

MICHAEL (MIKE) SABBE

EXPERIENCE SUMMARY

38 years with Bechtel National Inc. leading and managing projects and programs in the engineering, licensing, procurement, construction, QA/QC, project controls, testing, startup and nuclear site management and operation industry focused on US Department of Energy (US DOE) and private sector nuclear fuel cycle and defense program line item projects. Extensive experience on first-of-a-kind US DOE advanced technology nuclear fuel cycle and national defense facilities, environmental investigation and remediation, low-level and high-level waste management and treatment and nuclear facility maintenance and infrastructure management of high security defense facilities. Extensive experience with the preparation, review and approval of US DOE Order 413.3B project documentation and performance of project external reviews.

DETAILED EXPERIENCE

Project Manager II Associate— Longenecker & Associates

2016-present

Project and Program management and project technical support services to the U.S. Department of Energy (DOE) and private sector clients.

Bechtel National Inc. – Uranium Processing Facility (UPF) Project

2012-2016

Manager of Internal and External Project Reviews for the Uranium Processing Facility at the US DOE NNSA Y-12 National Security Complex. As manager for internal and external UPF project reviews I managed ~ 15 major reviews during each FY. External review entities include the DNFSB, GAO, DOD Cost Assessment and Program Evaluation (CAPE) and NNSA HQ DOE Order 413.3B independent technical and cost estimate reviews. Internal reviews are principally Bechtel National Inc. corporate and B&W functional managers' project reviews. Primary responsibilities as the external and internal review manager is to develop and coordinate the review agenda, compile and transmit pre-review project documentation to the review team, coordinate the development of review briefing material, be an active project management participant during the actual review, furnish in-process review documentation, manage in-process review questions, coordinate a factual accuracy review of draft review reports and development of action plans that address review recommendations; monitor progress on development of actions and documentation to resolve and close review recommendations.

In addition, I support the UPF Project Director performing special tasks and projects in support of the UPF Program and Project Management. Tasks & projects include:

- Earned Value Management System Cost Account Manager for \$72M/yr. of Business Services labor and services subcontracts. Report monthly cost and schedule performance and explanation of variances and action plans to mitigate variances.
- Developed the People Based Quality Program on UPF designed to pinpoint opportunities for improvement by developing and implementing actions to improve human performance.
- Develop the Business Services portion of the UPF Project Total Project Cost estimate
- Review and comment on various Plans and Procedures on behalf of the Project Director

UPF Project Services Manager – BWXT Y-12 LLC (Bechtel & BWXT Managed & Operated the US DOE NNSA Y-12 National Security Complex)

2008-2012

Project Services Manager (PSM) for the Uranium Processing Facility (UPF) project at the US DOE NNSA Y-12 National Security Complex. The UPF project is a major DOE capital acquisition per US DOE Order 413.3 with a total project cost range of \$4.8B to \$6.5B. The UPF is in final design and will provide the USA nuclear weapons complex with a new, modern and secure nuclear safety class facility for enriched uranium (EU) processing and manufacturing capability to support the nuclear weapons stockpile, provide uranium for the US Navy, dispose of excess EU materials and R&D programs requiring EU material. The PSM is a core project management team and leadership position responsible for planning and managing internal on-project and external (NNSA, DNFSB, GAO, DOD) project reviews and development and action plans to resolve review findings, observations and recommendations; administrative and document control services for the project, securing and managing leased buildings and equipment, project staffing and recruiting of personnel, managing accounts payable process for procured services in support of the project, Information Technology and cyber security, project safeguards and security, manage the project lessons learned and best practices program and database, development of preliminary plans, schedules and estimates for UPF startup and commissioning, technical editing and publications, and training of project personnel to ensure project resources perform their functions in accordance with NQA-1 quality assurance requirements defined in the project Quality Assurance and Control Plan and management of the UPF Project Contractor Assurance System responsible to support the development of extent of condition analysis, causal analysis, development of corrective action plans, status and reporting, trend analysis and reporting associated with procedural non-compliance corrective actions.

In addition, lead the effort to develop and collaborate with Project Management personnel and support staff on the CMRR Project at LANL to develop a common commercial grade dedication procedure and training, share lessons learned and participate on project reviews of CMRR Project.

