radiation safety training program for plant workers. Conducted the initial measurements and evaluation of radon in a residence that contained the highest contamination on record in the state of Pennsylvania. Involved in the systematic incorporation of radon mitigation technology for control in private residence. Developed and implemented a radon monitoring and mitigation program at the nuclear generating station.

December, 1982 to January, 1984 *Project Manager, Nuclear Support Services, Inc. Professional Services Division Hershey, PA.* Responsible for management of contracts in support of operating nuclear power plants in the functional areas of Health Physics, Chemistry, Emergency Preparedness and Training. Provided technical and administrative oversight for five contracts involving the services of over 50 professionals. Marketed the division services, developed bid proposals, and negotiated financial conditions of contracts. Responsible for product quality and customer satisfaction for professional services division contracts.

October, 1981 to December, 1982 *Senior Planner Energy Consultants, Inc. On-site Emergency Planning Group Harrisburg, PA.* Supervised the activities of the Emergency Planning Specialists in support of the full spectrum of emergency planning services to commercial nuclear power plants. Developed emergency plans, implementing procedures and training programs to meet post-TMI regulatory requirements. Developed scenarios and conducted drills and exercises to ensure workable emergency plans. Provided technical assistance in the areas of Health Physics and Nuclear Engineering in support of contracts with county, state, and federal agencies. Developed and presented training programs including command and control training for emergency directors and coordinators, off-site dose assessment theory, calculation and monitoring techniques, and emergency on-site radiation protection practices. Responsible for the management of three contracts involving up to 12 professionals.

March, 1980 to October, 1981 *Radiological Engineering Manager General Public Utilities Three Mile Island Nuclear Station Middletown, PA.* Responsible for the development of radiation protection programs and procedures in support of the restart of TMI Unit 1 following the accident

at TMI Unit 2. Responsibilities included ALARA, effluent monitoring, respiratory protection, in-plant radiation monitoring, Health Physics technician training and radiation worker training programs. Responsible for rewriting all Health Physics related procedures to make them applicable to a single unit. Developed responses to all findings related to radiation protection as a result of the accident investigation and subsequent inspections.

September, 1976 to October, 1980 *Supervisor, Radiation Protection and Chemistry General Public Utilities Three Mile Island Nuclear Station Middletown, PA.* Responsible for the development and implementation of the Health Physics, Chemistry, Radioactive Waste, and Industrial Waste programs at the two unit pressurized water reactor (PWR) facility. Program responsibilities including ALARA, internal and external dosimetry, respiratory protection, effluent monitoring, Health Physics field operations, radioactive waste packaging and shipping, radiochemistry, laboratory chemistry, plant chemistry control, industrial waste plant operations and monitoring in accordance with the station NPDES permit. Included in this period were four refueling outages in TMI-1, and the licensing, start-up and test program in TMI-2. Assigned primary responsibility for the development of the emergency plan for TMI-2, including all interfaces with local, county, state, and federal agencies. Assigned by the Station Manager as the Senior responsible individual for all radiation protection activities both on-site and off-site during the March 28, 1979 accident at TMI-2.

September, 1974 to September, 1976 *Health Physicist, General Public Utilities Three Mile Island Nuclear Station Middletown, PA.* Responsible for the development of the station dosimetry program and effluent monitoring program. Assigned system engineer responsibilities for the process and effluent radiation monitoring systems. Developed and presented the radiation protection modules for general employee training, radiation worker training, and Health Physics technician training program. Provided support as a Health Physics Shift Supervisor during outages.

September, 1973 to September, 1974 *Radiation Physicist, United States Navy Medical Regional Medical Center Charleston, SC.* Responsible for the implementation of the radiation safety program in compliance with By Products Material License issued to the Nuclear Medicine Laboratory. Provided monitoring support for the Radiology Department including all X-ray and Fluoroscopy units at the hospital and base dispensaries. Responsible for maintenance of the hospital radiation emergency plan in support of the Charleston Naval Shipyard.

January, 1972 to September, 1973 *Radiation Health Officer, United States Navy USS Orion (AS-18)* Responsible for the dosimetry program for the submarine tender in supporting ten nuclear power submarines. Provided radiation protection training to tender personnel assigned to radiologically controlled repair work on squadron submarines.

