Indian Point Nuclear Generating Units 2 and 3
Docket Nos. 50-247/ 50-286-LR

NRC Staff's Response in Opposition to State of New York's Motion for Partial Summary Disposition of NYS Contention 16/16A

Exhibit A

STEPHEN F. LAVIE

Health Physicist
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

EMPLOYMENT

U.S. Nuclear Regulatory Commission, Health Physicist *1997-present*

- Develops emergency preparedness policies, regulations, programs and guidelines for currently licensed nuclear reactors and potential new nuclear reactors. Provides support to regional inspection activities and oversight and technical direction for the emergency preparedness portion of the reactor oversight program.

- Performed evaluations and judges the acceptability of the radiological consequence aspects of applications for license amendments and other licensing actions to determine conformance with regulations and acceptance criteria.

- Maintained and created regulatory guidance on radiological consequence analyses.

- Team leader for working group that developed 10 CFR 50.67, "Accident source term," and supporting regulatory guidance, Regulatory Guide 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," July 2000.

- Radiological Assessment Assistant Director, Protective Measures Team in NRC's Incident Response Team (IRT). Performs incident response duties for exercises and served as IRT member for one actual event. Advises IRT on data provided by the licensee during the response effort.

Duquesne Light Company, Senior Health Physics Specialist *1982-1997*

- Performed radiological engineering activities in support of plant operations and modifications including:

  - re-analysis of UFSAR design basis accidents, such as DBA LOCA, locked rotor accident, fuel handling accident, main steam line break in support of steam generator alternate plugging criteria, small break LOCA with delayed spray actuation
  - re-analysis of control room post-accident radiological habitability
  - equipment radiological environmental qualification
  - shielding analysis of Emergency Response Facility.

- Developed and adapted computer codes for radiation transport and point-kernal shielding analyses including adaptation of QAD/CGGP and G3, developed multiple compartment linear transport code with progeny in-growth for use in offsite and control room calculations, developed two region CNMT transport code.

- Lead engineer for site Meteorological Measurements Program and the site's emergency response offsite radiological dose assessment capability. Supported the site Emergency Preparedness Program by maintaining and developing dose projection procedures and performing technical analyses in support of these procedures.

NUS Corporation, Health Physicist *1976-1982*

- Participated in detailed program reviews and procedure development at six operating nuclear power facilities.
- Provided onsite support at Three Mile Island
- Provided emergency planning support at the Beaver Valley Power Station.

United States Navy *1969-1976*

EDUCATION

Attended *PRA Basics for Regulatory Applications Course*, INEL, 1998. Studied the basic concepts of PRA, as well as the use and application of PRAs and IPEs in evaluating plant safety issues.

Attended *GE BWR/4 Technology Course*, Chattanooga, Tennessee, 1998. Examined the functions and flow paths of major systems and the instrumentation and equipment location. Emphasis placed on the nuclear steam supply system, including the engineered safety features.

AP 1000 Systems Design Basis (R-202P), USNRC, June 16-28, 2009

Radiological Emergency Preparedness Exercise Evaluation, L304, National Emergency Training Center – Emmetsburg, MD, September 20-23, 2005

Beaver Valley Power Station Plant Certification Program *1995-1997*

- Received classroom instruction on plant systems, design, operation, and transient response, plant systems walkdown, and plant simulator training.
- Program based on plant licensed operator training curriculum in order to provide plant technical support staff with an understanding of plant systems and operations.

Georgia Institute of Technology Video Based Instruction (audit) *1992-1995*

- Completed several courses (audit basis) in the Masters in Radiological Engineering curriculum.

Naval Nuclear Power School *1970-1971*

- Received academic and practical instruction in the design and operation of Navy nuclear propulsion plants.

- Received specialty qualification as Engineering Laboratory Technician (chemistry and radiological controls).

State College at *Fitchburg (MA)* *1965-1969*

- Completed 126 hours towards Bachelor of Science in Education (withdrawal due to draft board action and subsequent enlistment in the United States Navy).

PROFESSIONAL

Electric Power Research Institute (EPRI) *1996-1997*

- Member of industry resource group (IRG) on rulemaking for Steam Generator Management Program.

Nuclear Energy Institute Issue Task Force (ITF) *1994-1997*

- Participated in ITF on Implementation of New Source Terms at Existing LWRs (1994-1997).
- Participated in ITF on Steam Generator Performance-Based Rulemaking (1995-1997).
- Participated in ITF on Emergency Action Levels (1994-1997).

Nuclear Management and Resources Council: Ad Hoc Advisory Committee (AHAC) *1988-1993*

- Participated in AHAC on Shutdown Risk Emergency Action Levels (1992-1997).
- Participated in AHAC on Relicensing Rule Generic Environmental Impact Statement (GEIS) (1991-92).
- Participated in AHAC on the Proposed Changes to the EPA Protective Action Guidelines (1989) and Implementation White Paper (1992-1993).
- Participated in ITF on Emergency Action Levels (1988-1993).

American Nuclear Standard Working Group 3.8, Emergency Preparedness, Member. *1988-1993*

Health Physics Society, Member *1978-present*

PUBLICATIONS/PRESENTATIONS

"What's in the Black Box Known as Emergency Dose Assessment", workshop presented at the 2009 National Radiological Emergency Preparedness Conference, Norfolk, VA, April 2009

"Atmospheric Relative Concentrations for Control Room Radiological Habitability Assessments at Nuclear Power Plants," USNRC Regulatory Guide 1.194, 2003

"Emergency Dose Assessment", workshop presented at the 52nd Annual Health Physics Society Meeting, Portland, WA, July 2007 (with Patricia Milligan and Randolph Sullivan; I presented the Dispersion module)

"Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," USNRC Regulatory Guide 1.183, 2000

"Introduction to the MIDAS Computer Code," presentation in Atmospheric Science and Radioactivity Releases Seminars, Harvard School of Public Health, 1995, and 1996

"Reduction of O & M Costs Using 'New Source Terms'," co-authored with S. Ferguson, SWEC, at ANS Summer Conference, 1995

"Experience in Implementation of EPA-400," presentation in Advanced Workshop for Nuclear Emergency Planning, Harvard School of Public Health, 1994

"Implementation of EPA-400 Requirements at Existing Facilities," presentation before NUMARC 10 CFR 20 implementation Workshop, Baltimore and Chicago 1993, and at FEMA Region VI REP Conference 1993