

May 16, 2007

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION**

Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	
Entergy Nuclear Generation Company and	)	Docket No. 50-293-LR
Entergy Nuclear Operations, Inc.	)	ASLBP No. 06-848-02-LR
	)	
(Pilgrim Nuclear Power Station)	)	

**DECLARATION OF FRED J. MOGOLESKO IN SUPPORT OF ENTERGY'S MOTION  
FOR SUMMARY DISPOSITION OF PILGRIM WATCH CONTENTION 3**

Fred J. Mogolesko states as follows under penalties of perjury:

1. I am a Senior Project Manager with Entergy Nuclear Generation Company and Entergy Nuclear Operations (hereinafter and collectively, "Entergy") for the Pilgrim Nuclear Power Station ("PNPS"). I am the Project Manager for the Pilgrim License Renewal Project.
2. My professional and educational experience is summarized in the curriculum vitae attached as Exhibit 1 to this affidavit. I hold both a Bachelor's Degree and a Master's Degree in Aerospace Engineering and Applied Mechanics from the Polytechnic Institute of Brooklyn. I also hold a Master's Degree in Meteorology/Oceanography and a Ph D. in Oceanography from New York University. I am certified by the American Meteorological Society as a Certified Consulting Meteorologist.
3. In my capacity as the Project Manager for the Pilgrim License Renewal Project I am responsible for, among other things, consequence analysis modeling and assessment, and dispersion modeling of radionuclide and other pollutants in air and water environments for PNPS license renewal. I am knowledgeable of the Severe Accident Mitigation Alternative ("SAMA")

analyses prepared by Entergy for the Environmental Report that is part of the PNPS license renewal application. I have reviewed the analysis and provided advice and input on its preparation. Specifically, I am knowledgeable of and provided advice and input on the meteorological data used in the PNPS analysis.

4. I am familiar with Contention Pilgrim Watch 3, which was raised by Pilgrim Watch in the NRC licensing proceeding for the PNPS license renewal. As admitted into the proceeding by the Atomic Safety and Licensing Board, Pilgrim Watch Contention 3 asserts that “Applicant’s SAMA analysis for the Pilgrim plant is deficient in that the input data concerning (1) evacuation times, (2) economic consequences, and (3) meteorological patterns are incorrect, resulting in incorrect conclusions about the costs versus benefits of possible mitigation alternatives, such that further analysis is called for.”

5. My declaration addresses claims raised by Pilgrim Watch in Pilgrim Watch Contention 3 concerning the adequacy of the meteorological patterns and data used in the PNPS SAMA analyses. I will demonstrate that the PNPS SAMA analysis performed in support of license renewal used representative meteorological data for PNPS.

6. PNPS obtains meteorological data from its 220 Foot Meteorological Tower from both an upper level and lower level sensor. Data is obtained from the Tower on a daily basis. Personnel perform quality screening of data to look for grossly anomalous or missing data, as well as zero and span calibration checks of equipment. Sensor equipment is replaced on a regular, quarterly basis using sensors calibrated in accordance with applicable industry standards. Qualitative checks (wind direction alignment to cardinal sectors, ice bath tests for temperature sensors, etc.) were performed during these quarterly calibration/equipment exchanges.

7. On a monthly basis, data files were submitted to a contractor for processing of joint frequency distributions of wind direction, class and speed and X/Q calculations. As part of this contracted service, data were screened using NUREG-0917 quality screening criteria and found to be suitable for use.

8. The following table summarizes the percentage of data recoverable for the six year period prior to the performance of the SAMA analysis:

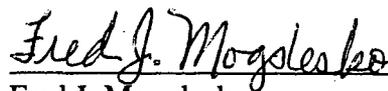
Year	220 Foot Met. Tower- Lower Level	220 Foot Met. Tower- Upper Level
1996	96.8%	96.0%
1997	93.7%	95.4%
1998	96.7%	92.1%
1999	94.8%	90.8%
2000	91.8%	91.0%
2001	98.1%	98.1%

9. Overall data recovery for the six-year period was approximately 94%, with the lowest recovery during any individual year being 90.8%. Joint frequency distributions wind direction, class and speed were calculated for the six years and found to be comparable on a yearly basis with each other and also comparable to historical joint frequency distribution for data available for the years 1992 and 1993.