Certification and Affiliations

Certified Power Reactor Health Physicist by the American Board of Health Physics in 1982

BWR Certified at the Senior Reactor Operation level in 1989

Member of the National Health Physics Society

Education

Georgia Institute of Technology, Atlanta GA
M.S. in Nuclear Engineering

Fairfield University, Fairfield, CT
B.S. in Physics

Donald R. Ferguson, Ph.D
Senior Vice President, TENERA, Inc.

Dr. Ferguson has over 24 years of experience in the nuclear industry. Since late 1994, he has been a member of the Kaiser-Hill team that holds the Integrating Management Contractor contract to operate the Rocky Flats Environmental Technology Site (RFETS). During the period of 1990-94, he served in a senior technical advisory role to the management of EG&G Rocky Flats. For the six years prior to that, he served as a consultant to electric utilities, where he designed and managed complex programs to address problems associated with the design, construction, licensing, and operation of nuclear power plants. Before entering the consulting profession, he managed the development of the Department of Energy's (DOE) program plan for advanced reactor safety technology development and subsequently directed the office that managed this program for DOE for several years. He began his career at Argonne National Laboratory, where he managed the development of large computer codes for the analysis of core performance and severe accidents in advanced reactors.

Education

M.B.A. Executive Program, Graduate School of Business, University of Chicago 1982
Ph.D. Nuclear Engineering, Massachusetts Institute of Technology 1971
M.Sc. Applied Nuclear Science, University of Birmingham, U.K. (on Fulbright Scholarship) 1968
B.S. Nuclear Engineering, Kansas State University 1967
Citizenship- U.S. Citizen, DOE (Q Clearance Active)

Experience

1988 - Present *Vice President and Senior Vice President, TENERA, Inc.* During this period, Dr. Ferguson has played a dual role at TENERA. He has held internal management positions that have given him responsibility as the Chief Information Officer (1992-95) and director of one of the company's largest groups (1994-95). At the same time, he has continued to serve as a senior consultant in the DOE's defense nuclear complex and the commercial nuclear power industry. Dr. Ferguson has undertaken the following major assignments for TENERA:

Member of Kaiser-Hill Team at RFETS Dr. Ferguson participated in the Transition effort carried out by the Kaiser-Hill team during the two months prior to assumption of the contractor to operate RFETS. He then served as Division Manager of Engineering Integration and Risk Management Division in the Kaiser Hill organization through the end of 1995. He is currently serving as Senior Technical Advisor in Kaiser-Hill's Safety, Engineering and Technical Services Group. In this role, he has played an instrumental role in the development of the format and content of the new authorization basis document that the Kaiser-Hill team is preparing to govern operation of nuclear facilities at RFETS.

Consultant to Electric Utility Industry Dr. Ferguson led a four-month study of the engineering and technical support organizations of the nuclear power group of Commonwealth Edison, one of the nation's largest nuclear utilities, in 1993. The purpose of the study was to advise senior management of the utility regarding actions that could be taken to improve the effectiveness and streamline the operations of the engineering organization. A number of recommendations for improving performance while reducing cost were made, most were adopted by the utility as part of a significant restructuring of the engineering organization.

Defense Nuclear Facility Restart Dr. Ferguson was one of the principal architects of the management plan that guided the implementation of a series of upgrades to programs, procedures, training, and equipment at the Rocky Flats Plant following curtailment of plutonium operations there. He served for six months as a member of the Senior Resumption Team, which provided management and technical oversight during the early phases of the Resumption effort. He then served for the past three and one-half years on the Technical Advisory Group, which advised Rocky Flats management on a wide range of Resumption-related issues and, more recently, on issues related to the Rocky Flats Transition mission. Dr. Ferguson also managed the preparation of several major documents that supported Resumption efforts.

Operational Readiness Dr. Ferguson designed and managed a program to assess the readiness of TU Electric to support the operation of its first nuclear unit, Comanche Peak Unit 1. This program extended over nine months and involved assessing the readiness of both nuclear operations and operations support organizations. Where weaknesses were identified, assistance was provided to utility management in designing corrective measures. He was later responsible for organizing the utility's efforts to prepare for the final operational readiness assessment from the Nuclear Regulatory Commission (NRC) and advised senior utility management on a range of matters leading up to readiness for licensed operation. Following issuance of the low-power license, he designed and implemented a program to restructure and consolidate administrative procedures throughout the utility's nuclear organization.

