James H. Moody

Summary and Background

Mr. Moody has over thirty years of experience in the power industry, specializing in risk management, decision-making, probabilistic risk assessment, and reliability engineering. He has been a leader in both the development and application of risk assessment at numerous facilities.

Mr. Moody has worked to improve the effective integration of risk and reliability into plant operation and maintenance. The scope of these projects included on-site training and technical support to improve the risk assessment program and its interfaces with engineering, operations, and maintenance. These projects have reduced plant outage time and capital expenditures, provided an overall improvement in decision-making, and prepared the plant for risk-informed regulation.

Additionally, Mr. Moody was a principal investigator in the development of the EPRI risk informed in-service inspection process. This process has been approved by NRC and is being implemented at several plants to reduce the cost of pipe weld inspections while at the same time improving safety.

Mr. Moody holds a Bachelor of Science degree from the University of Lowell and a Master of Science degree from Northeastern University.

Highlights of Recent Experience

Mr. Moody was part of the team that developed the EPRI risk informed in-service inspection (RI-ISI) methodology. As part of the methodology development, he was a principal investigator for the pilot applications (J. A. FitzPatrick, Vermont Yankee, and Arkansas Nuclear One Units 1 and 2). He has continued to be involved in applying the methodology at over 20 plants, several of which are listed below:

- South Texas Units 1 & 2
- Nine Mile Point Units 1 & 2
- Calvert Cliffs Units 1 & 2
- Perry Unit 1
- Commonwealth Edison's Braidwood Units 1 & 2, Byron Units 1 & 2, Dresden Units 1 & 2, Quad Cities Units 1 & 2, LaSalle Units 1 & 2
- Seabrook Station
- Brunswick Units 1 & 2

His work with EPRI has focused on expanding the RI-ISI methodology to include "Break Exclusion Zone" (high energy line break) weld inspection commitments. The NRC recently issued its safety evaluation approving the EPRI risk informed approach to break exclusion welds.

Mr. Moody continues to work with nuclear utilities to cost-effectively implement risk-informed processes. At Niagara Mohawk, he is providing project management support, technology transfer, and technical support in all aspects of risk management, including the development of an on-line risk-monitoring program for operations and maintenance.

Highlights of Past Experience

Mr. Moody was the Manager of Reliability and Safety Engineering at Seabrook Station. His responsibilities included the development and implementation of one of the first full scope PRAs. Additional responsibility included reliability programs, root cause analysis, incident evaluation programs, and the subsequent integration of these programs.

While at Seabrook Station, Mr. Moody pioneered risk assessment methodology during shutdown configurations. These studies provide risk input for managing outage safety, reducing their duration (i.e., on-line maintenance), and improving overall facility economics. As a consultant, he has developed methods and applications with the following organizations:

- Electric Power Research Institute
- Goesgen Plant (Switzerland)
- CSD, Inc. (Japan) and Toshiba Corp. (Japan)
- PSE&G's Hope Creek Plant
- Niagara Mohawk Plants

He has provided technology transfer on shutdown risk assessment to the Japanese industry.

Additionally, he has been involved with several maintenance optimization projects:

- An improved process for implementing regulatory requirements on test & maintenance of motor operated valves (Electric Power Research Institute). Implemented the process at several facilities to support cost reduction of Generic Letter 89-10 program.
- Has contributed to reducing overall cost of test & maintenance programs associated with major equipment (e.g., check valves), utilizing risk assessment, reliability techniques, and cost benefit analysis in decision-making.

Mr. Moody has performed numerous risk assessments at several facilities, including:

- Seabrook Station
- Beaver Valley Units 1 and 2
- Nine Mile Pont Units 1 and 2