NRC000122
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Statement of Professional Qualifications
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Summary

Mr. Yoder is Senior Chemical Engineer in the Division of Component Integrity, Chemical Engineering and Steam Generator Integrity Branch, in the Office of Nuclear Reactor Regulation. His official responsibilities include the technical, safety, and regulatory compliance reviews of a variety of chemistry and chemical engineering topics, including flow accelerated corrosion ("FAC") programs for applicants for license renewal, as well how FAC is affected by power uprates.

Education: B.S. Chemical Engineering, Florida State University, Tallahassee, FL, 2002

Experience:

2007 – Present: Senior Chemical Engineer/Chemical Engineer, USNRC Headquarters

Performed or supervised performance of reviews of multiple license renewal applications ("LRA"), including Three Mile Island Unit 1, Kewaunee Power Station, Prairie Island Units 1 and 2, Palo Verde Units 1, 2, and 3, and Susquahanna Steam Electric Station. Work on LRA includes, for the area of flow accelerated corrosion and component integrity, reviewing of applications and supplemental information, preparing requests for additional information, and preparing inputs for the Staff's safety evaluation report . Supervisory duties include acting as Branch Chief for several months, and providing management review of proposed technical reviews and findings. Reviews included consideration of the Staff's Standard Review Plan for License Renewal and the NUREG-1801, "Generic Aging Lessons Learned (GALL) Report" and NUREG-1800, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants GALL," and the industry's guideline EPRI NSAC-202L, “Recommendations for an Effective Flow-Accelerated Corrosion Program.” Duties also include updating the Staff's guidance documents.

In the area of power uprates, performed technical, safety, and regulatory review of license amendment requests ("LAR") to increase authorized power levels for sites including Browns Ferry Units 1, 2, and 3 and Millstone Unit 3. Work on power uprates included careful consideration of the impact of the requested changes on flow accelerated corrosion programs, including inspection frequencies, component replacements, changes in corrosion rate, and modeling in CHECWORKS. Reviews included consideration of RS-001 "Review Standard For Extended Power Uprates."

Other experience includes: evaluation of chemical effects and protective coatings related to Generic Safety Issue (GSI) 191, “Assessment of Debris Accumulation on PWR Sump

Performance;" audits of equipment vendors, engineering contractors, and licensees. Gave public presentations to industry groups, foreign regulators, and others on the issues associated with chemical effects and protective coatings. In addition, reviewed safety aspects of diesel fuel oil surveillance programs, microbiologically influenced corrosion issues, post-accident water chemistry and the affect on safety systems, reactor water cleanup systems, neutron absorbing materials in the spent fuel pools.

2007: Technical Assistant to the Director of the Division of Component Integrity, USNRC Headquarters

Provided direct expert support to the Division Director by assuring proper coordination of the Division's technical and regulatory activities related to materials and chemical engineering.

2005-2007: Materials Engineer, USNRC Headquarters

Performed engineering evaluations on engineering issues including steam generator tube integrity, post-LOCA pH control, microbiologically influence corrosion, diesel fuel oil, and flow accelerated corrosion. Reviews included power uprates and license renewal.

2002-2005: Nuclear Safety Professional Development Program

Performed rotational assignments in a variety of engineering disciplines, including chemical engineering, plant safety systems, fuel cycle, and inspection. Assignment to St. Lucie resident inspector's office to assist in performing routine baseline inspections.