Design and Plant Support Engineering Dr. Ferguson served as acting director of the design engineering department at an operating nuclear power plant, Rancho Seco, with a history of troubled operation. He stabilized the department organizationally and focused its attention on meeting the day-to-day needs of the operating plant in addition to preparing modification packages for the upcoming outage. He succeeded in implementing the necessary changes and remained in charge until a permanent director of engineering was brought in as an employee of the utility.

1984 - 1988 *Senior Consultant, IT CORPORATION (previously Delian Corporation)*

Operating License Activities Dr. Ferguson served as project manager of a major effort to aid TU Electric in the resolution of regulatory problems that were preventing an operating license from being granted to a Comanche Peak Unit 1. He organized and managed the review process that was responsible for producing intervenors in the licensing hearings. He was then selected by the client to serve as Program Director for the entire third-party investigative effort, the Comanche Peak Response Team (involving over 200 professionals). This third-party effort was successful in providing a basis for resolving problems with the design and construction of the plant. Throughout this assignment, Dr. Ferguson had extensive interactions with NRC staff and management on a wide range of matters related to resolving licensing issues.

Performance Improvement Programs Dr. Ferguson participated in several organizational consulting projects for utility clients, with particular emphasis on diagnostic evaluations of organizational performance, design of management control and information systems and application of computerized tools to the solution of management problems. He played a major role in the design and implementation of an organization-wide performance improvement program at one utility with a problem plagued operating nuclear plant over a period of 15 months.

1972 - 1984 Staff Member, ARGONNE NATIONAL LABORATORY

Director, Fast Reactor Safety Technology Management Center (FRSTMC) Was responsible for management of DOE's advanced reactor safety technology development program, with an annual budget of about \$40 million. Dr. Ferguson interacted extensively with a number of DOE contractors who supported the advanced reactor program and with staff and management of the NRC on a wide range of advanced reactor safety research-related and licensing-related issues.

Timothy K. Snyder

Professional Qualifications

Mr. Snyder has over 25 years of experience in providing management and technical engineering consulting services to the nuclear power industry. For the past six years, he has specialized in management consulting focused on producing significant organizational and work process performance improvements. His areas of expertise include work process analysis and design, information system management, procedural effectiveness, and organizational design. His technical engineering experience has included the performance and management of a broad range of design and analysis activities related to power plant structure, systems, and components. Over the past ten years, most of his technical consulting has been in the form of facility design reviews and third-party overviews of utility contracted work scopes. He has also had considerable experience at operating facilities, playing a key role in defining computerized plant information management systems and managing the development of the master equipment data bases that are the core of these systems.

Education

B.S. Civil Engineering (with Honors), University of California, Berkeley

Experience

1994 - Present *Management Consultant*

Assisted Pacific Gas and Electric Company's Nuclear Power Generation group in implementing various initiatives designed to improve engineering performance. Currently providing strategic input on methods for significantly improving administrative procedures and controls.

Performed an effectiveness review of Pacific Gas and Electric Company's Hydro Generation Department Regulatory Interface Process and provided recommendations for performance improvement. These recommendations addressed strategy, process, structure, people, culture, and information tools.

Provided strategic input to the charter and business plan for PacifiCorp's Corporate Business Process Improvement Group.

1985 - 1994 *Principal Consultant / Senior Project Manager, TENERA, L.P.*

Provided process performance improvement services to various clients including Entergy, Consumers Power, and PacifiCorp. These efforts focused on strategic planning, business planning, corrective action, and establishing a hierarchical process oriented structure for administrative control procedures.

Participated in an organizational effectiveness assessment of the Commonwealth Edison Nuclear Operations Division Engineering function following decentralization of the primary engineering responsibilities to the sites.

Timothy K. Snyder (Page 2)

Provided senior consulting assistance to Carolina Power & Light (CP&L) in overseeing the technical and project management performance of a significant structural re-verification program being performed by a large architect engineering firm for the Brunswick Steam Electric Plant.

Participated in an organizational assessment of the CP&L Nuclear Engineering Department. Also participated in process improvement initiatives at the Brunswick Plant related to the design control and modification control processes.

Participated as the key process evaluator in an organizational effectiveness assessment for the Washington Public Power Supply System. This involved an in-depth evaluation of ten critical work processes associated with WNP-2 Plant operations.

