

MOSTAFA (MOSI) DAYANI

EXPERIENCE SUMMARY

Team Leader of Construction and ES&H Team at the NNSA Project Management Office for the MOX Fuel Fabrication Facility (MFFF) Project at the Savannah River Site. Thirty-five years of experience with a proven record of accomplishments in defense and commercial nuclear industry with emphasis in Nuclear Safety, Project Management, and Systems Engineering. Extensive knowledge and experience in implementation of both NRC and DOE nuclear safety regulations in all aspects of nuclear fuel cycle including nuclear facility design and construction, reactor design and operation, and nuclear material processing. Certified Project Management Professional by the Project Management Institute, qualified DOE Senior Technical Safety Manager, qualified in DOE PMCDP at Level II, qualified COR Level III, and qualified under DOE Technical Qualification Program as Nuclear Safety Specialist at the Savannah River Site and Y-12 National Security Complex.

DETAILED EXPERIENCE

Employed by the U.S. Federal Government since 1983 with duty stations at various Department of Energy, National Nuclear Security Administration, and Tennessee Valley Authority sites as senior nuclear engineer, program manager, senior technical advisor, Branch Chief (supervisor), and team leader.

Site Representative, Project Engineer, and Team leader for the Engineering and Process Unit Design and Commissioning at NNSA MFFF Project Office

2003-Present

Since 2013, Team Leader for the Construction and ES&H at the NNSA MFFF Project Office. MFFF is an NNSA Non-proliferation project estimated to cost ~\$10b. It is designed and is being constructed under U.S. NRC and OSHA Regulatory regimes. Its mission is to dispose of the U.S. surplus weapons-grade Plutonium. As Construction Team lead I guide the oversight of project construction with 8-10 engineers including construction planning, scheduling, and work package development for all disciplines, e.g.; Civil/Structural, Mechanical, and Electrical. Perform walk-downs and assessments of construction in the field and actual commodity and glovebox installations to evaluate quality, efficiency and productivity. Use EVMS data and track rework, unit rate, and performance against each of commodity installation goals. As a COR I directly communicate with and provide technical direction to the prime contractor's management, evaluate contractor's performance, and provide feedback per the award fee criteria. Oversight of Licensing activities and review/concur with all correspondence with the U.S. NRC, including reporting, and submission of revisions to the MFFF Integrated Safety Analysis (Nuclear Safety Basis) and the Quality Assurance Plan.

As Engineering team lead oversaw full spectrum of design & engineering for both chemical and mechanical Plutonium processing units' equipment, procurement and fabrication, assembly, and in-advance testing of over 300 gloveboxes. Performed inspection of glovebox fabrication at vendor shops as well as during assembly and testing to ensure design requirements, NRC regulatory requirements, as well as NQA-1 and Commercial Grade Dedication requirements are met. Oversaw development of nuclear and criticality safety analyses and NRC license application in accordance with the 10 CFR 70, and NQA-1. Extensively involved in visits and interactions with both U.S. and French Plutonium processing facilities (LANL, F-Canyon/FB-Line, MELOX, and La Hague) to acquire and implement the design and

operating experiences as well as establish interface controls for chemical, physical, and isotopic characteristics of the Plutonium feed material and ensure MFFF is designed to accommodate the prospective Plutonium feed. Supported development of Plutonium Management and Disposition Agreement between the U.S. and Russian Federation. Participated in the interactions with IAEA to ensure MFFF is designed and instrumented to implement the IAEA inspection/verification requirements. In participation with the nonnuclear industry, DOE, NRC, and ANS coauthored the ANSI/ANS "Standard 58-16, Safety Classification and Design Criteria for Non-Reactor Nuclear Facilities."

Authorization Basis Engineer at the National Nuclear Security Administration's Y-12 Site Office

2002-2003

Managed implementation of 10 CFR 830, Nuclear Safety Management for nuclear facilities in special nuclear material control organization at Y-12 site. Authorization Basis Engineer for the \$500M Highly Enriched Uranium Materials Storage Facility (HEUMF) project. Reviewed development of Documented Safety Analysis and Technical Safety Requirements, including hazard identification, hazard evaluation, system functional classification, and development of controls. Formed multidisciplinary teams of engineers and successfully led review of the design and Preliminary Safety Basis Documents in support of Critical Decisions 2 and 3.

