

**Statement of Professional Qualifications**  
**Mark E. Franke, Chief**  
**Operations Branch 2**  
**Region II, Division of Reactor Safety**  
**U.S. Nuclear Regulatory Commission**

Mr. Franke is a Branch Chief with 25 years of work experience, including military, and private and public sector service. This includes 15 years of experience directly associated with nuclear power. He currently leads one of two branches responsible for the implementation of the operator licensing program for nuclear reactors in the U.S. Nuclear Regulatory Commission's Region II. He recently served as Executive Technical Assistant for the Office of the Executive Director for Operations, with a primary focus on operating reactors in NRC Regions I and IV. He also recently led the agency's Augmented Inspection Team response to the 2011 North Anna Earthquake, where he assessed facility licensee and licensed operator response to the event as it related to public safety. This event was significant in that it was the first earthquake in history to exceed the design basis of an operating reactor plant in the United States.

Prior to his current position, Mr. Franke served as an Engineering Branch Chief in Region II, where he implemented inspection programs to assess licensee performance in the areas of license renewal, steam generators, reactor plant in-service inspection, major plant modifications, independent spent fuel storage installations and heat sinks. Prior to this, he held positions in Region III as Senior Resident Inspector, Resident Inspector, and Reactor Engineer. While in Region III, he served as Senior Resident Inspector at the Perry Nuclear Power Plant during a period of heightened regulatory oversight (Column IV status) due to licensee performance issues.

In his roles as Branch Chief and as Senior Resident Inspector, Mr. Franke has led agency responses to a wide range of commercial nuclear plant events, including Alert level emergencies, where he has assessed facility licensee and licensed operator performance.

**EDUCATION**

B.S. Electrical Engineering, United States Naval Academy, Annapolis, Maryland, May 1988.

**EXPERIENCE**

2011 to present: Mr. Franke serves as an Operator Licensing Branch Chief in NRC Region II. He is responsible for implementing the operator licensing program to ensure the licensing of competent operators for nuclear plants in the Southeast. He also assists in the development and implementation of the operator licensing program for new construction reactors. In early 2012, Mr. Franke completed an assignment as an Executive Technical Assistant in the Office of the Executive Director for Operations where he represented Region I and Region IV, and where he helped to facilitate the transition of Fort Calhoun Station to a special oversight process due to licensee performance issues. In 2011, when a large earthquake struck the East Coast, Mr. Franke assumed a lead role as Reactor Safety Manager in the Incident Response Center for

Region II. He then led the agency's Augmented Inspection Team to assess the earthquake's impact on safety at the North Anna plant. He assessed facility and licensed operator response to the event. This event represented a unique challenge to the agency and nuclear facility licensees. It simultaneously affected a dozen reactor plants along the East Coast, represented an Alert level emergency at North Anna, and was the first time that ground motion exceeded the design basis of an operating nuclear reactor in the United States.

2009 to 2011: Mr. Franke served as Chief of Engineering Branch 3, Region II, where he implemented inspection programs to assess licensee performance in the areas of license renewal, steam generators, reactor plant in-service inspection, major plant modifications, independent spent fuel storage installations and heat sinks. This included inspection of boiling water reactor and pressurized water reactor designs. He also led the Region's response to Crystal River nuclear containment building concrete cracking issues.

2003 to 2009: Mr. Franke served in Region III as a Senior Resident Inspector (from 2006), as a Resident Inspector (from 2004), and as a Reactor Engineer (2003). He served as Senior Resident Inspector and Resident Inspector at the Perry Nuclear Power Plant during a time when Perry received increased regulatory oversight as a Column IV plant due to performance issues related to safety. He also provided back-up coverage and Special Inspection event response for the Fermi 2 Nuclear Power Plant. During this time period, Mr. Franke responded to numerous reactor plant events, up to and including an Alert level emergency, where he assessed nuclear facility and operator performance for the NRC.

Before joining the NRC in 2003, Mr. Franke was an Assistant Vice President at Merrill Lynch where he led business growth for the firm, managed financial risk, and cultivated a wide variety of business relationships. Prior to that, he served as a fast-attack nuclear submarine officer in the U.S. Navy. He achieved early Nuclear Engineer qualification (on S5W and S6G plant designs) and Engineering Officer of the Watch qualifications (S6G and S3G). His positions included leadership of nuclear electrical and machinery divisions, auxiliary division, the quality assurance program, communications division and the COMSEC program, and nuclear safety and nuclear weapons safety officer. Mr. Franke has several thousand hours of on-watch experience directing the control room operations of a naval nuclear reactor plant. He achieved the highest score possible as Engineering Officer of the Watch during the Operational Reactor Safeguards Exams, contributing to earning Engineering Excellence awards. He served as Senior Supervisory Watch for complex reactor plant maintenance. Mr. Franke was awarded medals and commendations for his performance in leading reactor plant and submarine operations.