Program Manager – BWXT Y-12, LLC (Bechtel & BWXT Managed & Operated the US DOE NNSA Y-12 National Security Complex)

2006-2007

Common Site Support Program Manager within the Readiness in Technical Base and Facilities Program Directorate at the USDOE Y-12 National Nuclear Security Complex. As Common Site Support (CSS) Program Manager responsible for the management of an annual budget and funds of \$175/yr. managed and controlled per DOE Program Management procedures. Principle duties and responsibilities as Program Manager includes management responsibility for scope, schedule, annual and multiyear budget baseline development and funds management, change control and monthly program performance reporting. This includes program management for Balance-of-Plant non-production maintenance of facilities and utility systems and site-level programs such as operation and maintenance of plant utility systems, facilities and infrastructure; balance of plant (BOP) facilities and grounds maintenance and repairs, facility and system condition assessments and master site planning and management; property management and onsite/offsite leases, plant material receipt/storage/delivery and disposition, fleet maintenance and laundry and shuttle services; Environmental Safety and Health including fire protection engineering, radiological control program, dosimetry, industrial safety and hygiene, environmental compliance/monitoring and reporting, waste operations program, plant emergency management program, fire department and systems

operations, plant shift superintendent operations and control; Legacy Workers Compensation Claims Program; and facilities modifications and repairs.

Program manager is responsible for integrating major planning and execution Divisions organizational participants including Manufacturing, Maintenance, Utilities, Engineering, Projects, Emergency Services, ES&H, Planning and Integration to ensure the primary BOP production support facilities, systems and programs are consistently available for mission work.

Ongoing integration and communication with both the local NNSA Y-12 Site Office and Headquarters Program Managers is essential responsibility of Program Management and requires interfacing on a regular basis by means of written and verbal communications and fee negotiations.

President of Bechtel North Texas, Inc. and Readiness in Technical Base and Facilities Program Director, US DOE Pantex Plant – Bechtel North Texas, Inc.

2004-2005

President of Bechtel North Texas, Inc. and Readiness in Technical Base and Facilities Program Director at the USDOE National Nuclear Security Administration Pantex Plant. As President of Bechtel North Texas, Inc. (BNTI) responsible for senior management leadership, direction and performance of BNTI personnel integrated into the overall Management and Operating Contractor (BWXT LLC) organization performing program management, plant maintenance, engineering/procurement/construction of facility upgrades and new facility construction, project management and subcontract formulation/administration/closeout.

As Readiness in Technical Base and Facilities (RTBF) Program Director I am responsible for the management of an annual budget of \$250M/yr. and budget planning for a 10-year planning period. Principle duties and responsibilities as Program Director is to establish annual and multiyear scopes of work, schedules, budget estimates and performance based incentive fee measures which are negotiated internally with M&O Division Managers and externally with the USDOE NNSA customer. In addition, I monitor and report monthly cost and schedule performance relative to the plan and manage variances and budget change control. The RTBF Program scope of work includes Pantex Plant maintenance, utility systems operation, environmental protection monitoring, environmental restoration and waste management, industrial safety, radiological protection, nuclear safety, facility and utility system authorization basis and safety analysis reports, emergency management and fire protection, multiyear site planning, engineering/procurement/construction (EPC) of plant upgrades/modifications associated with the Facilities Infrastructure Recapitalization Program, EPC of multiple new nuclear safety class Line Item Facility Projects in support of weapons life extension programs planned and managed in accordance with DOE Order 413.3, and Management and Administration support services such as legal, finance and CFO, human resources, information technology, production planning and control, and subcontract formulation and administration.

Vice-President and Area Projects Manager, Soil and Groundwater Remediation Closure Projects – Bechtel Savannah River, Inc.

1999-2004

As Vice President & Area Projects Manager, Soil and Groundwater Remediation Closure Projects provides leadership and overall guidance to all project, operations and support services management personnel assigned to the Soil and Groundwater Closure Project (SGCP). Senior Manager at US Department of Energy Savannah River Site responsible for achieving accelerated environmental risk reduction by characterizing, designing, remediating and post-closure performance monitoring of waste sites and groundwater

contamination areas so that enforceable schedules contained in regulatory agreements and permits (CERCLA and RCRA) are consistently met while costs are being reduced and the overall risk posed by existing contamination is reduced. Responsible for a \$160 million/year Closure Project with a staff of 420 personnel and over 50% of the annual budget executed by fixed price lump sum and unit price subcontractors managed by Bechtel.

In addition, executive sponsor of the Bechtel National Inc. Integration Council Panel focused on innovative environmental restoration and deactivation/decommissioning technologies across the M&O/M&I Environmental Management business sector within Bechtel National Inc.

Assistant General Manager responsible for Waste Management and Environmental Restoration at US DOE Nevada Test Site – Bechtel Nevada, Inc.

1998-1999

Assistant General Manager responsible for Waste Management and Environmental Restoration at the USDOE Nevada Test Site and Off-Site Locations Management and Operations Contract. Responsible for the annual development and execution of \$57M of environmental restoration and monitoring, technology development and deployment, and radioactive and hazardous waste treatment, storage and on-site disposal facility operations. In addition, responsible for the marketing and growth of the waste disposal business line at the Nevada Test Site serving the site and 13 off-site generators of nuclear waste.