Managed and participated in designing and developing a revised hierarchy of administrative control processes and procedures for the Pacific Gas and Electric Company Nuclear Power Generation Business Unit. This project included the development of all top level Program Directive Procedures and 74 Inter-Departmental Administrative Procedures. Personally responsible for the development of the procedures associated with training and qualification, engineering design and modification control, test control, material control, environmental compliance and numerous other areas.

Participated in the development of the Resumption Plan for the Rocky Flats Plant and developed the administrative control procedures and processes associated with this plan.

Developed TENERA's methodologies for performing strategic process management consulting services.

Provided senior consulting assistance in the development of master plans for data acquisition and verification efforts for large-scale plant information management systems for electricité de France and Philadelphia Electric Company.

Participated as a key leader in a Commitment Evaluation Task Group for TU Electric's Comanche Peak Steam Electric Station that was successful in saving \$50 million through commitment reduction and process performance improvement initiatives.

Managed a comprehensive design review of the Comanche Peak Steam Electric Station civil/structural and ASME piping and supports disciplines. This was accomplished using a team of more than 50 senior experienced design engineers, and involved the review of original designs as well as significant re-qualification efforts to ensure compliance with project design criteria and commitments.

1982 - 1985 *Manager, Diablo Canyon Site Group, Management Services Division, Impell Corporation*

Managed the design and development of an extensive master equipment data base for Diablo Canyon's Plant Information Management System utilizing a team of 25 engineering personnel. Also provided support to the on-site procurement group.

As Project Manager, WNP-2 Project, managed substantial engineering efforts for the utility and architect-engineer in the areas of system design, equipment qualification, environmental analysis, piping support design, procurement assistance, and systems analysis.

1971 - 1982 *Manager; Administration, EDS Nuclear*

Managed all support services for the Western Regional and Corporate Office including quality assurance, contracts, computer services, recruiting, human resources, facilities planning, and office services.

As Section Manager; Piping Analysis Division, managed significant efforts in the areas of piping analysis and support design, including IE Bulletin 79-14 efforts for two plants and large Class 1 and Class 2 piping analysis scopes for a number of plants.

As Section Manager; Advanced Analysis Division, managed and provided technical direction for numerous engineering projects in the areas of seismology, soil structure interaction, dynamic structural analysis, thermal hydraulic analysis, and seismic testing. Prepared and reviewed PSARs, FSARs, and SER responses associated with this work and participated in ACRS licensing hearings. This included work for utilities, architect-engineers, NSSS vendors, and equipment manufacturers.

Previously as Supervising Engineer, EDS Nucleaire, France, assisted in the establishment of the Paris office and directed all technical work for a period of two and one-half years. This included seismic soil structure interaction analysis, dynamic structural analysis, piping analysis, support design, thermal hydraulic analysis, and code interpretation. This included work for utilities, NSSS vendors, and manufacturers in France, Belgium, England, Italy, Germany, Spain, Sweden, and Switzerland.

Professional Registrations and Affiliations

Registered Civil Engineers, State of California

American Nuclear Society

Engineering Alumni Society, University of California, Berkeley

Chi Epsilon, Honorary

Paul J. Wood

Dr. Wood is a co-founder of CYCLA Corporation. During twenty years as a management consultant he has made significant contributions to the clarification and resolution of issues affecting the safety and regulatory performance of electric utilities and various other public companies. He is an industry leader in the application of qualitative and quantitative risk assessment techniques to the effective management of safety, health and regulatory risks. This leadership has included design and implementation of risk management systems for nuclear power plant operators and for numerous facilities conducting energy and defense-related research, development and production. His efforts have contributed significantly to the current general acceptance by regulatory agencies of risk management as a fundamental tool in effective management of operations.

In 1969 Dr. Wood began his career working at Westinghouse Electric Corporation in the development of advanced nuclear power reactors. Here he managed the second full-scope probabilistic risk assessment (PRA) of a nuclear plant in the United States. Beginning in 1978, as president and a principal in a series of successful technical and management consulting firms, Dr. Wood developed and demonstrated management systems that utilized the results of PRAs to support management decision making and resource planning. These systems were used by nuclear utilities to negotiate realistic compliance schedules with the Nuclear Regulatory Commission (NRC) during the regulatory frenzy following the accident at Three Mile Island. After the acquisition of his company by an environment management firm, Dr. Wood teamed with long-standing partners in 1990 to establish CYCLA Corporation. Here Dr. Wood and his partners have introduced risk management systems and tools to enhance communication of risks, decision making and budget allocation processes across the broad spectrum of facilities operated by commercial contractors for the Department of Energy.