Senior Technical Advisor and Program Manager for Nuclear Safety Programs

1989-2002

Also served as Senior Technical Advisor for Standards and Regulatory Programs, Manager of Reactor Power Limits Program, and Chief of Emergency Management Branch at DOE-SR. Received U.S. Vice President's National Performance Review Award (Hammer Award).

Served as Senior Technical Advisor and team leader for management, administration, and coordination of all aspects of planning, implementation, and technical support to facilities for Nuclear Safety requirements and processes. Provided guidance and leadership as Program Manager, instructor, and qualifying official for staff training on Nuclear Safety Program at DOE-SR. Chaired the DOE-SR Nuclear Safety Council. Development and maintenance of DOE-SR contractual nuclear safety requirements for Authorization Basis, Authorization Agreements, and Unreviewed Safety Question Determination (USQD) Process for nuclear facilities, DOE process for review and approval of these documents, and development of DOE Safety Evaluation Reports. Also lead program engineer for the site-wide Nuclear Criticality Safety. Led implementation of nuclear safety rules promulgated under the Price Anderson Amendments Act (PAAA). Reviewed initial issue and all subsequent revisions to Documented Safety Analyses for ALL nuclear facilities at SRS and recommended approval/disapproval to DOE-SR manager.

Led development and implementation of Standards/Requirements Identification Document per DNFSB recommendation 90-2, implementation of Integrated Safety Management System per DNFSB recommendation 95-2, and implementation of Configuration Management of Vital Safety Systems per DNFSB recommendation 2000-2, all ahead of schedule and each time set leading example for the DOE complex.

Program Manager and Systems Engineer, Savannah River Special Project Office for Reactor Restart (Three Heavy-Water Moderated Production Reactors). Performed as the Reactor Safety Improvement and Power Limits Program Manager and Systematic Evaluation Program Oversight accident analyses and

development of safety systems and controls for reactor operations and safe shutdown. Managed evaluation of plant design and capability to mitigate the Design Basis Events to ensure safe shutdown capability. This effort produced the input for development of the modern DOE Nuclear Safety Documents including Safety Analysis Report and Technical Safety Requirements.

Branch Chief, Emergency Management Branch - Supervisor for the newly established Emergency Management Branch. Responsible for management, administration, and oversight of SRS emergency management programs and operations.

System Engineer and qualified Level III test engineer at the TVA Brown's Ferry Nuclear Power Station, three BWRs

1987-1989

Cognizant of nuclear safety related systems' design, modification, operability requirements, and status. Conducted safety evaluations for plant modifications, special tests, and maintenance evolutions in accordance with 10 CFR 50.59, Unreviewed Safety Question Determination (USQD). Successfully completed Technical Staff and Managers Advanced Phase Training Program, (a 7 month nuclear engineering, management, and operations training accredited by INPO).

Nuclear Program Engineer, Department of Energy, Richland Operations Office, Richland, WA, Defense Waste Management and Civilian Spent Fuel Management Divisions

1983-1986

Management of Waste Operations, High Level Waste Tank Farms, as well as support of decontamination activities at TMI-2, International Support Program, Byproducts Utilization Program, and National Low Level and TRU Waste Management Programs.

Systems Engineer and Project Manager

1979-1983

Worked at privately funded side of the combined DOE-Commercial industry Clinch River Breeder Reactor Project Office as systems engineer and project manager. Managed engineering tasks in systems and components design, procurement, and fabrication in accordance with DOE Reactor Design and Technology (RDT) Standards. Chaired and/or participated in numerous design reviews of reactor systems and components. Also performed as cognizant engineer for overall plant dynamic analysis including LMFBR Demonstration Plant Computer Simulation Model.

EDUCATION

Bachelor of Science in Nuclear Engineering

CITIZENSHIP

U.S.

CLEARANCE

Q Clearance