Project Manager – Bechtel National, Inc.

1988-1998

Project Manager for the Central Interstate Compact (CIC) low-level radioactive waste (LLRW) disposal facility located in Nebraska. The facility will serve Nebraska, Kansas, Oklahoma, Louisiana, and Arkansas and will provide for the licensed disposal of LLRW. Responsible for the supervision, planning, and control of a 45-person multidiscipline project design and licensing team. Responsibilities included overall management and supervision for the following project activities: site screening and selection, site characterization, conceptual and detailed design, licensing, construction contract packages, construction management, and closure cap design. Additional responsibilities included the management of the preparation of the safety analysis and environmental reports, which constitute the license application for the CIC facility. The CIC LLRW facility is an above-grade safety-related reinforced concrete disposal structure, with an earth-mounded closure cap system for the permanent disposal of Class A, B, and C low-level radioactive waste.

Project Manager for the screening of potential regions within Taiwan and potential sites within differing geologic and hydrogeologic regions, conceptual design and initial environmental and safety assessment for the Taiwan Power Company Low-Level Radioactive Waste Disposal Facility Project.

Project Engineer for the US DOE, Special Isotope Separation Project – Bechtel National, Inc.

1986-1988

Project Engineer for the \$400M Special Isotope (plutonium) Separation Project planned to be sited at the Idaho National Engineering Laboratory. Managed and lead the personnel performing definitive design and preparation of construction bid packages for the construction management phase of the project. Managed and lead a group of 110 engineers and designers designing safety-related structures, mechanical and electrical/control systems associated with the Laser Support Building, Dye Support Building and the Plutonium Processing Building. Supported the development of capital cost estimates for the project and

interfaced directly with the US DOE client and laser light isotope separation SME's at Lawrence Livermore National Laboratory.

Supervisor Project Engineer for the US DOE, Civil/Structural/Architectural Group – Bechtel National, Inc.

1983-1986

Civil/Structural/Architectural Group Supervisor for the DOE Defense Waste Processing Facility (DWPF), Savannah River Site, South Carolina. Responsibilities included the analysis, design, specification, procurement, and installation of nuclear safety class special equipment and remote process-related support structures in the vitrification building and the analysis and design of high-level waste transfer and hazardous chemical/organic incineration structures and facilities. Additional responsibilities included the supervision of a 35-person design group, planning, scheduling, procurement/vendor interface, monitoring of engineering activities, client interface, construction support, and coordination.

Supervisor Project Engineer for the US DOE Deputy Civil/Structural Group Supervisor – Bechtel National, Inc.

1979-1983

Deputy Civil/Structural Group Supervisor for the US DOE Pilot Assembly and Balance Facility (PABF) and the Recycle and Assembly Facility of the Gas Centrifuge Enrichment Plant Program in Piketon, Ohio. Responsible for the analysis and design of special equipment structures and dynamic vibration transmissibility studies and testing performed at PABF. Interfaced with Union Carbide and AiResearch Corporation on the special equipment procurement and/or installation of design packages. Additional tasks included seismic analysis and design, interface coordination and scheduling of activities, preparation of construction contract packages, field construction contract administration and coordination, and review of vendor drawings and submittals.

Structural Engineer – Spalding & DeDecker and Associates

1977-1979

Structural Engineer responsible for the structural analysis, design, specifications, and cost estimates for municipal stormwater and wastewater distribution and collection systems and treatment facilities.

EDUCATION

Wayne State University, Detroit Michigan

Master of Science in Structural Engineering with honors, 1979

Wayne State University, Detroit Michigan

Bachelor of Science in Civil Engineering with honors, 1977

MaComb County Community College, Michigan

Associates degree in Land Surveying, 1973

OTHER QUALIFICATIONS

- Registered Civil Engineer in California (No. C32144)
- Active US DOE "Q" Top Secret Clearance for 38 years. Inactive DOD Top Secret Clearance
- Bechtel General Manager, Project Manager and Supervisor training

- 6 Sigma, People Based Leadership, Behavior Based Safety Principles, Human Performance Improvement and People Based Quality training
- Published technical papers in the proceedings of ASCE and Waste Management on structural engineering, siting and characterization of low-level radioactive waste (LLRW) disposal facilities; design, licensing, construction and public acceptance of LLRW disposal facilities; groundwater flow and radionuclide transport at a LLRW disposal site; innovative environmental restoration technologies and effective regulatory negotiations. Recipient of Bechtel Awards-of-Merit