Education

Sc.D. Nuclear Engineering, Massachusetts Institute of Technology; 1973
S.M. Nuclear Engineering, Massachusetts Institute of Technology; 1968
S.M. Chemical Engineering, Massachusetts Institute of Technology; 1968
B.S. Chemical Engineering, Purdue University; 1966

Experience

1990 - Present *Senior Partner, CYCLA Corporation*

- As principal consultant to Lockheed Martin Energy Systems (LMES) management, designed and supported implementation of a wide range of programs to introduce structured risk and resource management practice into major facilities operated by LMES. Also designed overall improvement programs including revised critical self-assessment.
- Consulted with Lockheed Martin Sandia Corporation in the development and implementation of an Integrated Services Management System that uses qualitative risk evaluation in establishing and justifying budgets for environment, safety, health and facility infrastructure management.

- Worked with the US Enrichment Corporation to design and manage the successful effort to reconstruct and resubmit the application for certificate of operation following initial rejection of the application by the NRC.
- Worked with managers across the Department of Energy to design and implement a risk-based planning system to support effective communication of major sources of environmental, safety and health risks at facilities across the country so that adequate budgets and compliance schedules could be determined. This effort was the seed for broad application of risk-based prioritization within the DOE.
- Worked with the US Enrichment Corporation to evaluate the readiness of the two gaseous diffusion plants for operation under NRC regulation. Supported introduction of the tools, systems and attitude needed to be successful in that regulatory environment.

1987 - 1990 *Senior Vice President, Advanced Systems, TENERA, L.P.*

- Managed a team of outside experts in a nuclear facility restart program at LMES. This effort was the first successful restart of a nuclear facility within the DOE complex. The effort included design and support for implementation of a comprehensive self appraisal leading to a performance improvement program. In addition, changes were instituted in management processes including issue management and resource management, and strategic support was provided for regulatory interactions.

Designed and conducted evaluations of safety management practice for several nuclear utilities and government facility operations contractors. These evaluations served as the initiator for operations improvement programs.

1981 - 1987 *President, Delian Corporation*

- Provide senior management oversight to and participated in the development and implementation of Integrated Resource Management Programs (IRMP) at Toledo Edison Company, Baltimore Gas & Electric Company, Northeast Utilities Service Company, General Public Utilities, Niagara Mohawk Power Corporation, and Philadelphia Electric Company. These programs were fundamental components in utility efforts to regain control of their own safety management decisions from the NRC.
- Introduced the use of quantitative risk assessment into the issue management and program planning processes at several electric utilities.
- Provided senior management oversight to and participating in the planning and implementation of the Palisades PRA for Consumers Power Company, as well as the Millstone Point Unit 3 PRA for Northeast Utilities Service Company.
- Conceived and managed the first application of risk management program in the commercial nuclear industry for the Big Rock Point plant of Consumers Power Company. This effort provided an effective industry example of how risk management can be used in negotiating compliance expectations with the NRC.

1978 - 1981 *Manager, Pittsburgh Division, Science Applications*

Responsible for project management of the Big Rock Point PRA for Consumers Power Company.

1969-1978 *Manager, Risk and Reliability Engineering, Westinghouse Electric Corporation - Advanced Reactors Division.*

- Responsible for the technical direction of the Clinch River Breeder Reactor safety study, the second full scope PRA conducted in the United States, and the first such evaluation conducted for a plant in support of its safety design and licensing.
- Developed the national program plan for assurance of reliability of large breeder reactors.

Developed and managed the transient hydraulic test programs for Fast Flux Test Facility, and integrated these test results into transient thermal and structural analyses of the facility.