10. PNPS used the 2001 meteorological data in the 2002 PNPS SAMA analysis that was performed to support license renewal because the 2001 data was both the most complete and the most recent set of data available at the time the SAMA analysis was performed. There is nothing atypical or extra-ordinary regarding the meteorological data for 2001, and the data are representative of the meteorological data gathered for the PNPS site.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on May 16, 2007.

  
\_\_\_\_\_

Fred J. Mogolesko

**Fred J. Mogolesko**  
**508-830-7832 (O)**

---

**Summary:**

Program manager for the electrical power generation and environmental impact assessment arena. Significant responsibilities include:

- Developing strategic plans, process reengineering, and structuring decisions under uncertainty
- Asset marketing and due diligence
- EPA Regulation 316 a & b regulatory and design concepts
- Technical quality, program management, budgeting, and planning for cross-functional projects
- Power uprate, extended power uprate, and license renewal programs
- Safety, financial risk, and consequence analysis modeling and assessment
- Dispersion modeling of radionuclide and other pollutants in air and water environments
- Natural hazard characterization (seismic, hurricane, flooding) and assessment
- Regulatory process, prudency review, and emergent issue management
- NEPA 2005.

**Education and Certification:**

- Ph.D., Oceanography, New York University
- M.S., Meteorology/Oceanography, New York University
- M.S., Aerospace Engineering and Applied Mechanics, Polytechnic Institute of Brooklyn
- B.S., Aerospace Engineering and Applied Mechanics, Polytechnic Institute of Brooklyn
- CCM, Certified Consulting Meteorologist, American Meteorological Society

**Experience:**

**1999-Present ENTERGY NUCLEAR OPERATIONS** **Plymouth, MA**  
**Senior Project Manager - Pilgrim Station**

Managed the development of strategies, processes, and programs to address emerging nuclear industry issues. Specific emphasis focused on calculation enhancement programs, power and extended power uprates and license renewal assessment (\$43M Program) and technology adoption related to changing the current licensing bases. Presently in the last stages of managing the Pilgrim License Renewal Program. I was past Chairman of BWROG Committee on instrument uncertainties.

**1986-1999 BOSTON EDISON COMPANY** **Plymouth, MA**  
**Senior Project Manager - Pilgrim Station**

Proposed and managed strategies, programs, and processes in support of economic and competitive generation of electrical power. Represented BECo in the regulatory environment, public forums, and prudency reviews.

- Responsible for the Pilgrim Station design and licensing basis recovery program [\$12-17M project].



Performed computer-based structural and aero-elastic analyses of aircraft and space vehicles such as the Lunar Excursion Module, the Gulfstream, and the F-111 fighter-bomber. Developed anti-submarine warfare strategies.

**Additional Experience:**

**1995 - Present    FRW, Inc. and Seamat, Inc.**  
**Senior Vice President**

FRW and Seamat are technology development corporations specializing in product development utilizing space age thermo-plastics (proprietary and patented processes) for military, environmental, and energy industry requirements.

**1977 – Present    M&L ENVIRONMENTAL CONSULTANTS    Sharon, MA**  
**Managing Partner**

Specializes in characterization and analyses associated with air and water phenomena and their potential societal impacts. Expert testimony and due diligence services.

**Teaching Experience:**

Adjunct Professor, Civil Engineering, Northeastern University, 1982-1984

Adjunct Professor, Geography Department, Boston University, 1978-1980

Lecturer, Physics Department, Brooklyn College, 1969-1971

**Organizations:**

- Chairman, BWROG Non-LSSS Technical Specifications Instrument Uncertainty Committee
- Member, Pilgrim Station Information Technology Steering Committee
- Chairman, Pilgrim Station Severe Accident Management Task Force
- Member, Boston Edison Company Asset Utilization Optimization Task Force
- Member, EPRI, Life Cycle Management Sub-Committee and EQ Working Group
- Member, BWROG, Severe Accident Management and License Renewal Committees
- Member, NEI, License Renewal and Severe Accident Management Committees
- Member, Pilgrim Station ALARA Committee