Jeffrey D. E. Jeffries

More than thirty-two years of leadership and experience covering a wide range of responsibilities within the nuclear industry. Proven technical capabilities, nationally recognized expert in the area of nuclear safety and oversight, regulatory affairs and applied risk assessment. Dedicated to making the nuclear industry effective and cost competitive while improving safety performance. Strong emphasis on technology development and transfer. Stays abreast of the best methods and techniques for solving problems, including those which deal with the non-technical issues of management and organizational development. Expertise in the field of management and process reengineering; comprehensive understanding of nuclear operations and overall facility performance. Balances strategy and tactics, i.e., possesses the ability to effectively transition concepts into practical implementation steps which add value. Excellent coach, mentor and teacher at the individual or group levels. Maintains a continuing association with universities and periodically returns as a guest lecturer.

Education

- 1972 Ph.D. (Nuclear Engineering) - Pennsylvania State University - University Park, PA
- 1970 M.S. (Nuclear Engineering) - Pennsylvania State University - University Park, PA
- 1964 B.S. (Engineering) - United States Naval Academy - Annapolis, MD
- 1984 Executive Management Institute - University of North Carolina, Chapel Hill, NC
- Numerous Technical and Management Courses, including: Juran Quality Services, Total Quality Management, Project Management, PRA Methods, and Empowerment
- Registered Professional Engineer - North Carolina and Pennsylvania
- Fellow, American Nuclear Society; Chairman - Executive Conference Review Committee
- Member, Sigma Xi - Scientific Honorary
- Member, Industrial - Professional Advisory Committee, Penn State College of Engineering

Experience

- 1993 - Present *President, Paradigm Consulting Services, Inc.*
- 1988 - 1993 *Vice President and Division Manager, Tenera, L.P.*
- 1981 - 1988 *Section Manager, Carolina Power & Light Company*
- 1979 - 1991 *Project/Program Manager, Electric Power Research Institute*
- 1972 - 1979 *Unit Manager, Carolina Power & Light Company; Progressive Engineering and Management Assignment*
- 1968 - 1972 *Instructor/Teaching Assistant (1971-1972), Reactor Operator (1968-1971) Pennsylvania State University*
- 1964 - 1968 *Officer, U.S. Marine Corps*

As President of Paradigm Consulting, and previously, a Vice President/Division Manager with Tenera, L.P., Dr. Jeffries has been both leader and key participant in many successful projects which addressed the elements of regulatory improvements as well as operational efficiency and effectiveness, including:

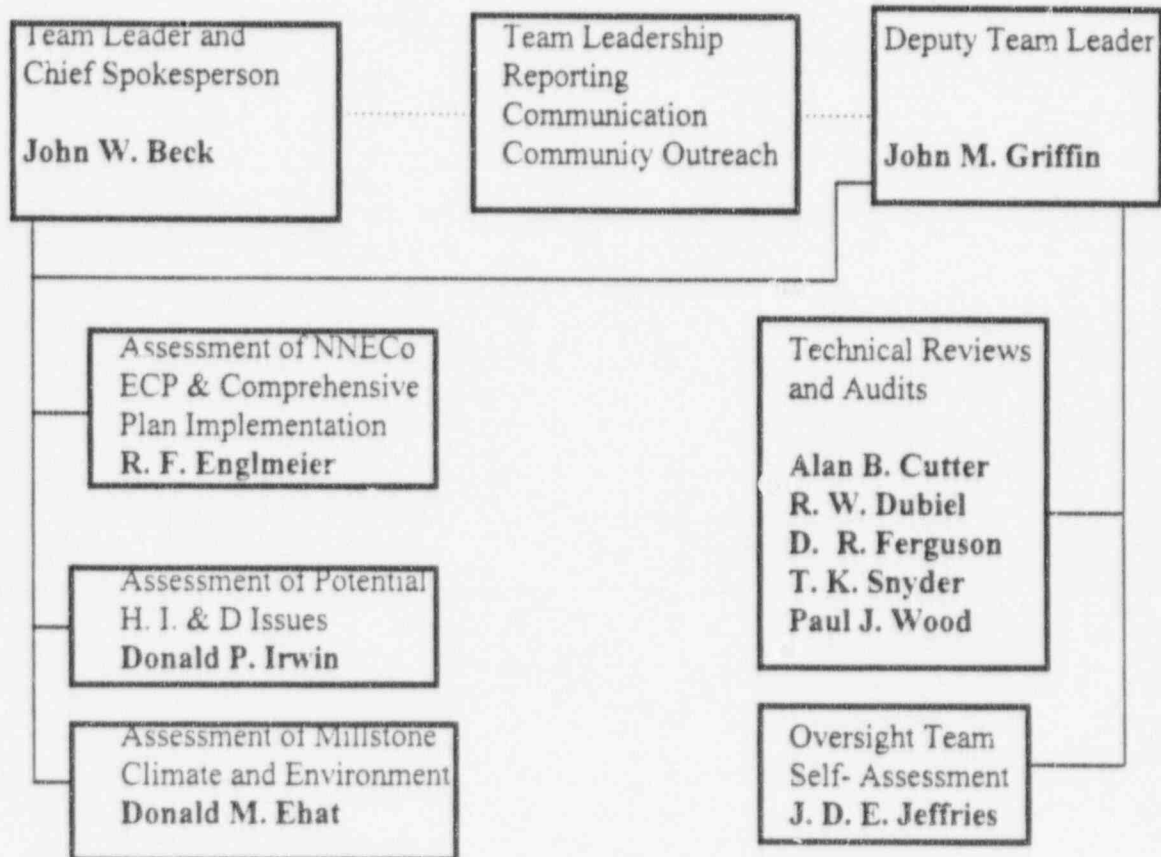
Jeffrey D.E. Jeffries (Page 2)

- **Major Assessments** - Led numerous in-depth evaluations, assessments and improvement efforts for a variety of functional areas, including maintenance, operational readiness, quality verification, nuclear oversight, safety evaluation programs, and root cause analysis programs. Most recently led diverse teams in evaluating the impact of organizational culture on change management processes, and a restructuring of a major utility oversight program.
- **Performance Improvement and Reengineering** - Organizational Analysis of nuclear groups and business units to improve performance. Evaluations covered all aspects of facility operations and addressed organizational restructuring, programmatic enhancements and process improvements. Current efforts emphasize the interaction of management and process reengineering to attain substantial technical and financial performance improvement.
- **"Problem" Plant Recovery/Restart Projects** - Key involvement with six major efforts designed and implemented to provide prompt step changes in performance to restart facilities shut down due to regulatory concerns. Developed strategic plans and assisted in implementation phases.
- **Risk Assessments and Individual Plant Examinations** - Led Risk Management Division developing full plant PRA models for seven utilities. Served on several top tier review boards associated with risk-based regulatory submittals. Full understanding of capabilities and limitations associated with risk-based application, and continually involved with the development of processes and methods which make effective use of PRA tools. Currently working to bring convergence between regulatory organizations and utilities to assure risk methods are most effectively used.
- **Oversight and Review Board** - Served with ten nuclear review boards or committees as member or consultant. Designed improvement programs to increase the value from oversight functions; developed effective ways, including models, to better communicate the role of oversight within operating divisions.
- **Issue Management and Self-Assessment Projects** - Developed issue management and self assessment processes and programs using state-of-the-art concepts and techniques. Chairman of the International Atomic Energy Agency technical committee in the area of self-assessment.

As a utility manager, Dr. Jeffries had direct experience in most areas associated with power facility operations, from the initial startup and refueling operations of commercial nuclear plants to leading major portions of industry wide programs for the Electric Power Research Institute. He was responsible for several unique initiatives including comprehensive safety system assessments (the forerunner of SSFIs) and the use of PRA techniques to determine safety significance. Dr. Jeffries is knowledgeable in the areas of management and process reengineering, and works effectively with all levels of organizations from the executive suite to the line workers. He has been effective as a utility representative to industry organizations, including: Atomic Industrial Forum, American Nuclear Society, Electric Power Research Institute, Nuclear Management and Resources Council, Special Joint Committee on 10CFR50.59, Operating Reactor Safety Engineering and Review Groups, and most recently the ANS President's Special Committee on Nuclear Management Issues. In several efforts he has been in key leadership roles; for example, he was directly responsible for the establishment of ORSERG and its alignment with EPRI, and he was the driving force behind the Joint Committee on 10CFR50.59 which resulted in the accepted reference on this subject (NSAC-125). In 1992 he was recognized as Outstanding Alumni Lecturer by The Department of Nuclear Engineering at Penn State University, and elected a Fellow of the American Nuclear Society in 1995. In 1996 he was appointed to the Industrial - Professional Advisory Committee for the Penn State College of Engineering.

Attachment B
Team Structure

Proposed Independent Third-Party Oversight Team Structure



Attachment C
Independence Certification Statements

Little Harbor Consultants, Inc.

Organizational, Experience and Financial Independence Certification

I hereby certify that I do not have any conflicts with Northeast Utilities System, Northeast Utilities Service Company, or Northeast Nuclear Energy Company as related to my participation on the Independent Oversight Team for Employee Concerns (IOTEC), in independently assessing their Employee Concerns Program (ECP), corrective actions, or investigation of specific safety issues or allegations. Specifically:

1. ☒ I am not and have never been an employee or director of Northeast Utilities System, Northeast Utilities Service Company, or Northeast Nuclear Energy Company;
2. ☒ I am not currently employed as a contractor or consultant to Northeast Utilities System, Northeast Utilities Service Company, or Northeast Nuclear Energy Company;
3. Either:
☒ (a) I have never worked as a contractor or consultant to Northeast Utilities System, Northeast Utilities Service Company, or Northeast Nuclear Energy Company;

Or

- ☐ (b) It has been approximately ____ years since I have supported a consulting project to Northeast Utilities System, Northeast Utilities Service Company, or Northeast Nuclear Energy Company, but my prior work never involved the employee concerns program, investigating a concern raised by an employee, or performance of their corrective action program.
4. ☒ I do not currently own or directly control any equity position or bonds in Northeast Utilities System, Northeast Utilities Service Company, or Northeast Nuclear Energy Company, or receive any compensation or remuneration from these companies. I will not obtain any such direct financial position in these companies for the duration of this independent oversight project.

Certified by: John W. Beck, (Print/type Name) JOHN W. BECK

Date: 12/27/96

Little Harbor Consultants, Inc.

Organizational, Experience and Financial Independence Certification

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Or

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Certified by:

John M. Griffin (Print/type Name) JOHN M. GRIFFIN

Date:

12/27/96

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Or

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Certified by: R. F. Englemer, (Print/type Name) R. F. Englemer

Date: 12/27/96

Little Harbor Consultants, Inc.

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Or

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Certified by: * *John. Bush*, (Print/type Name) DON M. EHAT

Date: 1/4/97

* EXCUTED ORIGINAL IN TRANSIT

Little Harbor Consultants, Inc.

Organizational, Experience and Financial Independence Certification

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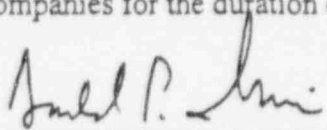
- ☐ (a) I have never worked as a contractor or consultant to Northeast Utilities System, Northeast Utilities Service Company, or Northeast Nuclear Energy Company;

Or

- ☒ (b) It has been approximately 15 years since I have supported a consulting project to Northeast Utilities System, Northeast Utilities Service Company, or Northeast Nuclear Energy Company, but my prior work never involved the employee concerns program, investigating a concern raised by an employee, or performance of their corrective action program.

4. ☒ I do not currently own or directly control any equity position or bonds in Northeast Utilities System, Northeast Utilities Service Company, or Northeast Nuclear Energy Company, or receive any compensation or remuneration from these companies. I will not obtain any such direct financial position in these companies for the duration of this independent oversight project.

Certified by:



(Print/type Name)

DONALD P. IRWIN

Date:

27 October 96

Little Harbor Consultants, Inc.

Organizational, Experience and Financial Independence Certification

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Certified by: Alan B. Cutter, (Print/type Name) ALAN B CUTTER

Date: 12/29/96

Little Harbor Consultants, Inc.

Organizational, Experience and Financial Independence Certification

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Certified by:

Richard W. Dubiel, (Print/type Name) Richard W. Dubiel

Date:

12/27/96

Little Harbor Consultants, Inc.

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Certified by:

** James W. Burt*

(Print/type Name) DONALD R. FERRELL

Date:

1/9/97

** EXECUTED ORIGINAL IN TRANSIT*

Little Harbor Consultants, Inc.

Organizational, Experience and Financial Independence Certification

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Certified by: Timothy K. Snyder, (Print/type Name) TIMOTHY K. SNYDER

Date: 02/29/96

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Certified by: Paul Wood, (Print/type Name) PAUL WOOD

Date: 12/27/96

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Certified by:  (Print/type Name) JEFFREY D.E. JOHNSON

Date: 12/28/96